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Ambient Power:
The Joint Production of Perception and Space

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy

in

Music

by

Matthew Scott McGarvey

Committee in Charge:

Professor David Borgo, Chair
Professor Norman Bryson
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Professor Charles Curtis
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2011

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Chair

University of California, San Diego

2011

for and from the living ambient hum

What has congealed as an environment is a relationship to the world based on management, which is to say, on estrangement. A relationship to the world wherein we're not made up *just as much* of the rustling trees, the smell of frying oil in the building, running water, the hubbub of schoolrooms, the mugginess of summer evenings. A relationship to the world where there is me and then my environment, surrounding me but never really constituting me...

What makes the crisis desirable is that in the crisis the environment ceases to be the environment. We are forced to reestablish contact, albeit a potentially fatal one, with what's there, to rediscover the rhythms of reality. What surrounds us is no longer a landscape, a panorama, a theater, but something to inhabit, something we need to come to terms with, something we can learn from.

The Invisible Committee

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PREFACE

On the day that I am writing this preface, I read on internet news that workers at the Fukushima reactors have just dumped 11,500 tons of radioactive water into the sea in order to make room in cracked holding tanks for water that is more radioactive still. Plans are being debated to suspend a special blanket on a large frame structure over the whole facility to contain the radiation billowing into the air. I read that many experts are skeptical, that the hot and uncontrolled processes still occurring within are likely to blow holes in the material. To date special polymers, sawdust, and even shredded newspaper have been employed in attempts to stop leaks. Of course they failed. I am thinking of my friend's family, 100 miles from that site, as I sit here in Los Angeles, 70 miles from San Onofre, 180 miles from Diablo Canyon. I recall the BP spill and the series of flubbed attempts to contain it, as oil bound itself with one and the next cubic volume of life. And I recall the two years I spent in San Diego pursuing this present degree, hearing the fighter planes sear the sky, to land amidst the bombs at Miramar, as I taught writing to seniors about to take jobs building weapons in San Diego's aerospace industry. I remember driving past the destroyers, the helicopters, the tanks at Camp Pendleton, which is so often on fire, from which many of the soldiers who destroyed Fallujah deployed. And I imagine that despite all this, in insisting that power surrounds us, immediately in the air that lays upon our ears and eyes and skin, and in talking for hundreds of pages about it, I will for the most part be perceived as a person prone to hyperbole.

When I was a teenager in rural Ohio I used to lay in my room with large speakers on either side of my head and listen to AC/DC at high volume. I bicycled for hundreds of miles through corn and wheat fields, on little meandering roads, with Def Leppard in my headphones. In Chicago I began to build my own audio spaces, with amplifiers, headphones and 4-tracks. There was something liberating about that, something necessary. I made the

sonic space I needed. It gave me strength. And as I drove down to San Diego from Los Angeles, where my wife and then my son remained, right past the two seaside orbs at San Onofre Beach, I moved in the car to La Monte Young and Muslimgauze as my skin lit up with goose bumps.

What is the relation of music and power? The answer must take account of these real circumstances, me and hundreds of thousands of drivers, with the windows and the stereo up, glimpsing those domes by the ocean, the ships floating through a lattice of wires, those wires that light L.A. and San Diego, pumping us rhythmically through intersections and shining through numbers on clocks to caress our cheeks in our beds as we sleep.

I did not begin my studies at UC San Diego with the intent of thinking about “ambient power” or the ubiquity of war. I just wanted to make music. When I arrived I learned of studies in our department focusing on the relation of music, emotion and perception, and I was interested. I was surprised when I discovered these studies were based on signal analysis, and sought to correlate fluctuations in informational complexity with shifts in emotional experience, as registered by subjects tweaking dials. I found that the education of the researcher responsible for the study’s construction had been funded and then performed by the Israeli Defense Force. Here was an understanding of music and emotion based on the analysis of communications signals as that is carried out for warfare and in industry. As I snooped around, I found that certain audio design had been done by members of faculty for use in fighter planes, and I realized that some of the key computer music focuses, the design of controllers and blob-tracking video analysis, had clear applications in the defense industry, and indeed that graduates in various California music programs had found employment in this field. I learned from Georgina Born’s book *Rationalizing Culture* that IRCAM in Paris, on which to some degree our own program is modeled, had taken part in the development of

flight simulators.¹ And of course the whole time the fighter planes whizzed overhead, and the moneyed research facilities all over the campus researched... what?

Meanwhile I found that ethnomusicology, particularly after John Blacking's *How Musical is Man*, had begun to shift increasingly toward cognitive science. Two lines of prevalent scholarship came into focus, one tracing everything to do with music back to "the brain" and evolution, the other seeking to understand "music cognition" as "embodied." In the first line I became aware of a set of popular books, distributed beyond academia to the world of nerdy music and science aficionados, including Robert Jourdain's *Music, the Brain, and Ecstasy*, David Huron's *Sweet Anticipation*, Steven Mithen's *The Singing Neanderthals*. In the latter line, I was attracted in particular to Judith Becker's *Deep Listeners*.² But as I strove to learn something about brains, bodies, cognition, perception, and the relation of sound with bumps on the skin from these scientific perspectives, I became increasingly aware that something was missing. What was missing was any sense of the profound historicity of this study, of the strangeness of "explaining" musical or mystical experience by reference to this hyper-specific set of paradigms. So I began to wonder how this shift had taken place, how these models had become hegemonic in my new field. As I investigated, the history of cognitive psychology and cognitive science started to appear. And it linked up with the shudder of the windowpanes and the dominant institutions at this University itself.

I was particularly well-primed, therefore, to hear of the connections between music and the military, music and torture at places like Abu Ghraib and Guantanamo. (I learned via internet news yesterday, by the way, that Guantanamo is to stay open indefinitely, and that military tribunals again are deemed reasonable.) I read Naomi Klein's *The Shock Doctrine*, and learned of the centrality of sensory deprivation, torture aiming at perception, to the most

¹ *Rationalizing Culture*, p. 162.

² Becker's book investigates "trancing" cultures in music, including gospel and music in Bali. She makes use of the James-Lange theory of emotion, as do I, and then also the popular cognitive science developments of it, particularly Damasio and Ledoux.

malicious moments of American coercion, those practices perpetually sheathing our distribution and production networks, where they carry out extraordinary renditions and reiterations of Ewen Cameron's *Kubark* manual. Some of these latter practices involve the coercive submersion of bodies in long-term, high-amplitude volumes of sound, manufactured through the playback of music like Slayer, Eminem, the Barney theme song. I researched sonic weapons and began to think how police and disco both move bodies by means of the careful, vibratory structuration of the air. And I read Jonathon Pieslak's book, *Sound Targets*, and learned of the saturation of military spaces, trucks, tanks, barracks, and then the streets of places like Fallujah, by musical playback—the same music as in the torture, and opposing sound from minarets. I began to see that the structuring of the air by sound is a part of a battle, an ongoing one that extends across “civilian” space as well.

These are among the reasons the study turned in the direction that it did. In the end it is obviously a study of ambience in which music plays a part, and not the other way around. I do not apologize for that: the fighter plane is louder than the concert. You can feel the first rumble beneath the second, even though everybody ignores it.

The answer I give here to the question, “what is the relation of music to power?” hinges on the fact that aesthetic production is a production of space, of ambience, and thus a competitor with the clock, the internet news, the ambient spill of all these military-industrial processes. The argument concerns all aesthetic production, and it urges a production of autonomy, and an autonomy of production, in opposition to the hegemonic structuration by powers beyond us of the spaces which we live, and which I argue actually live (through) us. Music is already intervention in the production of space, in taut relation with the fighter plane, the stop light, the warnings of terrorism on the television. This study insists upon this continuity, of one space with another, of power with breath, which we are trained not to perceive. We ignore the immanence of power with the very force by which we feel it: it is the

hum of all this overwhelming ambience, written in the body as tension and anxiety, that itself performs our serial forgetting, a forgetting which perfects our own participation in the hum.

It is not that we can cease to participate. Everything is linked: to hear the rumble of traffic is to be physically patterned by it, to be moving with it. That is not a metaphorical statement. But our activity can be redirected, to some extent, against this constricting, breathless power. Some of it, at least, can be siphoned off into local, self-amplifying circuits; we can participate in an expansive affirmation of the life of the locality. I believe this is the way we should think of music-making and the making of recordings. Our productive art always builds some space in which to live, either a space reproducing the power of dominant institutions, or some other space affirming itself, in the best case spilling beyond its allotted boundaries, such that it grows and its opponent recedes. Most likely we always build a complex mixture of the two. But the trick is to tend toward the latter, toward trespass and autonomization.

In line with contemporary neo-Marxist studies, I focus on production, not consumption. I do not focus, as many Marxist treatments of music do, on commodities or commodification. A critical treatment with that orientation yields too much ground to begin with. Emphasis on the “commodity” asserts in one way or another the existence of an independent sphere of circulation, and yet another of “consumption.” These would be aspects of social space and life which are not productive, little quiet nooks outside the noise of power. But there is no such space: that is the point. We are always already submerged in the conflict; it is always there on our skin and in our movement. Meanwhile the idea of a “consumption” of musical commodities, in which many Marxist critiques of the music industry indulge, seems to me just to overlook entirely the reality of listening. We listen, we mingle with, move with, learn from and habituate to, we move through the emotional densities of performances and recordings. We do not eat them. Even eating, as Marx points out in the *Grundrisse*, is

reproduction of the body, and hence production, not truly consumption. Every juncture with sound, light, walls, roads and rumbles, as every intimacy with music, is a moment of production. The goal is to autonomize that production, which is the production of the form of life itself. Most importantly we need to produce a space for strength as opposed to a space of fear.

Playing music is structuring ambience; listening to music is structuring perception. Subsumption into music, along with the bumps on the skin and the quickening of the breath, the dance of the body, is subsumption into the material world. In this study I argue that ecstasy is real, but that it links us ever again to the one network of power, the one with the lines from the power plant that produces the plutonium. That is the power that drives the speakers. I have therefore sought to affirm and hopefully to amplify the local production of space, of a space that amplifies its inhabitants, with the explicit intent to erode the production of isolation, with all the integrated silences that involves. Aesthetic production can be revolutionary, so long as it does not confine itself to the spaces it is officially allowed. I have written the present study as an aspect of that production. In it I inevitably reiterate innumerable undesirable techniques, linked with discipline, institution, hierarchies of specialist knowledge. I only hope that I have done something else as well.

ACKNOWLEDGMENTS

This study would never have been written without the ongoing, unquestioning and energetic support of Mitko, Ani, and Iva, Muti, Gogo, and Claire. They gave the time and the space in which to do it, even as their own time and space was so precarious. They are literally producers of what is in these pages, even if, lacking a very specific training in verbiage, they're not all entirely positive what it says.

I would never have made it through this work without Norman, who gave me so much time, useful criticism, and support. And I doubt that I would believe at present that the work has value if it were not for Robert, someone who uses his time to produce things that matter, and so should know what is what.

For the will to work from beginning till end, thanks Susan; for the vision of the wheat field: Brien. Somehow this is still the vision of the wheat field, and the love of real work with real people amidst living things that move with the wind, versus what interrupts it.

For strength when the bottom falls out: Kate, Adam, Stuart, Andrew, David, Julie, Carl.

Most important of all, were it not for Neven I would miss the living ambient altogether. There is no cliché at all in the assertion that children can teach us. We have got to stop thinking otherwise. Not only do we not know what we think we know and try to teach them: they know what it is we are so sorely missing, what for us requires an ecstatic vision which we struggle to interpret, and that is how to move together with what lives. They hear and feel everything that we think lies at a distance: Neven, Hattie, Sif, Adabayo, Rune, Anais, Rex, Darby.

And in memory of Djana, Dylan, Ryan and Pete.

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Collaboration with Iva Gueorguieva

2008

OutLine

Amsterdam, NL

Echolalia

Sound, video, and drawing installation

Collaboration with Iva Gueorguieva

Ben Maltz Gallery, Otis College

Los Angeles, CA

Looky See.

Sound and drawing installation

Collaboration with Iva Gueorguieva

2007

Robert V. Fullerton Museum

San Bernardino, CA

Sound and video installation

Collaboration with Mary Younakof

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Ollman, Leah, "A Sprawling, Satisfying Show," Los Angeles Times, Aug. 21, 2008.

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ABSTRACT OF THE DISSERTATION

Ambient Power:
The Joint Production of Perception and Space

by

Matthew Scott McGarvey

Doctor of Philosophy in Music

University of California, San Diego, 2011

Professor David Borgo, Chair

How are perception and lived space “produced,” how are these productions linked with social and material power, and how does “aesthetic” production fit into this picture? For its first half, this study traces the history of the joint production of perception and space, chiefly in the United States and Britain, through the twentieth century, as that was carried out by dominant

scientific, military and industrial institutions, and also in the arts. For its second half it explicates the production of common social space through architecture, ambient sound, light and vibration, and the distribution and playback of recordings, which construct sensory fields operating so as to calibrate bodily energies with productive processes. In its conclusion, it attempts to show the intermeshed functioning of produced space and perception with war and with everyday life.

The study uses a range of philosophical, psychological, aesthetic, media and cultural theory to demonstrate the continuity of material space through the body, and the determination of bodily gesture for perception and feeling. It uses especially the Marxist theory of ideology, as developed in Louis Althusser, to show how built spaces and coerced bodily practices determine types of perception, and more importantly, types of deafness and blindness that operate in conjunction with the dominant mode of production. It criticizes the dominant “information-processing” and “communications” paradigms, as well as the dominance of “the sign” in structuralist and post-structuralist theory, as instituting a field of noise which continues to act upon the body, and to determine it, even while it is systematically ignored. This is how power is “ambient.”

The study follows an historical course, from Westward Expansion in the United States up to our current engagements in the Middle East. Ultimately it argues for a Situationist or Anarchist opposition to centralized power and spatial hegemony, in the seats of Capital as well as in its military and market expeditions. Aesthetic production has to be conceived as a counter-force to the hegemonic production of our immediate environment and our very phenomenal life. It is necessary to sense the power in our periphery, and to engage it.

**INTRODUCTION:
THE TWO AESTHETICS AND THE TWO ASPECTS OF IDEOLOGY**

*The sensuous world [is] the total living sensuous activity of the individuals composing it...*¹

*If the psychic energies of the average mass of people watching a football game or a musical comedy could be diverted into the rational channels of a freedom movement, they would be invincible.*²

*It is becoming impossible to escape the notion that nature is being murdered by 'anti-nature' – by abstraction, by signs and images, by discourse...*³

*The writing I am currently executing and the reading you are currently performing are also... rituals of ideological recognition, including the 'obviousness' with which the 'truth' or 'error' of my reflections may impose itself on you.*⁴

This study deals with the joint production of perception and of the local spaces in which perception occurs. Concretely, it deals even more with those discourses framing these productions, which make claims to the truth about perception or about space in relation to perception, yet in their material function actually play a key role in these productive processes themselves. The study is also about the so-called “aesthetic,” which may denote either that having to do strictly with sensation, or with the “artwork,” and as generalized, with the produced sensory common. Sensation and space together properly constitute “ambience.” The organization of the study into two large sections may be understood as dividing between perception and the space in which it occurs, the individual and the common space in which she participates, or the aesthetic, taken in these two separate senses, first as the sensuous, secondly as the material world, as it lays upon the body.

Terry Eagleton begins *The Ideology of the Aesthetic* with this clarification. While at present the “aesthetic” denotes either something having no practical function, or something having to do with art or the theory of art, in its mid-18th century inception with Baumgarten, it

¹ Karl Marx, *The German Ideology*, p. 64.

² Wilhelm Reich, *The Mass Psychology of Fascism*, p. 19.

³ Henri Lefebvre, *The Production of Space*, p. 71.

⁴ Louis Althusser, *Ideology and the State*, p. 45.

first of all denoted that having to do with the immediacy and singularity of sensation, exactly in its positioning at the stumbling perimeter of categorical and linguistic thought.

The distinction which the term ‘aesthetic’ initially enforces in the mid-eighteenth century is not one between ‘art’ and ‘life’, but between the material and the immaterial: between things and thoughts, sensations and ideas, that which is bound up with our creaturely life as opposed to that which conducts some shadowy existence in the recesses of the mind. It is as though philosophy suddenly wakes up to the fact that there is a dense, swarming territory beyond its own mental enclave which threatens to fall utterly outside its sway. That territory is nothing less than the whole of our sensate life together – the business of affections and aversions, of how the world strikes the body on its sensory surfaces, of that which takes root in the gaze and the guts and all that arises from our most banal, biological insertion into the world. The aesthetic concerns this most gross and palpable dimension of the human, which post-Cartesian philosophy, in some curious lapse of attention, has somehow managed to overlook. It is thus the first stirrings of a primitive materialism – of the body’s long inarticulate rebellion against the tyranny of the theoretical.⁵

Only slowly through the last 250 years has that first sense eroded, to be replaced by the reference to art. The “aesthetic” as an intellectual focus in either sense is an historical phenomenon. It did not exist fully as a distinct category either for classification or for study before Baumgarten. Eagleton’s book traces the permutations of aesthetic theory through the key philosophers who developed it, and it tries to understand the essentials of each theory in tight correspondence with the social context which produced it, especially in terms of its property relations, its manners of production and governance.⁶

I follow Eagleton in attempting to contextualize contemporary theoretical productions in this manner. This is to say that I treat aesthetic theory of either sort as a form of “ideology,” that is, a product “for thought,” developed out of a functional social context, and retaining some essential function within that context. This implies an a priori historicization of either

⁵ Terry Eagleton, *The Ideology of the Aesthetic*, p. 13.

⁶ The very existence of an “aesthetic” theory in the sense of a theory about sensation, Eagleton suggests, reflects a need on the part of power to control the range of everyday life. “...how can any political order flourish which does not address itself to this most tangible area of the ‘lived’, of everything that belongs to a society’s somatic, sensational life? How can experience be allowed to fall outside a society’s ruling concepts?” p. 14. “If the *Lebenswelt* is not rationally formalizable, have not all the most vital ideological issues been consigned to some limbo beyond one’s control?” p. 15. What Baumgarten opens this terrain to is “in effect the colonization of reason.” p. 15.

aesthetic theories or other “aesthetic” products, and a critical resistance to the unspoken but nevertheless loudly reiterated insistence that one or another “scientific” account is just telling the ahistorical truth about the senses. Indeed, it is at present much more difficult to speak of theory delineating the meaning or truth of perception as ideological than to speak of “aesthetic theory,” as that is now glossed, as such. This is because the truths about perception, about vision, hearing, about attention and focus, about touch and feeling, about the material domain of hyper-individual intercourse, are all commanded at present by institutions taken socially to be beyond the scope of the problematically historical. Beginning in the mid 19th century, as Jonathon Crary has outlined in his two key books, *Techniques of the Observer* and *Suspensions of Perception*, experimental psychology made an increasingly successful bid to control true declarations referring to this domain. The quantification of the study of perception, its girding itself with mathematical assemblages, and the sheer volume of “information” about vision, hearing, the brain, etc., now make it socially very difficult to inquire about correlations between such discourse and what Henri Lefebvre calls “spatial practices.”⁷ Yet it remains the case that the whole history of experimental psychology, and then likewise of cognitive science and neuroscience, are very tightly bound with other institutional enterprises, and particularly with military and industrial production of “interfaces”⁸ and other means of calibrating productive or destructive processes, in spaces functionalized by hierarchy, with the human body. I investigate the 20th century history of the theorization of perception in these connections through the first two chapters. In the third, I

⁷ Lefebvre, *The Production of Space*, p. 38.

⁸ At present the term “interface” denotes especially the relatives of the “GUI,” the “graphical user interface” produced in the 1980s as means by which to interact with computers. It refers primarily to the screen and its format, which determines or enables function. This study will show the continuity between these later organizations of functional perceptual fields and earlier ones in military and industrial contexts: radar arrays, control panels, communications arrays, gun-sighting systems and the like. Chapter 1 treats these origins and develops the “interface” further.

consider a specific development of aesthetic theory, still referring to “sensation,” as that was developed by practitioners in the arts, and particularly in music.

Within the history of the “scientific” treatment of perception, there is already theoretical opposition and conflict. I present two key opposed traditions in chapters 1 and 2. Because such opposition exists within science, “artistic” theories about perception and sensation may position themselves as allied with one or another scientific camp, as typically happens in contemporary music scholarship, or in opposition to the scientific approach altogether. In the 1940s through to the early 1960s, some key ways of thinking about perception in the arts, particularly the one advanced by John Cage, opted for this latter route, positing a “religious” conception derived from the “East” against the “functional” and “scientific” one dominant in the United States, Britain, France and Germany. A focus on immediate sensorial space as either “divine” or “demonic” has this merit, that it deals with this space as a force in itself, without reference away. I take this as a key beginning in grasping the “aesthetic” dimension of “ambience.” Yet at the same time the “Eastern” discursive approach tends to deny history and power. To this extent these theorizations prove tightly locked with their context, and continue to play an ideological role within it, even if the spatial-sensate products corresponding to the theory (primarily pieces of music) are promising in their intensity. I take what I can from the discourse, but focus on the field of sound, the autonomous, living sensory volume, as a volume of force. That is the key starting point for the second half of the study, which deals with the production, distribution, and regional integration of such volumes.

The practices corresponding to the scientific discourse about perception, as I have said, are very clearly military and industrial. They are also clearly “aesthetic” practices, as well as being “spatial practices,” insofar as they engage in the production of spaces designed specifically to facilitate particular varieties of seeing, hearing, touching, feeling, being

energized or not. In their most distinguishing moment they take part in the production of what we now call “interfaces.” In World War II, these were the interfaces in aircraft, in anti-aircraft guns, and in communications decks. Quickly production would expand to the development of interfaces in factories, cars, and to the ergonomic design of work spaces. Experimental psychology, and then cognitive psychology and cognitive science, have always been tightly engaged with practical production of these sorts. And this means that they have been practically engaged in the production of perception in two respects, first the production of the “truth” of perception, which is taught in colleges and recited in doctor’s offices, second of the material habituations of particular manners of perception, especially those involving quick scanning for important signals, as at control panels, and those involving targeting.

The practices corresponding to artistic discourse about perception obviously differ from the above, but not so much as one might think. Artistic discourse about perception is bound up with artistic production, which except in the limit case of the purely “conceptual” work, results in a sensory positivity to be engaged with in some particular fashion. There is a productive practice conjoined with the theory, such that the dual production of perception observable in the scientific pursuit of aesthetic truth is here as well. On the one hand, a pretense to the giving of the truth of the inter-relational sensory/sensible phenomenon, on the other, a material structuration of some volume of space and time, designed explicitly to modulate, and through time therefore to habituate, particular varieties of perception.

By recognizing that the “work of art” is ontologically not distinct from any other little sector of space and time, one opens up the possibility of investigating everyday space as “aesthetic,” even when it is functional. What differentiates the two senses of the “aesthetic” is not just that one deals with sensation, and the other with art (as if these two things were not joined in their essence). Rather the “aesthetic” in the second sense, that aesthetic which is dealt with by what is currently called “aesthetic theory,” has to do with the common, shared,

public aspect of perception, that which is built, that which is seen and heard, in its participated reality, without reference to other functions. The work of art is common in this respect, as is the interface, and we can treat both in terms of their local reality, as also in their connection to what lies in a continuity beyond.

The typical “aesthetic” question, for example in Adorno’s theory, is what distinguishes an “art”-volume from the everyday, or the supposedly functionless common from the functional common. The answer involves “intensity.” I will attempt to show through the course of this study that each functional moment actually involves a prior local self-assertion, a pulsatile surge in localized energy in a local space/body junction, which then comes to be functionally integrated in wider circuits.⁹ This is one key role of music as a producer of social space. I take Cage and Young’s formulations as elucidating with regard to the materiality of the sensory volume, but I try to show how each such volume necessarily integrates in material series with the processes passing through the framing material conditions.

The aesthetic theory that I pursue in the second half of this study might be said to stem largely from the late 1950s and early 1960s assertions that art and life either do or should intersect, that the ontological distinction between a sensory field that is art and one that is not is false.¹⁰ The World Soundscape Project, which I deal with in Chapter 4, holds this explicitly. If there is a distinction to be made it is properly between listening and not listening. All spatial volumes are “aesthetic” in the sense that they are materially positive in a mode open to the senses. In this respect, “functional” perception is really a variety of perceptual distraction, isolation or deadening, which happens to be useful in some other productive process.

⁹ This view coincides with that of contemporary neo-Marxist thinkers like Antonio Negri or Christian Marazzi, who discuss the serial production and then exploitation and destruction of “commons” of various sorts. See for example Marazzi’s *The Violence of Financial Capitalism*, and Antonio Negri and Michael Hardt’s *Empire* and *Multitude*.

¹⁰ A view championed for example by the Situationists, Herbert Marcuse, and Allan Kaprow.

What I have set out to study here is the connection of perception with a space designed strategically for sensory engagement and disengagement, a space which is itself productive of perception of particular types as well as of further everyday, shared space. The design and production of everyday space is clear from the start on the architectural level, and it is particularly obvious in the case of the cockpit or the driver's seat. Something further happens though with the advent of audio and video recording and playback. As such technologies and their products become widespread, the practice of spatial production comes to involve a variety of fixed capital which is distributable or moveable to an historically unprecedented degree. Every recording, documentary, movie, begins with a sensitive mechanism exposed to and patterned by some local ambience, which results in a worked-over material that is then serially re-exposed in different production environments, until a "product" appears. The phenomenal unfolding of such a product is nothing but the patterning of a new ambience in a manner related to the whole chain of previous exposures. Put simply, "aesthetic" products (including older technologies like painting and live music), while they may not be "functional" or other-oriented in the same sense as a hammer or a bookshelf, do always take part in the production of functional, everyday space. The air and light through which we walk are structured materially both through architecture and through the occurrence of various such products. Each of these, as well as other distributions of energy into ambience through the peripheral spill of tools, yells, and so on, plays a real role in producing the material space in which we live, which through repetition operates on the patterns of our behavior, our perception and our feeling.

Still the Frankfurt School, for example, and especially Theodor Adorno, insist upon a distinction between mass-produced schlock and real art. The former veils over existing material conditions; the latter somehow critically expresses them, in form. I present Adorno's model in Chapter 5, but amend it significantly. Insofar as it is always the case that even the

cheapest, least intelligent “aesthetic” product engages in a production of space in the vicinity of its playback, it must always be something more than a veil. It does not just hide, it makes. The question about the “aesthetic” must here shift away from qualitative distinction, and toward more subtle analysis of the types of structuration of ambient air and light, and the manners in which they articulate against the body, habituating it, energizing it, subduing it, etc. (Nor is the “body” a pregiven thing, whose being is known by science, etc. That too is always produced, and in these two respects, as discursive meaning and as habituated practice.)

Since aesthetic products are actually means of the production of space, the key question from a critical or a Marxist perspective becomes how they produce space, and in what larger strategy of spatial production they take part. What Adorno calls “schlock,” the output of major corporations which, it is true, are often standardized, must nevertheless in the end be distinguished, not essentially over against “high art,” but against independent production. The distribution of the products of major industry take part in a spatial colonization whose tactic at the locality must generally be pacifying, enervating, disabling. A large-scale, private, for-profit producer must maintain and expand its market. That means disabling or discouraging the production at any locality of the product the institution is selling.¹¹ Independent, not-for-profit production, on the other hand, may aim at an increase of other local productions. This is a real opposition at the level of strategy with regard to the production of space, and a variety of direct action in the sphere of the everyday.

There is another opposition, harder to detail and to name, which has to do with the affect and arousal attendant to some structured region of space-time. Abstractly the opposition has the same form as the above. Some aesthetic products rouse an activity in the persons who engage with them. Others subdue such activity. Chapter 6 and the concluding Chapter 7

¹¹ This may take place immediately, or as has been common in the record industry and as is increasingly prevalent on the whole, it may take place only after a certain local production has developed something valuable, whether product or productive process, which then is seized, extracted, and its productive context disabled. The end result in either case is the same.

attempt to show that this distinction is not arbitrary or subjective, but that rousing products are real, and that they continue a distribution of arousal in exact continuity with the structured ambience in which they come to be nestled. This capacity of some structured region of air and light to activate the body, to bring up energies or “libido,” adrenaline or whichever institutional designation you prefer, has to do with the subduing or overcoming of a pacifying and nihilistic performance, namely that of the sign or of information. Insofar as some aesthetic positivity, which is always something material, some produced and productive region of space, achieves this disruption, it activates that space and the bodies linked up with it, placing these elements in asymmetrical tension with the broader vicinity. This tension is, in a way, what Adorno took to be the critical aspect of art. I try to present that aspect as fully gestural and felt, and to show how it is a real resource within larger-scale spatial strategies.

In the end, “aesthetic” production is a production of space, and any strategy regarding it must orient itself in terms of the dominant strategies already taking part in that productive process. There is no “nature” outside this ongoing production. As Marx says, nature is thoroughly historical.¹² The dominant discourse regarding the aesthetic, however, in either of these respects, systematically tends to hide this history, to hide the material structuration of ambience, and to produce a fundamentally deceptive model of both perception and space as ahistorical. The means by which this is accomplished at present are the mastering tropes called “information” and “communication,” and on a more limited scale, “focus” and “attention,” which achieved ideological hegemony in the course of World War II through their engagement in high-volume production for the war. It is in this short period that other ideological strands, the notion of perception as bound up with habit, for example, are finally

¹² “...the sensuous world... is not a thing given direct from all eternity, remaining ever the same, but the product of industry and of the state of society; and indeed, ... an historical product, the result of the activity of a whole succession of generations...” Marx, *The German Ideology*, p. 62; “the celebrated ‘unity of man with nature’ has always existed in industry.” p. 63. There is no “human nature”; “always an historical nature and a natural history...” p. 62.

subdued and dismissed. It is here that identification of seeing and hearing with focus, source location, and even targeting, take place. It must therefore be the goal of any really critical account of the joint manufacture of perception and space to challenge and disrupt the hegemony of these frameworks. It must show what is false about the notion that perception or space are functions or forums of information, that they may be reduced non-problematically to something called “communication.” Nor is it enough to introduce some alternative ahistorical terms, like “the body” or “ecology,” as happened in the 1960s to the 1990s in cognitive science and other discursive fields. Insofar as these terms are introduced themselves without any critical context, they function just as malignantly as what they supplant. The ongoing production of military hardware with the useful concept of “ecological perception” demonstrates this. Nor is it even sufficient to applaud the disfunctional or afunctional in opposition to that functionality whose flavor has been sullied by what Adorno would probably call the behaviorist “philistines.” Any assertion of ahistorical categories or domains escaping the infectious sprawl of production, both intentional and accidental, serves to hide that sprawl and in that way to provide it a discursive invisibility operating as cover, a darkness in which easily to act. Any critical account, then, of these real productions of perception and space, must continuously explicate and challenge assumptions about the existence of signals, sources and sinks, of information flows and channels, even of minds as distinct from matter, subjects opposing objects, etc. It must point out that wherever these preliminary patternings of the phenomenon occurs discursively, the huge bulk of materiality, of the functioning of the body on the one side and the sprawl and density of air and light and architecture on the other, are from the beginning veiled in an adiscursive shadow region.

This is the reason that I have focused so heavily on “ambience,” and the reason that I have titled the study “Ambient Power.” In a circumstance where what is materially present is theoretically dismissed from the very beginning of any inquiry, as itself bearing only signs and

signals pointing temporally ahead and behind; in a circumstance where what is peripheral to focus—that is, the entirety of the world—is systematically dismissed as nonexistent for either perception or function, which are supposed to consist entirely in focus and attention, and the series of these; in a circumstance where nevertheless, and not surprisingly at all, informational communication and attentional distribution are highly theorized because production at present is oriented entirely toward these tropes; in such a circumstance the ambience is everything. It is that massive volume of material possibility whose existence critique must serve.¹³ It is that massive material volume which acts all the time in a darkness tailored just for it.

Why Ideology

It is not fashionable any more to talk about “ideology,” not like it was still in the early 1970s. That term has gone out of favor in critical academic circles, for a number of reasons. One might be the general decline of Marxist-oriented thought within academia, a decline which in America may be traced to the McCarthy period, which forced American Marxists out of academic positions, and which in Europe stemmed from the implementation of the Marshall Plan.¹⁴ Another might be the failure of left-oriented revolts in 1968, which resulted in a generalized re-thinking of leftist theory¹⁵; a third the fall of the Soviet Union and the Communist Eastern Bloc. In strictly theoretical terms, the theory of ideology has been dismissed largely under a critique mounted in the early 1970s from various quarters but particularly by Foucault, whose theory of “power/knowledge” seems to have supplanted it. One thing that I hope I achieve in this study is an argument in favor of the retaining of the theory, in a very particular respect. What I wish to show, with Althusser (who was Foucault’s

¹³ According to the model of critique offered by Marx in “For a Ruthless Critique of Everything Existing” and then adopted by the Frankfurt School.

¹⁴ For the first account, see John McCumber *Time in the Ditch*. For the second, see John Krige, *American Hegemony and the Postwar Reconstruction of Science in Europe*.

¹⁵ For accounts of this change, see for example Peter Starr’s *Logics of Failed Revolt* and Kristin Ross’s *May ’68 and Its Afterlives*.

teacher), is the persistence of an infrastructural-superstructural divide, not between production and ideas, but between the materiality or gesturality that characterizes both motivity and thought, such that they are in reality not distinct, and the alleged order of information, code, language or the sign, in which dimension occurs all the erasures I have already begun to designate, and most importantly that nihilistic erasure of the reality of the present by means of the essential and perpetual mechanism of the signification of elsewhere. The sign is the vanishing of present ambience for feeling. As such it is an indispensable agent in the sprawl of hierarchical productions of space and bodies. It hides materiality itself by insisting that meaning is more real than existence. (Even Adorno is a grave trespasser in this respect).

A critical note: As I have written the study I have been aware of my own participation in a productive enterprise. Every discursive production occurs in some previously-structured context. Whatever is composed, in whatever sensate medium—and the medium of text is still material and sensate, regardless of what the information technology or linguistics authorities insinuate—is a patchwork collision, a time- and energy-consuming assemblage of pre-existent materials.¹⁶ Obviously this is the case with the present study, which trumpets the presently-popular tropes of “the body,” “perception,” “space,” etc. The selection of these tropes, the selection of problems, of authorities, of which texts and which aesthetic pieces, which moments of history and which critical apparatus ought to be used, and even more importantly, the selection as to which elements ought to play a formative and serious role, as opposed to

¹⁶ A point, again, made by Althusser, not only in *Reading Capital*, but also later, for example in “Philosophy and Marxism.” “A dominant ideology must be constructed on the basis of what already exists, starting out from the elements and regions of existing ideology and the legacy of a diverse and contradictory past, while passing through the surprises represented by the events that constantly surge up in science and politics... the task which philosophy is assigned and delegated by the class struggle is that of helping to unify the ideologies in a dominant ideology... Precisely by proposing to think the theoretical conditions of possibility for the resolution of existing contradictions, and thus for the unification of the social practices and their ideologies... philosophy produces theoretical schemas or figures that serve as a means of overcoming contradiction, and as links for connecting the various elements of ideology.” (In *Philosophy of the Encounter*, pp. 286-287)

the ones which simply get “explained” or organized, these are all selections which in the end correspond to institutional context and institutional history.

I do not enter very far into the reflective problems this observation raises. I simply want to identify this present product, which you are reading, as having this character. With regard to the material I consider, however, I have tried to deal with the theory of ideology at length. And this is just because the correlation between discursive production regarding perception and the more-obviously “material” production of interfaces, weapons, and songs, is so glaringly clear. It may well be that the Foucauldian theory of power/knowledge accounts for this mutual production, by spatial practice of discursive truth, and by discursive truth of spatial practice.¹⁷ Insofar as it emphasizes productive feedback circuits of this sort though, Foucault’s own theory is certainly gestated in the theory of ideology. At any rate I think that the whole project I undertake here can be understood in terms of this theory, which to some degree I hope myself to modify.

Ideology as Reflection of Social Conditions of Production

David Hawkes has written a book called *Ideology*, in which he offers a fuller history of that concept, spanning back to the 17th century. For present purposes we can think of the theory proper as beginning with Marx, in the mid 19th century, around 1850. The theory begins with the observation that those products constituting “culture,” which are produced specifically for intellectual engagement, or in a sensuous fashion not just oriented toward immediate function, seem rather conveniently to match up with the social practices surrounding them, such that, for example, Aquinas’ metaphysical model, with concentric circles designating degrees of existence, with God at the center, man halfway out, dust out at the perimeter, bears a distinct resemblance to the clerical-judicial organization of 14th-century

¹⁷ (Although the terminological formulation here is from Henri Lefebvre in *The Production of Space*.)

Italy, going outward from Pope to Cardinal to Priest to Parishioner to beast of burden, or from King to Vassal to Knight to Peasant to animal to plant to dirt. The basic idea inaugurating the theory is here: somehow or other products of this sort reflect the conditions of their production.

How exactly this comes to pass is a real question. Marx himself begins to answer it by insisting on the material context of the production of the intellectual work. There is only so much to work with, and whatever there is must be given in some material ambience. Works do not arise from nothing; they articulate their context. More specifically though, and in addition to the broad concept that such products reflect their material environment, Marx thought of ideology always as being the “ideas of the ruling class... the ideas of its dominance.”¹⁸ This already moves us beyond the preliminary relation of reflection, as we will see in a moment. Marx’s argument, even if it does insinuate a certain intentionality with regard to ideological content (as does Noam Chomsky’s *Manufacturing Consent*) and involve a classical conception of ideas as mental entities, both of which conceptions must eventually be challenged, is centered on the point that ideas themselves have a material basis. One gets one’s ideas from somewhere, from some material context, and every material context is produced, structured, by explicit and perfectly singular productive and hence historical processes. That people coming from the rural Ohio where I grew up believe in God is certainly connected to the proliferation of churches there. These institutions engage in material production of literature; they engage in material gatherings where certain ideas are propagated; they construct physical spaces the walls of which are decorated with particular images, of shepherds, mangers, people with haloes, etc. Children raised in these environments (which Althusser will refer to as “Ideological State Apparatuses,” or “ISAs”) acquire certain beliefs

¹⁸ Marx and Engels, *The German Ideology*, p.64. The first section of the book in which this passage occurs is typically attributed to Marx.

and conceptions, just because they have been materially exposed in this fashion, and because they themselves have engaged in a material repetition of certain rituals.

Broader social space is produced as well, and it too is wallpapered with certain ideas, images and sounds. These include quite obviously ideas about the normative shapes of bodies, the desirability of one or another posture, etc. On the whole they constitute, via the news, via books and literature and image in the mall or the university (two different ISAs), a completely specific, submersive “ideological environment.” Now the fact that these spaces and these “communicative” materials are produced is everything, because for Marx, real rule is nothing but control over the means of this material production, which as is obvious here, is really the production of the materiality of life itself.¹⁹ This should be increasingly clear as, through the course of this study, we investigate the essential continuity of the body with its ambience. To produce space is to produce the common and hence to produce the socius, right down to its breathing patterns and its flicks of the eye—right down, on that basis, to “individual” thought. Now Marx thinks that because the means of production of ideas are necessarily owned by the ruling class, the ideas they produce must be selective; they must be the ideas whose promulgation furthers or at least does not interrupt the fact of present relations of ownership. Only those ideas which tend to reproduce the present conditions of production, which in their most basic contours are class relations, will be produced and distributed.²⁰

¹⁹ This is the central point emphasized in Henri Lefebvre’s *Critique of Everyday Life* and then by the Situationists, particularly by Guy DeBord in *The Society of the Spectacle*.

²⁰ Here is the full key passage. “The ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling *material* force of society, is at the same time its ruling *intellectual* force. The class which has the means of material production at its disposal, has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it. The ruling ideas are nothing more than the ideal expression of the dominant material relationships, the dominant material relationships grasped as ideas; hence of the relationships which make the one class the ruling one, therefore, the ideas of its dominance. The individuals composing the ruling class possess among other things consciousness, and therefore think. Insofar, therefore, as they rule as a class and determine the extent and compass of an epoch, it is self-evident that they do this in its whole range, hence among other things rule also as thinkers, as producers of ideas, and regulate the production and distribution of the ideas of their age: thus their ideas are the ruling ideas of the epoch.” *The German Ideology*, pp. 64-65.

Ideology as a Productive Force

Yet the theory is never quite worked out in Marx, and in his formulations there remain certain problems which later Marxist thinkers were compelled to challenge. The first of these is that the ideological domain, that domain which allegedly consists in ideas circulating on material vehicles through common space, is entirely determined by productive social practice, the latter of which is supposed to be distinct.²¹ Already here is the problematic opposition between “infrastructure” or “base” and “superstructure”—that distinction which in a very particular form I will try to resurrect. First though we must observe that as the theory of ideology developed from one critical leftist to the next—and there were numbers of thinkers, Georg Lukacs, Antonio Gramsci,²² most of the Frankfurt school, who have taken this aspect of Marxist theory as the most important one—a productive role for ideology was increasingly recognized. Ideology plays a role at the very least in reproducing the conditions of production.²³ This itself is a production. But if we look at the localities where discourse etc. arise (and there is an increasing difficulty in determining exactly what is ideology and what is not), we have to see that in many cases it shows up just to augment and facilitate some productive process. Take user manuals for example, or internal training manuals at some company, or even the geological studies performed under oil company funding. Each of these very clearly is just a manner of clarifying and codifying procedures which themselves are infrastructural and directly productive. They specify how to; they direct the singular

²¹ “But even if this theory, theology, philosophy, ethics, etc. comes into contradiction with the existing relations, this can only occur because existing social relations have come into contradiction with the existing forces of production; this, moreover, can also occur in a particular national sphere of relations through the appearance of the contradiction, not within the national orbit, but between this national consciousness and the practice of other nations, i.e. between the national and the general consciousness of a nation...” *Ibid.*, p. 52.

²² In *History and Class Consciousness* and *The Prison Notebooks*, respectively.

²³ This is how Althusser positions it in *Ideology and the State*, following the second volume of *Capital* and Engels.

movements of some productive enterprise in some specific way. They sharpen the behavior of that industry. So in a way they are reflections of practice. Yet they are also very clearly aspects of practice, tools or as Marx says “forces” of production, without which production would be minus one implement and hence would materially produce differently.

Gramsci seems to have been the first fully to articulate this mutual engagement of ideology with practice (although Engels touched on it), for which reason he preferred to put the designation “ideology” to the side, and to use instead the term “hegemony.” “Hegemony” however is a richer concept which designates not only the existence of some domain of intellectual products having a reflective and perhaps an augmenting relation with practice, but also the engagement of the syndicated feedback systems composed of both motor and intellectual aspects in expansive territorializations (to use the later Deleuzian term) of space. “Hegemony” refers to the tendency of a dominant sector to dominate, and it specifies that an essential condition of that domination is the domination via ideas.

Wilhelm Reich, whose work is not cited as frequently as the rest, except by Deleuze, but who was fairly clearly a basic resource for Althusser, began to consider this productive aspect of ideology in a psychological context. Writing *The Mass Psychology of Fascism* in the period immediately following the rise to power of the Nazi party in Germany (in 1933), Reich challenged the theory of ideology to explain how it came about that large sectors of a population could act in opposition to their own economic interests. The same voting of lower classes for agendas that favored their employers and not themselves, this tendency of the working class to be wooed by “mysticism” either of the Nazi or whatever other religious sort, is equally apparent in the United States today. Reich’s question was just: how is this achieved? How, via ideology, is this psychological tendency constructed? What is innovative about Reich’s approach is that he starts to understand the very development of the individual, in terms of her erotic inclinations and her fears, as open to social compulsion. Ideology, he

writes, “has the function of *anchoring the economic process in the psychological structure of the individual members of the society.*”²⁴ This is the manner in which it is a real “material force.”²⁵

I will attempt in this study to show that this capacity to calibrate desire and feeling is rooted in the very materiality of ideology itself. Ideology should not ultimately be conceived as a certain volume of ideas, a pool or cloud of information, names, declarations, beliefs, all understood as having some “mental” ontology. The key assertion in Althusser, who traces it back to Spinoza, is that there exists no such mental domain. The “mental” is itself an ideological product, achieved by a certain distribution of material ideology. The psychological efficacy that Reich had observed has, on my account, to be traced to the basic materiality of ideology itself, which, like the interface or the work of music, exists only in the patterning of some volume of space and time, in the real structuration of matter. Distributions of aesthetic products thus may themselves be understood ideologically or materially, “functionally” or “aesthetically.”

The Problem of the Base and the Superstructure

One key reason that the model of “ideology” was challenged, implicitly in the Frankfurt school and particularly in Marcuse’s work like *One-Dimensional Man*, but explicitly in the period from roughly 1968 to 1973, is that the distinction it asserts between the “base” and the “superstructure” seemed increasingly untenable. This is a period in which the Italian “Autonomia” movement, working out postulates offered earlier by Cornelius Castoriadis and “Socialism or Barbarism,” was asserting that the whole of the social body, all of social space, whether it be officially designated “functional,” “recreational,” “public” or “private” was

²⁴ Wilhelm Reich, *The Mass Psychology of Fascism*, p. 14.

²⁵ *Ibid.*, p. 15.

essentially productive.²⁶ Raymond Williams, in his 1973 “Base and Superstructure in Marxist Cultural Theory,” would opine that the distinction had to be dropped or at least softened. Who could say, after all, whether piano playing is superstructural—that is, determined entirely, and essentially nonproductive—or infrastructural, that is, productive of some space, for example, and hence determinative of other relations and phenomena within it?²⁷ Williams thought the distinction needed to be relaxed, to one between determining and determined elements, which may float to some degree, but where certain practices, like for example heavy industry, do clearly exert a largely determinative influence over things like dominant ideas. Specifically, Williams suggested, citing Gramsci, that we conceive the domain of ideas as basically limited, not exhaustively and directly patterned, by large productive enterprise and the class controlling it.²⁸ Further, he argued that the base itself should never be conflated with fixed capital, with either the spaces or the machinery involved in industrial production. Rather the base is itself process,²⁹ a continual unfolding of behavior, a continual orientation and expenditure of energy, which exhibits a certain regularity of pattern through time. In making this last suggestion, Williams pulled contemporary understandings of the base, which in Lukacs’ sense tended already to reify labor (as a set of things), back to Marx’s conception of productive activity as essentially sensuous and processual in its nature. This is to say, perhaps strangely, that production is itself aesthetic.

²⁶ See for example Antonio Negri, *The Social Factory*. This history is also detailed in Todd May’s *The Political Philosophy of Post-Structuralist Anarchism*.

²⁷ Raymond Williams, “Base and Superstructure in Marxist Cultural Theory” (in *Culture and Materialism*, pp. 34-35): “There is a difficult passage in the *Grundrisse* which [Marx] argues that while the man who makes a piano is a productive worker, there is a real question whether the man who distributes the piano is also a productive worker; but he probably is, since he contributes to the realization of surplus value. Yet when it comes to the man who plays the piano, whether to himself or to others, there is no question: he is not a productive worker at all. So piano-maker is base, but pianist super-structure. As a way of considering cultural activity, this is very clearly a dead-end.”

²⁸ “a notion of determination as setting limits, exerting pressures.” Williams, *Culture and Materialism*, p. 34.

²⁹ “... we have to say that when we talk of ‘the base’, we are talking of a process and not a state.” *Ibid.*

But it was probably Foucault's critique, coupled with his own formidable theoretical output, which put the theory of ideology into disrepute. In a 1976 interview entitled "Truth and Power" Foucault stated his objections to the theory simply.

The notion of ideology appears to me to be difficult to make use of, for three reasons. The first is that, like it or not, it always stands in virtual opposition to something else which is supposed to count as truth. Now I believe that the problem does not consist in drawing the line between that in a discourse which falls under the category of scientificity or truth, and that which comes under some other category, but in seeing historically how effects of truth are produced within discourses which in themselves are neither true nor false. The second drawback is that the concept of ideology refers, I think necessarily, to something of the order of a subject. Thirdly, ideology stands in a secondary position relative to something which functions as its infrastructure, as its material, economic determinant, etc. For these three reasons, I think this is a notion that cannot be used without circumspection.

The notion of repression is a more insidious one...³⁰

The problem of ideology as over against truth stems from an unfortunate phrase which appears infrequently in Marx and Engels but becomes central in Lukács: "false consciousness." If ideology is conceived as "false consciousness," certainly it is already determined as the antithesis of something true, a science. Althusser himself holds onto this opposition, which I would agree, with Foucault, is ultimately untenable.³¹ The reason is that a discourse may be true in several fashions, and still selected or determined in the manner that Williams suggests.³² The geological report commissioned by the oil company, for example, is true, and yet it constitutes the land, it develops the discursive reality of the land, in a very specific way,

³⁰ Michel Foucault, *Power/Knowledge*, p. 118.

³¹ His insistence on his own scientificity, and of Marx's, was one key aspect of his eventual rift with his younger student Jacques Rancière, who went on to write for example *Althusser's Lesson* and *The Ignorant Schoolmaster* in direct opposition to this notion of the possession of truth, which reaffirms the very institutional hierarchies Althusser himself claimed to oppose and to diagnose.

³² "...there is a process which I call the *selective tradition*: that which, within the terms of an effective dominant culture, is always passed off as 'the tradition', 'the significant past'. But always selectivity is the point; the way in which from a whole possible area of past and present, certain meanings and practices are chosen for emphasis, certain other meanings and practices are neglected and excluded. Even more crucially, some of these meanings and practices are reinterpreted, diluted, or put into forms which support or at least do not contradict other elements within the effective dominant culture. The processes of education; the processes of a much wider social training within institutions like the family; the practical definitions and organization of work; the selective tradition at an intellectual and theoretical level: all these forces are involved in a continual making and remaking of an effective dominant culture, and on them, as experienced, as built into our living, its reality depends." *Ibid.*, p. 39.

which is exactly the manner conducive to the spatial practice of the oil company. It is not false (although indeed it may employ a grounding rhetoric that secretly draws upon metaphysical categories like subject and object, and particularly a trope of “objectivity” linked with quantic measurement), yet its truth remains tactical and functional. While true according to various procedures of verification, the account still remains in a social tension with other varieties of truth, for example of the land as living, as an ecological niche, etc. The spread of the representation produced under oil company funding, of the land as a lifeless shell penetrable at one or another weak spot, the more broadly it is distributed and the more widely it becomes “common sense,” thus still carries out a “hegemony” from which the other accounts and the practices affiliated with them suffer.

Now secondly, with regard to the “subject,” Foucault is right that the notion of “ideology” also implies this other notion, but not necessarily in the way that he suggests, as we will see below with Althusser. Foucault’s meaning seems to be that if produced discourse in its role as socially hegemonic is conceived as “ideological,” it is from the start codified as objective, an idea had by some subject. But Foucault for his part wishes to show that the subject is itself a product. Althusser will say the same thing, but somewhat more determinately: the subject is precisely the effect of ideology.

We have already discussed the third point. For Foucault, both the practice and the discourse are productive. They engage equally in strategic, hegemonic expansions and calibrations across social space. It does not make sense to him, therefore, to try to segregate out some specific sector as more productive than the rest.

Still I think there is a reason to retain the infrastructure/superstructure divide, not as a designation applying to one or another social space, but to name that difference between matter and “intellect,” between the material aspect of the product, and that product codified as essentially informational or mental, between the space and that which, within the space, denies

the space. What I wish to argue, largely on the basis of Althusser's work, and with reference to Žižek's work in *The Sublime Object of Ideology* and *For They Know Not What They Do* (which follows from Althusser, Lacan and Reich), is that the very order of subjectivity, of the sign and of information, of code, really is superstructural, in that it is determined, that it reflects, that it inverts and that it veils the manner and nature of its own production, which is spatial and material. Discursive practices and other spatial practices are uniformly material and productive, granted. Yet the present discursive hegemony of language, information, sign, etc., deny this. Their own material infrastructure must therefore be shown, and their veiling function penetrated. In fact, I will argue in the concluding chapters of this study, this penetration or the collapse of the dimension of the sign or meaning into tactility is absolutely continuous. Only through the collapse does the perpetuation occur. These machines, as Deleuze and Guattari say, work only by breaking down.³³

The Two Orders of Ideology

Althusser characterizes ideology as operating on two levels, always in some institutional context situated within a material space, in which rituals of motion and behavior occur. The two levels are those of the ritualized habit, which is unconscious or unattended to cognitively, and then the level of the subject and speech. Each Ideological State Apparatus (ISA) is responsible for a production of individuals as subjects of particular sorts at both these levels, by means of recapitulation of gesture and of speaking position and syntax. The ISA distributes individuals within its own pre-existent gestural and discursive matrices, and causes them to reiterate within those grids until they have become the thing that initially they mimed.

³³ "Desiring-machines work only when they break down, and by continually breaking down." Deleuze and Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, p. 8.

Althusser defers to Lacan for understanding the process of “interpellation,” by which certain bodies are “called” to speak in particular ways, and to become particular names. We will turn to that process briefly in a moment. It is essential though to note that from the beginning Althusser insists that this discursive order is itself performed. Each of the signifying behaviors is really a behavior, really motor and gestural. The very idea that ideas are ideal, he says, is ideological.³⁴ One key aspect of the material inculcation of behaviors of speech and gesture within the ISA is this insistence upon the ideal nature of the subject, the idea, the subject’s intent, the accidental or consequent nature of the act. In this the ideal order effectively inverts and obscures the very material processes which continually reproduce and perform it. That is its key function as ideological.³⁵

Beyond this, the purpose of the selectivity of the ISAs, which produces certain subject positions and certain bodily comportments—establishing what Pierre Bourdieu refers to as the “habitus” composing the social formation in its horizontally-calibrated motive gesturality³⁶—is dual. On the one hand, those subjects and skills must be fabricated which fit exactly the contemporary division of labor. Schools must produce bodies who are fitted for industries dominant in their vicinity. Further, they must produce different bodies for different industries, different bodies for manual and intellectual labor (both of which—and this is central to

³⁴ “I have already touched on this thesis by saying that the ‘ideas’ or ‘representations’, etc., which seem to make up ideology do not have an ideal or spiritual existence, but a material existence. I even suggested that the ideal and spiritual existence of ‘ideas’ arises exclusively in an ideology of the ‘idea’ and of ideology, and let me add, in an ideology of what seems to have ‘founded’ this conception since the emergence of the sciences, i.e. what the practitioners of the sciences represent to themselves in their spontaneous ideology as ‘ideas’, true or false. Of course, presented in affirmative form, this thesis is unproven. I simply ask the reader to be favourably disposed towards it, say, in the name of materialism.” Althusser, *Ideology and the State*, p. 39-40. “I shall therefore say that, where only a single subject (such and such an individual) is concerned, the existence of the ideas of his belief is material in that *his ideas are his material actions inserted into material practices governed by material rituals which are themselves defined by the material ideological apparatus from which derive the ideas of that subject.*” p. 43. For an elucidating longer passage, which Žižek takes as central in his own analysis, see pp. 41-42.

³⁵ Marx: “in all ideology men and their circumstances appear upside-down as in a *camera obscura*”... *German Ideology*, p. 47.

³⁶ See Pierre Bourdieu, *Outline of a Theory of Practice*.

Althusser's understanding of his own work—are in fact manual). Secondly it must produce submission.³⁷ It must teach both subordination and command. This too is achieved through the allowance and disallowance of certain postures, the delivery even of blows and insults, the systemic allowance and indeed propagation of humiliations, etc., which establish the gestural relations between authority and submission, men and women, for example, between straight and gay, upper and lower class, on the basis of expectancy and readiness for force. The giving and receiving of commands in hierarchical situations like the workplace and the school (themselves ISAs, still perpetuating a regime of dual-level training) may now dependably occur, the basic violence of the relations being both continued and sublimated.³⁸

The Dimension of the Sign

It is worth noting that even in the earliest inception of 20th-century structural linguistic theory, with Saussure, the physical domain and the aspect of materiality empirically indissociable from linguistic phenomena was rigorously dismissed. Saussure determines the

³⁷ “To put this more scientifically, I shall say that the reproduction of labour power requires not only a reproduction of its skills, but also, at the same time, a reproduction of its submission to the rules of the established order, i.e. a reproduction of submission to the ruling ideology for the workers, and a reproduction of the ability to manipulate the ruling ideology correctly for the agents of exploitation and repression, so that they, too, will provide for the domination of the ruling class ‘in words.’ In other words, the school (but also other State institutions like the Church, or other apparatuses like the Army) teaches ‘know-how’, but in forms which ensure *subjection to the ruling ideology* or the mastery of its ‘practice’. All the agents of production, exploitation and repression, not to speak of the ‘professionals of ideology’ (Marx), must in one way or another be ‘steeped’ in this ideology in order to perform their tasks ‘conscientiously’...” *Ideology and the State*, pp. 6-7.

³⁸ Žižek develops Althusser's theory by insisting that the element of force is still and always felt in the subjection to some dominant interpretation. “...this external ‘machine’ of State Apparatuses exercises its force only in so far as it is experienced, in the unconscious economy of the subject, as a traumatic, senseless injunction. Althusser speaks only of the process of ideological interpellation through which the symbolic machine of ideology is ‘internalized’ into the ideological experience of Meaning and Truth: but we can learn from Pascal that this ‘internalization’, by structural necessity, never fully succeeds, that there is always a residue, a leftover, a stain of traumatic irrationality and senselessness sticking to it, and that *this leftover, far from hindering the submission of the subject to the ideological command, is the very condition of it*: it is precisely this non-integrated surplus of senseless traumatism which confers on the Law its unconditional authority: in other words, which – in so far as it escapes ideological sense – sustains what we might call the ideological *jouis-sense*, enjoyment-in-sense (enjoyment), proper to ideology.” Žižek, *The Sublime Object of Ideology*, p. 43.

key elements both of the sign and of the language in contradistinction to their enactment. He does so in at least two ways. First of all he defines the sign as a conjunction, a conventionally-fabricated, arbitrary but agreed-upon linkage between a sound and a “concept.” The latter term is taken for granted as epistemologically unproblematic. With it, of course, must also be assumed the existence of a “subject” or a “mind” whose concept this is. Even the sound, however, is supposed to be distinguished from its vibratory and spatial manifestation. What is linked in the sign is not the singular, really present sound, but a mnemonically-established, generalized phonic pattern, to which the extant sound is somehow matched.³⁹ So material ambience triggers a particular sign, in the brain, in its associational matrix with other signs, which are in large part shared between individuals. Having received a message, which is supposed to be a temporally linear concatenation of signs⁴⁰ (whose sequence may be thought of as a higher-order sign), a speaker may now opt to speak himself. In so doing, this mind or brain simply thinks up some concepts and sends an order to its underlings in the motor centers, who output the message into the air, where it may bounce into another ear and into another brain.

Saussure’s famous diagram of language as a sheet cutting in endlessly-explicit articulation the juncture between thought and sound⁴¹ is endlessly watered down by his own commentary.⁴² First of all the sound linked with the concept is not a given sound, but a

³⁹ “...the two elements involved in the linguistic sign are both psychological and are connected in the brain by an associative link...

A linguistic sign is not a link between a thing and a name, but between a concept and a sound pattern. The sound pattern is not actually a sound; for a sound is something physical. A sound pattern is the hearer’s psychological impression of a sound, as given to him by the evidence of his senses. This sound pattern may be called a ‘material’ element only in that it is the representation of our sensory impressions.” Ferdinand de Saussure, *Course in General Linguistics*, p. 66.

⁴⁰ “Unlike visual signals (e.g. ships’ flags) which can exploit more than one dimension simultaneously, auditory signals have available to them only the linearity of time. The elements of such signals are presented one after another: they form a chain.” *Ibid.*, p. 70.

⁴¹ (which either makes music language—a popular rendering which I would strongly oppose—or which is challenged as a model for language by the very existence of music, as also by that of animals)...

⁴² “Psychologically, setting aside its expression in words, our thought is simply a vague, shapeless mass. Philosophers and linguists have always agreed that were it not for signs, we should be incapable

cognitive pattern. Second, the motor aspect of speech, without which no speaker could ever achieve lingual articulation, is not even given a position in the sign, which at the very least in this regard would have to be tripartite, even if we are to allow that the “pattern” is a pre-known, cognitive “representation” which is somehow output to a machinic tongue and throat, a servant class of the body disposed by nature not to determine themselves.⁴³

Saussure defines language according to the same prejudices. The language is the set of abstract relations of signs, their semantic, denotative and connotative connections. Though language is necessarily social, since the entirety of syntax and lexicon are distributed across brains/minds but not present in entirety in any one, it is not essentially material. On the basis of assumptions about mind, representation, sensation and motion, the latter two are simply figured out of the equation.

It is the signifying order into which bodies are interpellated in Althusser’s ISA. And yet already the very nature of this order, as determined both by Saussurean and then by

of differentiating any two ideas in a clear and constant way. In itself, thought is like a swirling cloud, where no shape is intrinsically determinate. No ideas are established in advance, and nothing is distinct before the introduction of linguistic structure.

But do sounds, which lie outside this nebulous world of thought, in themselves constitute entities established in advance? No more than ideas do. The substance of sound is no more fixed or rigid than that of thought. It does not offer a ready-made mould, with shapes that thought must inevitably conform to. It is a malleable material which can be fashioned into separate parts in order to supply the signals which thought has need of. So we can envisage the linguistic phenomenon in its entirety—the language, that is—as a series of adjoining subdivisions simultaneously imprinted both on the plane of vague, amorphous thought (A), and on the equally featureless plane of sound (B)....

The characteristic role of a language in relation to thought is not to supply the material phonetic means by which ideas may be expressed. It is to act as intermediary between thought and sound, in such a way that the combination of both necessarily produces a mutually complementary delimitation of units. Thought, chaotic by nature, is made precise by this process of segmentation. But what happens is neither / a transformation of thoughts into matter, nor a transformation of sounds into ideas. What takes place, is a somewhat mysterious process by which ‘thought-sound’ evolves divisions, and a language takes shape with its linguistic units in between those two amorphous masses. One might think of it as being like air in contact with water: changes in atmospheric pressure break up the surface of the water into series of divisions, i.e. waves. The correlation between thought and sound, and the union of the two, is like that.” *Ibid.*, pp. 110-111. “Linguistics, then, operates along this margin, where sound and thought meet. *The contact between them gives rise to a form, not a substance.*” p. 111.

⁴³ A footnote in Saussure’s *General Course in Linguistics*, offered by the editor, points out this oversight. P. 66, n. 2. Saussure himself recognizes it earlier on: “This analysis makes no claim to be complete. One could go on to distinguish the auditory sensation itself, the identification of that sensation with the latent sound pattern, the patterns of muscular movement associated with phonation, and so on. We have included only those elements considered essential...” (p. 12)

“communications” theory, especially that so popularly developed by Claude Shannon and Warren Weaver, as well as by Norbert Wiener, just after World War II,⁴⁴ is premised on an erasure of the performance which embodies it. Yes, say the theories of sign and information, the sign and the information are spoken and sent. But, this speaking and sending are accidental; the essence is somewhere else, somewhere essential and ahistorical, like a mind. At their metaphysical basis, structuralist semiotics, a la Saussure or Levi-Strauss and then up through some moments of post-structuralism and communications theory, share everything. There is supposed to be a source. A signal flows along some channel. Its message is given in linear articulation. It is received by some entity which cogitates it. In its cogitation this entity is some sort of scanner, some sort of focalizing function which looks and recognizes. Having recognized, it calculates, associates, synthesizes. Having thought, it commands. Its commands result in output behaviors, gestures, movements, motivity. We have again entered the domain of accidentality, which strangely seems from an empirical or phenomenological perspective to be all that exists.

The Lacanian aspect of Althusser’s theory has to do with the mimetic identification with one or another speaking position built into the historically-conventional linguistic network. Offering up a small set of options, as lures,⁴⁵ the ISA proceeds to half-seduce, half-abuse the individuals walking its halls to identify as one or another of these few options. Then they are compelled to speak as such. Women speaking like men, or men like women, underlings like managers or managers like underlings, are abused into submission. Even if they never submit, at the least they are constituted as the determinately-negative failure of the identification, the perversion specific to the norm.

⁴⁴ See Claude Shannon and Warren Weaver, *The Mathematical Theory of Communication*, and Norbert Wiener, *Cybernetics: or Control and Communication in the Animal and the Machine*.

⁴⁵ Althusser references Lacan. In “the mirror stage...”, Lacan references Roger Caillois’ earlier “Mimicry and Legendary Psychasthenia,” where Caillois discusses the “lure of space.” (See *The Edge of Surrealism: A Roger Caillois Reader*, p. 99). Caillois for his part refers the concept back to Eugène Minkowski.

In Lacan's famous essay, "the mirror stage...", he names this process as actually having a neural or physiological substrate. The human, being born prematurely and retaining a neural plasticity, is uniquely prepared for this manner of subsumption into social power formations. What the individual becomes, even at the fine gestural level of neural firing, is thus historically determinate. Power operates through the ISA, straight through the body. It seizes something with an undetermined potentiality, and renders it specific to the present relations of production.⁴⁶

Now the prepared subject, with his regime of bodily habits—a regime indefinitely fine, the sort of thing that Marcel Mauss or Pierre Bordieu point toward,⁴⁷ but happening on an indefinite number of scales—with his name, his face, his identity, his posture, his syntax, his manners of speech, and all those exact beliefs corresponding to his habits, which ideologically he has been taught to reiterate are the causes of the habits and acts, and not vice versa (he thinks this "in" "his" "mind," thinking "in," and "my" and "his" and "mind" in conjunction with whatever else [he] thinks)... now this subject is ready to engage with public space, with that produced, aesthetic common we deal with in Part II. Within this space innumerable sensate conjunctions take place. The subject gets to linguistic work, identifying one thing after another according to the arbitrary schematic designations appropriate to his culture. With

⁴⁶ "In man, however, this relation to nature is altered by a certain dehiscence at the heart of the organism, a primordial Discord betrayed by the signs of uneasiness and motor unco-ordination of the neo-natal months. The objective notion of the anatomical incompleteness of the pyramidal system and likewise the presence of certain humoral residues of the maternal organism confirm the view I have formulated as the fact of a real *specific prematurity of birth* in man.

It is worth noting, incidentally, that this is a fact recognized as such by embryologists, by the term *foetalization*, which determines the prevalence of the so-called superior apparatus of the neurax, and especially of the cortex, which psycho-surgical operations lead us to regard as the intraorganic mirror.

This development is experienced as a temporal dialectic that decisively projects the formation of the individual into history. The *mirror stage* is a drama whose internal thrust is precipitated from insufficiency to anticipation – and which manufactures for the subject, caught up in the lure of spatial identification, the succession of phantasies that extends from a fragmented body-image to a form of its totality that I shall call orthopaedic – and, lastly, to the assumption of the armour of an alienating identity, which will mark with its rigid structure the subject's entire mental development." Jacques Lacan, "The mirror stage as formative of the function of the I as revealed in psychoanalytic experience," p.41.

⁴⁷ In "Techniques of the Body" and *Outline of a Theory of Practice*, respectively.

regard to higher-order syndications of things, or with regard to events whose meaning is not absolutely determinate, his position as a particular sort of subject and his habits of engaging in certain acts, intervene in order to seize hold of what Roland Barthes identifies as the proliferation of connotation,⁴⁸ to pin it down, according to one or another “mastering” signifier (which is mastering just insofar as it masters, and for no other reason than habit and a force expressed by that avenue), as some already-known meaning. Recognition takes place. Ideology now operates through the codices of the person. They are an ideological function.

Foucault’s hesitation regarding the theory of ideology, because it implies the existence of some subject, is here answered by his teacher a few years before his comments. The subject is indeed, as Foucault himself never tired of asserting, a function and a product of power.

The Dimension of Space and the Gesture

Yet the point always for Althusser is that every one of these articulations, whether “signifying” or not, whether within the scope of conscious intent, or in that dark nature of humming habitual cycle, actually is performed materially, by the body, in space. Because the signifying regime continually explains itself as immaterial, but at a more powerful level, because the very mechanism of its operation, the “sign,” which points by its only function to another sign, which defers, which “draws attention” away from here and thus forecloses here for attention, in a perpetual skittering flight...⁴⁹ because this very mechanism denies its

⁴⁸ In “Rhetoric of the Image,” in *Image, Music, Text*, pp. 46-51.

⁴⁹ The exact behavior of the commodity, incidentally, according to Marx. “In a mystifying ‘now you see it, now you don’t’ logic, the commodity is present and absent simultaneously, a tangible entity whose meaning is wholly immaterial and always elsewhere, in its formal relations of exchange with other objects. Its value is eccentric to itself, its soul or essence displaced to another commodity whose essence is similarly elsewhere, in an endless deferral of identity. In a profound act of narcissism, the commodity ‘looks on every other commodity as but the form of appearance of its own value.’” *The Ideology of the Aesthetic*, p. 208. “As pure exchange-value, the commodity erases from itself every particle of matter; as alluring auratic object, it parades its own unique sensual being in a kind of spurious show of materiality. But this materiality is itself a form of abstraction, serving as it does to occlude the concrete social relations of its own production. On the one hand, the commodity spirits

locality a duality is constructed. The very dimension which performs the perpetual articulation of the sign, which is a gesturation, a movement of the ear, and of the physiology, and of the tongue and mouth, is hidden beneath the alleged reality, which is precisely not real, but only believed. A duality opens up then between the dimension of language or the sign, of information and communication, which are always supposed to streak across space without touching down, always on their way somewhere else, and that dimension itself, that ambience, what Lefebvre calls “social space,” that space which he always reiterates is “produced,” that space which I will even insist is living. That space, ambience, now appears as the infrastructure buried beneath the superstructure of meaning.

That it is denied both by official theoretical discourse and by the glancing nihilistic habits of the dominant linguistic-performative regimes, and more concretely, by the parallel habit in perception, of moving attention always forward from one not-enough to the next, does not in reality erase it, nor does it touch at all its producedness or its productivity, which continue to give birth to this erasive slide. The ground waves its own shadow like a flag.

Ambient Power

This study is oriented toward the investigation of this “infrastructural” dimension. It seeks to extricate that dimension from its ideological cloak, and to show how the very dominant paradigms telling us the truth about our own thought, perception, and space, are the means by which our own performance and production of our immediate space, just through our indefinitely-deep regimes of movement and gesturation, are hidden from us, and thus syndicated with productive strategies of value to those elsewhere, those hegemonic institutions involved in for-profit manufacture, environmental poisoning, and remittless war. There is

away the substance of those relations; on the other hand it invests its own abstractions with specious material density.” p. 209.

indeed something critical about the aesthetic, although not necessarily in the way that Adorno comprehends it. What is of the greatest importance about the aesthetic “product” is that it is experienced and felt in its presence. If that critique is effective, it leads us to begin to feel the full and productive force of our own ambience, the expanse of which, in fact, is aesthetic, and the power of which is always local: local to this ambience; local on this skin; a single skin that is the juncture with space and that is motive in itself. The argument that I ultimately wish to make is for the assertion, the resistant, post-moral assertion of that ambient power, the demon of this place, its force below its meaning.

PART I

CHAPTER 1: THE PRODUCTION OF PERCEPTION

Just as the entire mode of existence of human collectives changes over long historical periods, so too does their mode of perception. The way in which human perception is organized—the medium in which it occurs—is conditioned not only by nature but by history.¹

This study is primarily concerned with the post-war period. But that period, of course, has its own history, and if we are adequately to trace and to evaluate the theoretical and aesthetic formulations, along with the institutions, that become dominant within it, we need first to understand the reference points of those formulations, and hence what is implicit within their terms as well as what those terms may hide. The 18th-century theories of perception, out of which the 19th century crafted and reformulated its own, were chiefly associationist, rooted in Lockean empiricism. Perhaps the most referenced of these in the 19th century was Condillac's, which was taken by figures like William James to be representative of the associationist theory on the whole. Besides the empiricist tradition, the Kantian one was increasingly influential, through to phenomenology in the 20th century.

The transitional period between 1800 and 1900 has been admirably, thoroughly outlined by Jonathon Crary, in his two books, *Techniques of the Observer* and *Suspensions of Perception*. Crary locates an epistemic cleft between an earlier, associationist model of vision correspondent to the figure of the camera obscura, involving an inner space that is in unproblematic communication with the outer world, and which adequately captures the patterns which externally are described by the laws of optics, and a later model that closes off this easy communication, and that emphasizes, perhaps above all else, the role of attention in the synthesis, organization and essence of perception. Roughly we could say that the Kantian model of a subject closed off from the reality of the physical world, engaged in a pre-

¹ Walter Benjamin, "The Work of Art in the Age of its Mechanical Reproducibility," p. 255.

conscious activity which in one way or another actually produces perception, becomes dominant as a result of Johannes Müller's demonstrations that the stimulus eliciting a sensation need have no similarity whatsoever to the sensation itself. Electricity, for example, is capable of producing sensations in a subject either of light, or of touch, just depending on which specific nerve the current is brought into contact with. The possibility of a simple commerce between the world and the mind being thus foreclosed, some other theory of just what happens in perceptual experience was necessitated.

In the background of Crary's account, but determinative throughout, are the material, technological and architectural alterations that were occurring in this same period within social space. The driving element, it seems, behind scientific adjustment and also adjustments within aesthetic theory, was material change in the regularities of the everyday world. To put it simply, Crary wishes to argue that these discursive apparatus, these scientific and academic sectors of a Foucauldian power/knowledge, had the task of constructing a new subject, who would be capable of navigating an increasingly stimulus-dense and consistently shocking, overwhelming sensory environment. Central to this subject is the faculty of attention, a faculty never emphasized in Kant, but already central in his most devoted interpreter, Schopenhauer. Whereas for Kant, the unity of experience, either synchronically or diachronically, could be traced ultimately to the unity of the subject, for Schopenhauer, and then for Nietzsche, who followed him, that unity is a product of force. If associationism assumed that an untroubled and rational regularity of percepts is possible, because of the openness of a subject to the physical world, which itself is taken to be fundamentally ordered, by Kant this order has retreated to the subject, with no real knowledge about the ultimate character of the outside being possible.² In Schopenhauer the retreat continues, or a sort of battle, a wrestling match

² "...all our intuition is nothing but the representation of appearance; the things which we intuit are not in themselves what we intuit them as being, nor their relations so constituted in themselves as they appear to us... As appearances, they cannot exist in themselves, but only in us. What objects may be in

between the human body and its stimulus-environment, ensues. Now it is not sufficient simply to say that experience is orderly. In fact of itself it is not—it is James’ “blooming, buzzing confusion”—the subject, or more specifically, the subject’s will in the form of attention, must do real work, consuming physical energy, in order to achieve any synthesis. Crary notes the sudden and decisive movement away from Kantian idealism to a physiological and muscular account of the character of attention.³

In these opening pages we need to define attention, because its importance grows theoretically throughout the 20th century and up to the present. Together with the body image, which on my account constitutes the matrix or matrices of possible travel for attention, attention is a key point for scientific study, and also for coercive and resistant strategies for channeling human, physiological energy, within the military, business, and art. Attention is a foundational element in Husserlian phenomenology, as it is in the information-based theory of perception developed at the end of World War II. Contemporary studies of attention continue to be oriented toward extremely practical questions regarding the integration of humans with their complex and noisy “signal environment.” What these contemporary studies seem to neglect, however, is the ongoing relationship between attention and distraction, and more importantly, between attention, habit and “automatism” (primary and secondary),⁴ and the

themselves, and apart from all this receptivity of our sensibility, remains completely unknown to us. We know nothing but our mode of perceiving them—a mode which is peculiar to us, and not necessarily shared in by every being, though, certainly, by every human being. With this alone have we any concern. Space and time are its pure forms, and sensation in general its matter.” Immanuel Kant, *Critique of Pure Reason*, p. 82.

³ “Once the philosophical guarantees of any a priori cognitive unity collapsed (or once the possibility of the self imposing its unity onto the world, in post-Kantian idealism, became untenable), the problem of ‘reality maintenance’ gradually became a function of a contingent and merely psychological capacity for synthesis or association. Schopenhauer’s substitution of the will for Kant’s transcendental unity of apperception is an event with many aftershocks, for it implied that the perceived wholeness of the world was no longer the apodictic product of Law but depended on a potentially variable *relation of forces*, including external forces outside the subject’s control. It became imperative for thinkers of all kinds to discover what faculties, operations, or organs produced or allowed the complex coherence of conscious thought...” Jonathon Crary, *Suspensions of Perception* (hereafter “*Suspensions*”), pp. 14-15.

⁴ See “Two Memories” and “The Subliminal Somatic Self” below.

manufacture of the sense of self, all of which were explored in significant detail in the work of William James.

Sensation and Perception in Associationism

Opened up/sealed off.

An overwhelming light, identity with light; a thunderous sound, subsumption in sound; but never simplicity again.

Identity with light: Condillac's formulation of the first moment of sensation, upon birth. Subsumption in sound: becoming a Buddha upon the moment of death, according to the *Tibetan Book of the Dead*.⁵ After identity, for Condillac, knowledge instead, involving a perpetual separation between knower and known. Failing to enter thunder, a series of intermediate states, returning back to birth.

...

If we allow, as seems sane, that there exists an external world, we mingle with it at our sensory membranes. We are nude there, at our skin, our eardrums or our basilar cilia, our lenses or our retinas, our tongues, our nostrils, in sheer vulnerable intimacy. Events upon these surfaces are simultaneously energetic events within the environment. A flash, or an explosion, is upon us, exactly as it is outside. And far more subtle events, shifts in afternoon light, a stir of air, almost subliminal humming; these, literally, touch us too. There is a constant complexity of movement, of stimulus and receptor, of moving pattern, some stability, some change. Energy is exchanged, from environment to body, and then via the musculature and the respiration, from body back to environment.

Beyond this, what happens? This is sensation, but what of perception? What are their relations? For Condillac, the former composed the latter, as simple elements assembled into

⁵ This text and its involvement in music and art are treated in Chapter 3.

increasingly complex compositions, of increasing temporal dilation. That first flash of light may have been, in principle, an experience of a single sensation. From that point forward, perception and sensation are distinct, as a molecule is different from an atom. Sensation is the raw matter, perception is its formation. Take a single image. It will be extended in space; it will consist of parts. At some level of magnification, the parts cease to appear as composite; there are individual blots of color. Those are sensations. Or take a single sound, stretched in a short duration. Bring your attention to focus on an homogenous moment of that duration, between attack and decay. Shorten it to the smallest duration to which you can attend. This sheer tone will be a simple auditory sensation. All of our perceptions involve a multiplicity of sensate elements.

Of course there is in everyday experience no stopped image or tone. Things appear and disappear, sound and decay quickly, in a broad flux. We must identify them as quickly as they live and die, or they will never be perceived. This we do to a lesser degree when young, a greater degree in our prime, and again to a lesser degree in old age. What changes in the perceiver who is coming to maturity, such that experience complicates itself, is memory, which accumulates in time as sensations accumulate in space. Start back at the flash of light. Then imagine a second one. The second flash is not, and cannot be, simple or absolute. In the subsequent instance, as Condillac says, we know, rather than participate. The reason is that this second flash, given in sensation, is accompanied by the first, given in memory. The sensation pulls the memory to it, or the memory pulls at the sensation. Both, like attracting bodies, pull at one another, but memory wins. A third flash is met by two remembered flashes, or by a flash already doubled; it is known better the greater the number of its predecessors. Knowing is just this meeting of the sensational given with a certain sector of the web of like memories, the associational web. We know by associating what is given in the present with what has been given in the past.

Perception is thus a composite, spatially of sensations together, temporally of the present with memory. As time moves along, the associational web grows in complexity, and one's capacity to discern increases. This is what distinguishes the adult from the child. Knowledge on a significant scale appears as the web comes to resemble the outside world. While the mind may remain clouded, due to desire, or fear, or laziness, in principle the untroubled passage, of perceptions composed of sensations from things composed of atoms, into a mind that remembers, allows the possibility of a thoughtful person's sorting through the superficial juxtapositions given in phenomena to the essential relations necessarily existing within a law-governed physical world. Cognitive work refines the web, such that what the perceiver looks out for in the future is the essential, allowing the inessential to pass by unremarked. The whole world of course is never perceived. What counts is perceiving its truth, and ignoring inconsequential appearances. In either case though, for the fool or for the wise, the past determines future perception. What can be is what has been.

Sensation and Perception in James

By 1890, when James published his *Principles of Psychology*, Condillac's associationist model seemed clearly in need of a thorough renovation. The general quantification of the sensory apparatus of the body, as presented exhaustively in Müller's *Handbuch der Physiologie des Menschen*⁶ in 1833, and developed by Gustav Fechner and Hermann Helmholtz, made a much more elaborate theory possible. And Müller's demonstration, published in that same text, that the stimulus eliciting a sensation of a particular sort need not resemble the sensation, negated the more simplistic aspects of the associationist account. Because it could not be trusted to correspond to the stimulus that

⁶ Cited in Crary, *Techniques of the Observer* (hereafter "*Techniques*"), p. 88.

elicited it, sensation was undependable, and perception came to be sealed off. Still, James' model clearly draws on Condillac, as upon Kant and Schopenhauer.

James posits sensation and perception as two distinct functions, rather than as two varieties of fact. Sensation is that capacity that an experiencing subject has, to be confronted with something that is present. "The first sensation which an infant gets is... his dumb awakening to the consciousness of *something there*."⁷ Perception, on the other hand, involves the knitting of present experiences together with relations of elements from past experience. While the connection to associationism here is clear, James was very careful not to assert the identity of sensation with stimulus, and he was specific in rejecting Condillac's compositional scheme. Now perception is to be understood as a temporally distinct articulation, an interpretation produced by the individual, of some set of sensations.⁸ First, there is sensation, invisible and inaudible, then there is perception, which means a seeing, a hearing, etc., which we produce, after the sensate fact. In James, simple sensation occupies the same privileged, once-only temporal position as did Condillac's primordial blast of light. But James does not allow, even in that always-forgotten moment, a real participation of the perceiver with the environment. The reality outside the subject is not to be met directly either in the minute elements of what is perceived, or in special cases of perception. Perception, like knowing, occurs in a different space than the physical one. Further, like Schopenhauer James insists that it has to be constructed through bodily effort, commanded by the will.

⁷ James, *Principles of Psychology* (hereafter "*Principles*"), v.2, p.8.

⁸ "Professor Hering puts, as usual, his finger better upon the truth than anyone else. Writing of visual perception, he says: 'It is inadmissible in the present state of our knowledge to assert that first and last the same retinal picture arouses exactly the same *pure sensation*, but that this sensation, in consequence of practice and experience, is differently *interpreted* the last time, and elaborated into a different perception from the first.'" James, *Principles*, v.2, pp. 4-5, fn.

Attention and Memory

“Every one knows what attention is,” writes James. “It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalization, concentration, of consciousness are of its essence. It implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatter-brained state which in French is called *distraction*, and *Zerstreuung* in German.”⁹ Following Hermann Helmholtz in particular, James details a number of further features: typically in vision, attentional shifts correspond to motions of the eyes, as well as to motions of the head and neck; those motions involved in listening are much more subtle. It seems that there is a special case of being able to pay attention to items in the visual periphery. Attention is short-lived—it occurs in pulses;¹⁰ a fixed attention tends to erase its object, and thereby to become distraction.¹¹ In fact, as both James and Cray note, attention is involved in a continual dance with distraction, in various registers.

Even before it is juxtaposed with distraction, though, and by that route with the “automatisms” and the whole massive system of habitual patterns typifying the body at large, attention occupies an embattled, strategic pass at the pivot between body and mind.¹² This synthesizing force, now responsible for the unity of any perceptual moment, for the patterning of that moment into focal, fuzzy, and suppressed regions, for the unity of such moments in

⁹ James, *Principles*, v. 1, pp. 403-404. This quote appears in the introductory sections of a good number of contemporary books on attention: it is considered at present a common sensical starting point for more sophisticated investigation.

¹⁰ Attention “continues pulse after pulse”; *Principles*, p. 404; “however numerous the things, they can only be known in a single pulse of CS for which they form one complex ‘object.’” p. 405.

¹¹ “No one can possibly attend continuously to an object that does not change.” ... “Once more, the object must change. When it is one of sight, it will actually become invisible; when of hearing, inaudible,—if we attend to it too unmovingly.” *Principles*, v.1, p. 421.

¹² James suggests we picture a brain cell “played upon from two directions. Whilst the object excites it from without, other brain-cells, or perhaps spiritual forces, arouse it from within... not when merely present, but when both present and attended to, is the object fully perceived...” *Principles*, p. 441.

durations across time, and even, it will turn out, for the production of conscious memory and hence for the web of relations involved in identifying any percept, is divided in its essence. On the one hand, attentional activity, according to James, always involves a motor component—some small or large movement of eye or ear musculature, head, neck, posture, breathing.¹³

James notes that certain theorists would like to reduce attention to this physiological dimension. But it also always involves an activity of what James now refers to as a system of ideational “relations,”¹⁴ namely a pre-selection of pre-experienced identities as likely candidates for a match with what is now present for perception. This James calls “pre-perception.”¹⁵ Not only must the body be carefully poised so as to conjoin with the percept in which we are interested; the mind also must draw itself to a point, projecting some element of its previous experience forward so as to capture or to formulate the percept mentally. “[T]he *preparation*... always partly consists of the creation of an imaginary duplicate of the object in the mind, which shall stand ready to receive the outward impression as if in a matrix.”¹⁶ If we are entirely lacking in this regard, if we have no idea sufficient to circumscribe a sensate positivity, perception in relation to that positivity does not take place, because perception for James, as for Condillac, depends upon the present activation of a node in a network of known relations. “[T]he only things which we commonly see are those which have been labeled for us.”¹⁷

¹³ “When we look or listen we accommodate our eyes and ears involuntarily, and we turn our head and body as well; when we taste or smell we adjust the tongue, lips, and respiration to the object; in feeling a surface we move the palpatory organ in a suitable way; in all these acts, besides making involuntary muscular contractions of a positive sort, we inhibit others which might interfere with the result—we close the eyes in tasting, suspend the respiration in listening, etc.” James, *Principles*, v.1, p.435.

¹⁴ *Principles*, v.2, p.1.

¹⁵ A term he takes from a Mr. Lewes, *Principles*, v.1, p.439.

¹⁶ *Ibid.*

¹⁷ *Principles*, v.1, p.444. Certainly there is a large discussion to be had here regarding the relation between language, teaching, and perception. I will engage that more fully in the chapters to come, particularly in Chapters 4 and 5.

Two Memories

Attention is the portal through which percepts may enter into the relational web determining future perception. “Whatever future conclusion we may reach as to this, we cannot deny that *an object once attended to will remain in the memory*, whilst one inattentively allowed to pass will leave no traces behind.”¹⁸ The whole domain of distraction, all that which is not attended to, including the whole of the automatisms (things like breathing and heartbeat) and secondary automatisms (learned, habitual routines), as well as the peripheral and the ambient, steady-state sensate environment, are screened from ideational memory. But James’ long section on “Habit” in the *Principles* asserts that secondary automatisms are themselves a manner of retaining the past, by re-performing it in certain circumstances. Certain secondary automatisms are even learned unconsciously, acquired through subliminal somatic synchronization with ambient stimuli, like the ticking of clocks.¹⁹ The vital automatisms are re-performed all the time, from second to second, or day to day as in the cycles of digestion, sleeping and waking. The secondary automatisms, like the adoption of an appropriate posture upon sitting down at a piano, are re-performed given appropriate, like circumstances. If by “memory” we denote the retaining of the past within the present, there are already in James two varieties of memory, just as there will be six years later for his friend and correspondent Henri Bergson, in *Matter and Memory*.²⁰ On the one hand a

¹⁸ *Principles*, v.1, p.427.

¹⁹ *Principles*, v.1, p. 457. James draws on Müller, describing subtle somatic synchronizations with ambient stimuli like the constant ticking of a clock as “sidetracks” by which we “learn to draft off the stimulations that interfere with thought.” We can tell however that such stimuli are at some subliminal level sensed because we are startled by their sudden cessation.

²⁰ Bergson: “The past survives under two distinct forms: first, in motor mechanisms; secondly, in independent recollections.” *Matter and Memory*, p. 78. “...we are confronted by two different memories theoretically independent. The first records, in the form of memory-images, all the events of our daily life as they occur in time; it neglects no detail; it leaves to each fact, to each gesture, its place and date...” p. 81. The other is “a memory profoundly different from the first, always bent upon action, seated in the present and looking only to the future. It has retained from the past only the intelligently coordinated movements which represent the accumulated efforts of the past... In truth it no longer *represents* our past to us, it *acts* it; and if it still deserves the name of memory, it is not because it

conscious, ideational memory, which is the product of attentional behaviors in the past and which is highly rarefied by that means; on the other hand an unconscious, motor memory. So when James writes that “each of us literally *chooses*, by his ways of attending to things, what sort of a universe he shall appear to himself to inhabit,”²¹ the agents of this choosing are complexly distributed with regard to time. Any momentary production of conscious memory occurs via a body already typified by particular habits of attentional motion. “The practical and theoretical life of whole species, as well as of individual beings, results from the selection which the *habitual* direction of their attention involves....”²² Attentional patterns themselves, if they are learned and not primary, are the product of some earlier deployment of attention, in the learning of a skill (ambient attunement constituting a special case of learning). Attention sediments into motor habit; since attention is one half motor, motor habit constitutes one half of its behavioral infrastructure, the other being constituted by the potentially conscious, representational distillates of previous experience.

Attention and Habit

Attention then operates in relation to habit as a kind of stitching process, integrating individual behavior with the specificities of the surrounding functional world. James’ favorite examples of the production of habit through the application of attention are musical. In particular he prefers those 19th century parlour instruments, the violin and the piano. Learning a tune on any instrument involves a sophisticated arrangement of bodily motions at each point throughout the piece. In the early stages of learning, each postural element must be attended to. The proper posture, eventually adopted without thought upon preparing to play the instrument, results from these early, painstaking engagements. The angle of one’s head, the

conserves bygone images, but because it prolongs their useful effect into the present moment... these two memories... the one *imagines* and the other *repeats*.” p. 82.

²¹ *Principles*, v.1, p. 424.

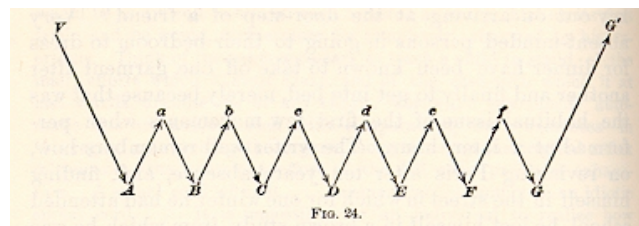
²² *Ibid*, my italics.

position of one's elbows, one's fingers, each must be paid attention to. Then the sequence of notes with their specific durations must be knit together into a line. If the tune is unfamiliar these first may be read consciously from a score, the symbols there translated into movements enacted by fingers and arms. One must attend not only to the motor execution of the melody, but also to the way that the playing sounds, in order to judge regarding one's success. By this careful crafting of individual behavior, increasingly-coherent durational units, composed of sound, touch of fingers upon keys or fret board, motion of fingers, arms, head, are synthesized.

Once thoroughly known, a particular piece may be performed without any conscious thought at all. James quotes William Benjamin Carpenter:

A musical performer will play a piece which has become familiar by repetition while carrying on an animated conversation, or while continuously engrossed by some train of deeply interesting thought; the accustomed sequence of movements being directly prompted by the *sight* of the notes, or by the remembered succession of the *sounds* (if the piece is played from memory), aided in both cases by the guiding sensations derived from the muscles themselves. But, further, a higher degree of the same 'training' (acting on an organism specifically fitted to profit by it) enables an accomplished pianist to play a difficult piece of music at sight; the movements of the hands and fingers following so immediately upon the sight of the notes that it seems impossible to believe that any but the very shortest and most direct track can be the channel of the nervous communication through which they are called forth.²³

James schematizes the habituation process in this diagram:



the habituation process

He explains:

Let *A, B, C, D, E, F, G* represent an habitual chain of muscular contractions, and let *a, b, c, d, e, f* stand for the respective sensations which these contractions excite in us

²³ *Principles*, v.1, p.117. James is quoting Carpenters 'Mental Physiology' (1874), pp. 217, 218.

when they are successively performed. Such sensations will usually be of the muscles, skin, or joints of the parts moved, but they may also be effects of the movement upon the eye or the ear. Through them, and through them alone, we are made aware whether the contraction has or has not occurred. When the series, *A, B, C, D, E, F, G*, is being learned, each of these sensations becomes the object of a separate perception by the mind. By it we test each movement, to see if it be right before advancing to the next. We hesitate, compare, choose, revoke, reject, etc., by intellectual means; and the order by which the next movement is discharged is an express order from the ideational centres after this deliberation has been gone through.

In habitual action, on the contrary, the only impulse which the centres of idea or perception need send down is the initial impulse, the command to *start*. This is represented in the diagram by *V*; it may be a thought of the first movement or of the last result, or a mere perception of some of the habitual conditions of the chain, the presence, e.g., of the keyboard near the hand. In the present case, no sooner has the conscious thought or volition instigated movement *A*, than *A*, through the sensation *a* of its own occurrence, awakens *B* reflexly; *B* then excites *C* through *b*, and so on until the chain is ended, when the intellect generally takes cognizance of the final result. The process, in fact, resembles the passage of ‘peristaltic’ motion down the bowels. The intellectual perception at the end is indicated in the diagram by the effect of *G* being represented, at *G'*, in the ideational centres above the merely sensational line. The sensational impressions, *a, b, c, d, e, f*, are all supposed to have their seat below the ideational lines. That our ideational centres, if involved at all by *a, b, c, d, e, f*, are involved in a minimal degree, is shown by the fact that the attention may be wholly absorbed elsewhere.²⁴

I present James’ account in detail because of its ongoing significance throughout the course of this study. For the present, three key features should be emphasized. First, the model states that bodily behavior may be functionally linked with sensation rather than with perception. Conscious recognition of the presence of some entity, and with that, the knowledge of the identity of the entity as it stands in the system of ideational relations, is unnecessary for functional engagement, either with the external world or with the automatic processes of the body. This leads to the second key point, that there exist sensations which are sensations of the body rather than of the external world. These arise from “the muscles, skin, or joints of the parts moved.” These sensations, in automatic, habituated processes, operate either exactly as “external” sensations, or else in functional equivalence with them: *a, b, c, d*, etc., may be sensations of the body, “but they may also be effects of the movement upon the

²⁴ *Principles*, v. 1, pp. 116-117.

eye or the ear.” The third key point is the existence of a line separating sensation and ideation: the “sensational” or the “ideational” line. This, James allows, is a fuzzy line, not excluding entirely sensation from ideation or vice versa. “[O]ur ideational centers, if involved at all by *a*, *b*, *c*, *d*, *e*, *f* are involved in a minimal degree.” If these sensations do play some role within the ideational domain (which, recall, includes the perceptual), they will be peripheral rather than focal, since in principle “the attention may be wholly absorbed elsewhere.” They will populate some zone of relative but not total distraction. What is achieved then through habituation is a tight integration of the body with its functional environment, such that conjoined body-environment activities, for example the playing of the keyboard, are equivalent to an organic process, “like a wave of ‘peristaltic’ motion down the bowels.” One might say that the individual body becomes a part of a larger body.²⁵

To this we could add James’ later observation that it is not only intentionally-learned processes which become sedimented in the temporally-repeating, habituated body. In addition to these, there are unconsciously learned ones, corresponding to the overall steady-state, ambient character of the environment. James writes

We do not notice the ticking of the clock, the noise of the city streets, or the roaring of the brook near the house; and even the din of a foundry or factory will not mingle with the thoughts of its workers, if they have been there long enough. When we first put on spectacles, especially if they be of certain curvatures, the bright reflections they give of the windows, etc. mixing with the field of view, are very disturbing. In a few days we ignore them altogether. Various entoptic images, *muscæ volitantes*, etc., although constantly present, are hardly ever known. The pressure of our clothes

²⁵ This is a conception that I will develop in the following chapters, through the course of which I hope to depict various environment-body machineries, operating functionally in concrete, spatial circuits, so as together to produce single effects. This last qualification is the one that Baruch Spinoza offers in the *Ethics* as a means for defining singular things. E2D7, in Edwin Curley’s translation in *The Ethics and Other Works: A Spinoza Reader*, p. 116: “By singular things I understand things that are finite and have a determinate existence. And if a number of individuals so concur in one action that together they are all the cause of one effect, I consider them all, to that extent, as one singular thing.” My general argument in this study is that body-environment syndications of this sort are widespread, functional, both physiologically and psychoactive, and in certain key ways coercive, but that insofar as they occupy a “periphery,” an ambience, a volume of noise, and must be distinguished from the grammatical “subject” who perceives, they are themselves systematically unperceived. This structural imperceptibility may indeed be essential to their perpetuation or their function.

and shoes, the beating of our hearts and arteries, our breathing, certain steadfast bodily pains, habitual odors, tastes in the mouth, etc., are examples from other senses, of the same lapse into unconsciousness of any too unchanging content...²⁶

James points out that all these ambient stimuli do indeed impact upon our senses. That we are somehow aware of them, but at a subliminal or non-“perceived” level, is clear from the fact that we are startled when they cease. “That the stopping of an unfelt stimulus may itself be felt is a well-known fact: the sleeper in church who wakes when the sermon ends; the miller who does the same when his wheel stands still...”²⁷ The account he then offers as to the manner of our engagement with them is derived from Müller. Every stimulus in the environment impacts us somehow, they reason, and every sensation must somehow work its way through the body into motor response, in order to maintain our organism’s equilibrium (a goal here taken as given in the nature of an organism²⁸). There must therefore be very small movements of our bodies, things like the tapping of our feet, or “insignificant muscular contractions,” operating as “side-tracks” for the stimuli to which it is inconvenient or impossible for us to attend; it is the cessation of our own synchronized muscular behavior which we recognize and which startles us.²⁹

On James’ overall model, then, perception is always organized, synthesized and modulated by attention. But attention itself is modulated, on the one hand by an interpretive matrix in the “ideational” domain, and on the other by habituated motor phenomena originating in our basic somatic functionings (these are primary automatisms), and also in somatic functionings learned either through explicit training (which involves attention and will) or through unconscious motor adaptation to subliminal ambient stimuli. Perception is at once a function of an interpretive cognitive system with a mnemonic origin and ontology, and

²⁶ *Principles*, v. 1, p. 455.

²⁷ *Ibid.*, p. 457.

²⁸ The view of the organism as essentially homeostatic is problematic in itself. I will address this issue later, particularly in relation to Gilles Deleuze’s *Difference and Repetition*.

²⁹ *Ibid.*

of a highly articulated muscular system that is non-symbolic, non-recollective, but all the same constructed in time and itself bearing past repetitions into present formations.

The Subliminal Somatic Self

On this basis we can articulate another key element of James' psychology, regarding the immediate sense of "self" and connected to emotion and religious experiences. James understands his own observations on these points to be contentious, to "traverse" common sense and to "contradict all philosophy," and he therefore decides to treat them as "a parenthetical digression," and for the bulk of his work to "revert to the path of common sense again."³⁰ Nevertheless his comments follow clearly from the above observations on the ongoing presence of subliminal³¹ sensation within momentary experience, and James never rejects the strong account that follows.

Three or four elements within the periphery of ongoing perception, themselves occupying a region definitively suppressed, although not to the degree zero, together constitute a felt sense of presence, which James notes we tend to identify as "ourselves" as opposed to our "objects." These we have already identified above. They are a. the constant feelings of attentional adjustment, correspondent to all the larger and smaller musculature involved in those procedures; b. the feelings of sensations involved in pre-fabricated habitual series, which never rise "above the ideational line," but which are not totally absent either from awareness, such that we always notice if our habitual sequence is interrupted; then lastly the feelings of subliminal ambient stimuli, of two sorts, c. internal, including all of our respiratory and circulatory processes, etc., and d. external, including whatever aspects of the

³⁰ *Principles*, v. 1, p. 305.

³¹ "Subliminal" is the technical term that James uses most commonly in *Varieties of Religious Experience* (1902), to refer both to the emerging work regarding what we now know as the "unconscious," as well as the sort of sub-perceptual processes he otherwise calls the "automatisms." In *Principles of Psychology*, "subconscious" is a synonymous term.

sensory environment are continual and unchanging enough not to constitute good or interesting percepts, or to warrant attention on functional grounds.

Just after citing the large set of motor behaviors involved in attentional adjustment which I listed above, James notes that

The result is a more or less massive organic feeling that attention is going on. This organic feeling comes... to be contrasted with that of the objects which it accompanies, and regarded as peculiarly ours, whilst the objects form the not-me. We treat it as a sense of our *own activity*, although it comes to us from our organs after they are accommodated, just as the feeling of any object does. Any object, if *immediately* exciting, causes a reflex accommodation of the sense-organ, and this has two results—first, the object's increase in clearness; and second, the feeling of activity in question.³²

This is a process he has discussed previously, in a long section of his chapter on “The Consciousness of Self.” There he offers tentatively that it could be that “*our entire feeling of spiritual activity, or what commonly passes by that name, is really a feeling of bodily activities whose exact nature is by most men overlooked.*”³³ Were such a radical hypothesis to be accepted, James notes that a fascinating if troubling doctrine follows:

...the nuclear part of the Self, intermediary between ideas and overt acts, would be a collection of activities physiologically in no essential way different from the overt acts themselves... The peculiarity of the adjustments would be that they are minimal reflexes, few in number, incessantly repeated, constant amid great fluctuations in the rest of the mind's content, and entirely unimportant and uninteresting except through their uses in furthering or inhibiting the presence of various things, and actions before consciousness. These characters would naturally keep us from introspectively paying much attention to them in detail, whilst they would at the same time make us aware of them as a coherent group of processes, strongly contrasted with all the other things consciousness contained... They are reactions, and they are *primary* reactions. Everything arouses them; for objects which have no other effects will for a moment contract the brow and make the glottis close... In the midst of psychic change they are the permanent core... which naturally seem central and interior in comparison with the foreign matters, *apropos* to which they occur, and hold a sort of arbitrating, decisive position, quite unlike that held by any of the other constituents of the Me. It would not be surprising, then, if we were to feel them as the birthplace of conclusions and the starting point of acts, or if they came to appear as what we called a while back the ‘sanctuary within the citadel’ of our personal life.³⁴

³² *Principles*, v. 1, p. 435. Note that this means that whether our attention is oriented in some way voluntarily or involuntarily, in either case the same felt sense of self is generated.

³³ *Principles*, v.1, p. 301-302.

³⁴ *Principles*, v. 1, p. 302.

James says that given this circumstance, which constitutes a “sheet of phenomena” “objective” in all its elements, whether these be named subject or percept, both Matter and “The Thinker” amount to postulates, neither of which is ever intuited with any immediacy.³⁵ The immediate self, the one really given here, would be nothing but a set of actions distinct from other actions only in their greater frequency of repetition and in their determination of which other actions and hence which perceptions are possible. “Me” would be a name given to the most recurrent; “not-me” to the more variable.³⁶ Me and not me together, at the felt level, would constitute an immanent domain between exteriority and interiority, from which both exteriority and interiority would be generated, as hypotheses. Nor would this “hypothesized” exteriority and interiority necessarily match our common-sense expectations. The image of a clock, focused upon by turning the head and straining the eye musculature, and by identifying the “clock” as something familiar because previously experienced and named, would be perceived as exterior, and would occupy a short duration within the larger flow of experience. But the clock’s ticking, as a regularity of a much longer duration, would be interior, me and not not-me. On the whole this pattern would hold: regular, recurrent sensory/motor phenomena would be felt as stable and hence “me,”; anything passing, whether somatic or environmental, would be “not me.” More complicated considerations would be necessary to determine the inner or outer character of perceived things, rendering some “ideational” and others “perceptual.”

All these notions will be developed as we go along. For now let me only mention the key connection here established between an habitually-constructed felt self and emotion. James rather famously held that emotional states are performed before they are felt, or more

³⁵ *Ibid.*, p. 304.

³⁶ *Principles*, p. 304.

precisely, that the “felt state” is just the lived character of a phenomena which is in its essence performative:

*objects... excite bodily changes... the changes are so indefinitely numerous and subtle that the entire organism may be called a sounding board... every one of the bodily changes, whatsoever it be, is FELT, acutely or obscurely, the moment it occurs... If we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its bodily symptoms, we find we have nothing left behind... there is no limit to the number of possible different emotions which may exist... the emotions of different individuals may vary indefinitely...*³⁷

If our hypothesis is true, it makes us realize more deeply than ever how much our mental life is knit up with our corporeal frame, in the strictest sense of the term...³⁸

On this model then there would be no difference between emotion and self; at least the somatic, felt self, the immanent one as opposed to some ideational composite in which we might believe (a hypothetical self), would designate enduring emotions as opposed to passing ones, nothing more. And the line between the two would be mobile.

The Will and God (Move Through the Subliminal)

In the end James did not really believe in the possibility he lays down here, which so intriguingly foreshadows phenomenology and post-structuralism. The reason is that, whereas the felt self is a fact of psychological experience, there is another function, namely the conscious modulation of attention and action, stemming from the will, vying for the title of “real” self. These are two contenders for the same foundational role, one, felt, immediate, and endlessly mundane, the other, more hypothetical, (since as James himself notes, it remains entirely possible that the shifting of ideational matrices in attention are effects of muscular alteration), but free and dignified. The felt self denotes nothing but the felt process of doing and being in a material, somatic milieu. The will is a function of freedom and control standing transcendent with regard to that milieu. While

³⁷ *Principles*, v. 2, pp. 450-454. Italics all James’.

³⁸ *Principles*, v. 2, p. 467.

its own proper domain is difficult to determine, for James, as for Bergson, it is ultimately a spiritual one, shared with the divine or with God.

It is well worth noting, then, that when James gets around to discussing religious experiences, twelve years after *Principles of Psychology*, he hypothesizes that such experiences essentially involve “uprushes,” from the region of the automatism, from the “subliminal” or “ultra-marginal” domain. By this route, something which is beyond the individual traverses individual psychology and exerts an influence on consciousness. “Let me propose, as an hypothesis, that whatever it may be on its *farther* side, the ‘more’ with which in religious experience we feel ourselves connected is on its *hither* side the subconscious continuation of our conscious life.” The religious man “is moved by an external power,” but mediately, such that his psychological experience can also be denoted an “invasion from the subconscious region.” In this “upsurge,” “the finite self rejoins the absolute self.”³⁹

In this formulation, the two domains, internal and external, which are constructed hypothetically from the “sheet of phenomena” are occupied on the one hand by the will, on the other by God. While the sheet itself is felt and immediate, and involves an organic intertwining of the body with its environment, the sides of the sheet are spiritual, refined, in some sense *beyond* materiality. The force of these beyonds nevertheless manifests only as alteration within the sheet; for this reason each is hypothetical; and their hypothesis is only necessary at all, it seems, in order to account for some emotion or motion, and hence some state of bodily performativity, hitherto unprecedented or otherwise in too great a disequilibrium with other patterns to be attributable to the organism, conceived as a system of balanced repetitions.

³⁹ William James, *Varieties of Religious Experience*, pp. 512-513.

After James

James can serve as a reference point for most of what follows in this investigation; and the above consideration of his work has allowed a presentation of most of the terms we will need in order to consider the psychological-scientific manufacture of perception. The distinction between sensation and perception, for example, continues into present discourse, and is of key significance for understanding contemporary aesthetic theory, as well as the very concept of the aesthetic as I will attempt to develop it. “Sensation” will be a central concept for Chapter 2. Likewise attention is an important subject of study especially within the applied fields of cognitive psychology, the inception and history of which we will shortly encounter, and will be of key concern for the composers and musical movements we will consider in later chapters. Ultimately I will try to show how both socially “functional” and “aesthetic” products operate upon and through attention. Lastly James’ emphasis on habit, its relation to bodily states and to the felt self, has a very interesting line of descendents, passing on the one hand through the theory of the “body image,” and on the other through the influential behaviorist movement.

The “sheet of phenomena” that he identifies, meanwhile, is of enduring significance from a critical perspective, since it offers a reference point in terms of which later normative psychological pronouncements can be understood. It overlaps his more famous idea of a “stream of consciousness,” which in some fashion is developed in Bergson and then Husserl. Perhaps though it is more provocative or more useful than that other denomination, precisely because it does not stipulate anything about a subject (“consciousness”) whose predicate the stream would be. Rather it emphasizes the opposite state of affairs: some dilated system of cycling behaviors, neither mine nor not-mine, has me, and not-me, rather than the other way around. Upon this sheet of phenomena various constructions are possible. One element may be

hypothetically raised above the rest, as a transcendental principle accounting for them.⁴⁰ Typically two transcendent domains are erected, flying the imperial flags “inner” and “outer.” What character either has, and which is the more important, is determined by the particular construction. In Husserl, and even, in a mitigated, apologetic fashion, in the work of Maurice Merleau-Ponty, the inner underpins the outer. For John B. Watson, J.J. Gibson and Alva Noë, the outer underlies the inner. Meanwhile the whole sheet of phenomena is subject to interpretive ontological coloration: for Husserl as for James it is ultimately a flow *of* consciousness; for Watson it is rather a “stream of activity”;⁴¹ for the biologist Jacob von Uexküll it will have a mixed character, part motor, part semiotic; for the mainstream after World War II, the whole sheet turns into “information.” Etc. Insofar as the discourses produced by any of these individuals or institutions become influential, and turn out to be related to particular, concrete productions of architecture and technology, each of these interpretive maneuvers has a social-political significance. James’ “will” is among other things a legal concept; if the unity of experience stems from adequate willing, those failing to experience such a unity are legally substandard; meanwhile the concept of God is morally and conceptually regulative with regard to the possibilities of the material domain, precluding, for example, the sentience of that domain, and hence plays a role in determining collective behavior within and toward it. Even the assertion of the “unity” of the “sheet of phenomena” involves an operation from within the sheet meant to determine its global essence; and it should not go unnoticed that my present emphasis *on* the sheet, as an immanent domain

40 Žižek identifies this as the moment of ideological capture, the key point where some “master signifier” seizes hold of a series of previously under- or un-determined signifiers and grants to them a meaning, by means of an extra-significant force which is retrospectively justified as a consequence of its own action as a necessary, natural, and overly meaningful explanation. With Laclau and Mouffe he identifies this reduction of a semiotic multiplicity to a unity of meaning as the most pressing of political problems, exactly the phenomenon which would have to be avoided in a radically democratic field.

Žižek’s interpretation, it should be noted, rests upon the preliminary identification (ideological) of the “sheet of phenomena” as semiotic in character or ontology. See Žižek, *The Sublime Object of Ideology*, particularly Ch. 3, “Che Vuoi?,” pp. 95-144, and Laclau and Mouffe, *Hegemony and Socialist Strategy*.

⁴¹ John B. Watson, *Behaviorism*, p. 137.

underpinning the production of any transcendence,⁴² has exactly the same “hypothetical” status.

In any environment, in any history where there are vying accounts of something, the essential question is always “which is true?” That question may itself be engaged with in a couple of ways. On the one hand we can take part in the construction of truth, by entering into discussion about the relative merits or stability of one or another account. By this means we can arrive at an answer, based on reasoning or observation or whatever. We will thus support a particular account explicitly. And we will also support, implicitly but more importantly for that very reason, the particular methodology of truth-substantiation that we employed in order to arrive at our partisan conclusion. Insofar as any interpretation at all implies a background, theoretical frame, such an implicit assertion is always made. Nevertheless we may attempt to take some distance from the set of accounts in order to gain a view of their inter-relations, of their institutional affiliations, and of their historical connections—to observe how their own truth is socially constructed; how, in Foucauldian terms, they achieve a “truth-effect.” We will never achieve objectivity by this means—in fact all interpretation remains strategic and partisan; the one assembling the material is involved in a construction; she selects, emphasizes and de-emphasizes, according to some plan, even when that plan is not subjectively recognized—but we may at the least defend against immediate seduction by one or another authoritative voice, and in the best case we may actually succeed in throwing our own theoretical commitments into a critical light.

⁴² I am pressing James’ concept into conformity with Deleuze and Guattari, and Spinoza—an interpretive strategy typical of some segments of the contemporary academic institution.

The Formed and Forgotten Felt Body

The story that I want to tell, then, follows Crary's, and emphasizes these elements in James, which I think have been extremely influential and are still of value. In the twentieth century, the retreat that Crary describes, of the principle responsible for the unification of experience, from the ordered material world, to the transcendental subject, to the modulation of attention by will, continues still further, unification of perception and of self becoming a basic feature of the body or of the body's "projection." Later, in the post-Marxist and post-structuralist theories to which I have thus far only alluded, particularly in Theodor Adorno and Gilles Deleuze, that horizon will move back to the total material or semiotic system encapsulating any particular body. We won't get to that part of the story until later. In the remainder of this chapter, though, we will witness the coming-to-ascendance of two of the most popular and influential themes of our current intellectual environment, namely "the body" and "information." "The body," of such importance for feminism, gender studies, Nietzsche-inspired post-structuralism, and then installation art, sound art, and contemporary theoretical formulations regarding music (not to mention the hegemonic medical and pharmaceutical industries), rises in intellectual significance to begin with in the course of the world wars, in studies of amputees and persons with shrapnel in their brains, but also in behaviorist projects for behavioral control. Later discourse on the body image and on "embodiment," in late phenomenology but especially in cognitive science, are rooted in these earliest studies, performed to begin with by Sir Henry Head and Lord Russell Brain (!), and later by Paul Schilder, under the influence of Sigmund Freud. Meanwhile the transformation of the whole world into information occurs in an even shorter period, especially during the years 1940 to 1948, at which latter point Norbert Wiener's *Cybernetics* was first published. In that short but extremely intensive period, communications technologies, weapons systems, cryptography, the brain and nervous system, perception and conception were all brought

together under one theoretical heading: each was a problem of information; wireless waves, military codes, neurons, visual and auditory fields, mental representations, attentional processes, all were assemblies of information, all conveyed information; everything became a message. Code and decode: the passwords, one might observe, also of structuralism and post-structuralism, arose in the wake of this war-driven tumult. It is of key significance that at just this point when all these essential aspects of immediate life are transformed theoretically into “information,” the huge emphasis previously given to bodily habit as a manner of environmental engagement, and to the history and context of the individual as constitutive of habit, disappear from the theoretical vocabulary, while the problem of attention, now explicitly joined with the production of “control” environments, gains a renewed importance. This present chapter tells the story of the hegemony of information; the next details the counter-theme of the body.

The other key shift taking place in this period, if already underway with Fechner, Müller and Helmholtz, is that from an introspective to an “objective,” quantitative and experimental psychology. While one might locate the completion of that shift very early in the 1900s, perhaps between 1910 and 1920, by which latter point behaviorism was well-entrenched, in another respect it continued at least through World War II, during which period phenomenology was still a strong discipline. While Head’s theory regarding the body image emphasizes its objective cortical ontology, Schilder in 1935, in *The Image and Appearance of the Human Body*, was still primarily interested in bodily space as experienced. It is for this reason that he was such an important reference point for Merleau-Ponty’s *Phenomenology of Perception* in 1945. In the war period, then, both currents, those emphasizing first-person and those third-person perspectives, were both viable; both were institutionally funded and both commanded some degree of intellectual respect. The contemporaneous influence of Schilder and the behaviorist John B. Watson shows this clearly.

Nor is the debate between introspection and experiment only methodological. While it can be described in terms of the amenability of certain varieties of observation to accuracy, precision and verifiability, these criteria already presume the victory of one perspective over another. For William James, knowledge about psychological experience is ultimately psychological, experienced knowledge. The point of understanding the regularities of perception is to have a clear awareness of one's own life. The key shift that takes place with behaviorism is a shift away from that first-person perspective to a second- or third-person one. This later knowledge is a knowledge about another, a knowledge about behavior, which term designates precisely those dimensions of human activity making an appearance to an experimental apparatus arrayed without. The whole question then is one regarding the position of knowledge, even the spatial position of knowledge, with respect to experience. And the outcome, since introspection falls into disfavor and phenomenology never comes to compete with "hard" science, is that socially speaking, knowledge is positioned outside of experience. To know the truth about one's immediate world, one must consult an expert. Here is a "scientific" determination with obvious, extensive social-political ramifications.

Until the information revolution, both the in-side and the out-side perspectives on perception place a large emphasis on habit. In Schilder and Freud, and then Merleau-Ponty, habit becomes the bodily ego, the body schema or image, or the lived body. Habit is encountered as lived, or better, as I have described it above, as a very specifically-articulated material support for the more "conscious" dimensions of experience, a framework in which those take place, which is, nevertheless, not a transcendental absence. From its denomination with Henry Head, the body image determines both the organization of proprioception and the matrix of attention. It constitutes the limits of the body as felt and acted, and the infrastructure of the body-centric object-space within which percepts are located. It is a unity for feeling and a grid for perception. Theoretically it still plays these roles today—Jacques Paillard's work

presents these functions in some detail. But the historicity of habit or the body image, its formability through practice and social touch, as also the intimate and troubled connection between proprioception and desire, which Freud, Schilder and Merleau-Ponty emphasize, are dropped abruptly with the advent of the communications paradigm.

Minus the eros, the formability of the habituated body was equally important for proponents of the out-side perspective. In John B. Watson, behavior itself, and personality too, are ultimately composed of miniature “habit-systems.”⁴³ Foreshadowing the “sub-routines” of the impending computer age,⁴⁴ such systems are habit as viewed from without; the personality is the personality as manifest in the endless details of behavior throughout days, weeks, months, years, appearing ideally to a ubiquitous behaviorist observer.⁴⁵ Like sub-routines, each habit system is composed of pre-fabricated and dependably replicable elements, constructed through the elementary process of “conditioned response.”

Interestingly, in both cases, whether they are lived from within as the horizontal infrastructure distributing percepts and cognitive subjectivity, or viewed from without with an aim to their optimal engineering, systems of habit exhibit a profound “lability” (to use Schilder’s phrase), and both traditions note a tight co-variance of the set of habit systems with the functional and aesthetic material environment within which they are formed and in which they continue to operate. For the phenomenologists, this points to the intentional behavior of a free existential subjectivity engaged in concrete projects, for the behaviorist to the possibility of social engineering aimed at efficiency of production and corporate organizational stability.

⁴³ *Behaviorism*, p. 272.

⁴⁴ An explicit parallel Norbert Wiener draws for the passive orienting of attention in *Cybernetics*, p. 136.

⁴⁵ “Just assume, for purposes of argument, that the habit curve for everything you can possibly do has been plotted out by a behaviorist who had studied you under experimental conditions throughout the whole of your life up to the age of 24. *Now it is obvious that if at the age of 24 he took a cross section of your activity, he would be able to catalogue everything that you can do.*” *Behaviorism*, p. 272.

In World War II and afterward, it will transform into the possibility for ever-tighter integration between humans and machines within information-processing “control systems.”

But the historicity and the relation to desire are now discursively absent. If they continue at all in theory, it is only in certain small sectors of phenomenological and psychoanalytic feminism, well off the radar of mainstream science.⁴⁶ This discursive shift, from the experientially formative role of an habituated and felt body that is erotic and historical to the naturalized passivity of an ahistorical, an-erotic and purely cogitative body, is what I wish to show in the remainder of this chapter. Jacob Von Uexküll’s work can be thought of as one moment at which the pivot takes place.

Head and Brain’s Body Schema

Although the studies thematizing it come from vastly different circumstances than do 18th-century theories of perception, depending on the provision of laboratory subjects by a newly-mechanized warfare, we can nevertheless think of the body image as standing directly in the line Cray traces, from associationist psychology, through Kant and Schopenhauer, through James. For Henry Head, who theorized on the basis of studies done on brain-damaged soldiers, body image denoted a function of the sensory cortex responsible for producing the awareness of one’s own bodily positioning, of the limbs in reference to one another, and of the localization of sensations upon one or another bodily surface. This is to say that sensations are not of themselves primordially local or solidly located within a pre-given space. They may be experienced ambiguously, and may without any ambiguity be perceived as stemming from bodily locations completely distinct from their objective origin. An intervening function is necessary in order to localize them, in relation to “a” body, which on the one hand is felt, in a

⁴⁶ In particular in the work of Judith Butler (in *Bodies that Matter*) and Kaja Silverman (in *The Threshold of the Visible World*).

vague, “proprioceptive” (felt and non-focal) fashion, as a presence that is “mine,” and which on the other hand operates as the matrix for possible distributions of internal and tactile percept, and ultimately even percepts at a distance, since these are experienced in their positional relation to one’s own body and its parts.⁴⁷ It is the body image which now performs the function of unifying perceptual experience.

To be specific, a distinction should be made between “body schema,” which denotes one of a set of transitory and continually updated organizing functions correspondent to varying regionalities of the body (for example, the hand or the arm), and “body image,” which refers instead to a similarly-temporal composite of schemata. Head thought of the functioning of each body schema very much as Condillac thought of the process of association-driven perception. Each schema constitutes a sort of subsystem within the associational complex, which is called up and engaged in relational processes whenever some sensation takes place. In James’ language, each schema performs a preliminary interpretation. Like all other elements of the associational web, the body schema and the body image are derived from earlier experience. They are assembled from previous impressions, unconsciously.⁴⁸ Each present sensation, then, is brought into associational conjunction with a memory-complex, in such a fashion as to capture or identify the present sensation as being of some previous local type, of “coming from” such and such a bodily locale. It is as if this sub-

⁴⁷ A good account of the various modalities of percept-distribution in perceptual spaces, “operational,” tactile, and visual is given in Uexküll’s *A Stroll Through the Worlds of Animals and Men*, which I will discuss below. To these must be added auditory space, discussed thoroughly in Jens Blauert’s *Spatial Hearing*.

⁴⁸ “But, in addition to its function as an organ of local attention, the sensory cortex is also the storeroom of past impressions. These may rise into consciousness as images, but more often, as in the case of special impressions, remain outside of central consciousness. Here they form organized models of ourselves, which may be termed ‘schemata.’ Such schemata modify the impressions produced by incoming sensory impulses in such a way that the final sensation of position, or of locality, rises into consciousness charged with a relation to something that has happened before. Destruction of such ‘schemata’ by a lesion of the cortex renders impossible all recognition of posture of the locality of a stimulated spot in the affected part of the body.” Henry Head, *Sensory disturbances from cerebral lesion*, quoted in Paul Schilder, *The Image and Appearance of the Human Body* [hereafter “*Image and Appearance*”], pp. 11-12, without specific citation.

complex itself carried out its own regime of functions, the same in kind as the overall functioning of associational memory. Where memory in general engages in what Kant had called a “schematism”—an intermediary “reaching out” by means of which something purely sensate is determined as having a conceptual identity⁴⁹—the body schema must do so too.⁵⁰ In performing this function, like other associational entities, schemata themselves remain for the most part in a non-focal region.

Body schemata, and the body image which organizes their sum, are continually updated, moment by moment, on the basis of bodily impressions. From tactile sensations, visual sensations of the body, and from the vast multitude of sensations produced within the body itself,⁵¹ the schemata are endlessly assembled and endlessly re-assembled. There are new schemata and a new composite image at every second.

By means of perpetual alterations in position we are always building up a postural model of ourselves, which constantly changes. Every new posture or movement is recorded on this plastic schema, and the activity of the cortex brings every fresh group of sensations evoked by altered posture into relation with it. Immediate postural recognition follows as soon as the relation is complete.⁵²

...the postural model of the body is in perpetual inner self-construction and self-destruction.⁵³

Along with constituting the overall form of a body, of a felt self, and a complex matrix in terms of which and in relation to which perceptions are localized spatially, the body image even determines that key division between inside and outside. Inner and outer are

⁴⁹ “Obviously there must be some third thing, which is homogeneous on the one hand with the category, and on the other hand with the appearance, and which thus makes the application of the former to the latter possible. This mediating representation... mediates the subsumption of the appearances under the category.” *Critique of Pure Reason*, p. 181.

⁵⁰ At a more specific or temporally-distinct level, before percepts are identified in terms of names, for example.

⁵¹ “We see parts of the body-surface. We have tactile, thermal, pain impressions. There are sensations which come from the muscles and their sheaths, indicating the deformation of the muscle; sensations coming from the innervation of the muscles (energy sense, von Frey); and sensations coming from the viscera.” *Image and Appearance*, p. 11.

⁵² Head, *Sensory disturbances from cerebral lesion*, quoted in Schilder, *Image and Appearance*, p. 12.

⁵³ Schilder, *Image and Appearance*, p. 15.

preliminary, key localizing functions, not simply recognized on the basis of some raw nature of a sensation. A sensation alone is a positivity to be interpreted. Its in-ness and out-ness are equivalent formally to rightness, leftness, or differences between sensory modalities. All must be fabricated.⁵⁴

That the body image is not identical with the objective body, that it is rather what would come to be referred to as a “projection,” if a special, framing one, is proven by the fact of the phantom limb, a phenomenon with which Head, Brain, and Schilder all had significant experience, working as they did with amputees. That it is located within or dependent somehow upon the sensory cortex is demonstrated by the fact that an amputee with a brain lesion, who had previously experienced a phantom limb, lost that experience upon the appearance of the tumor.⁵⁵ Thus there exists even in this small theoretical vicinity a tension between the objective and the lived body. From an engineering perspective, body schemata and body image are localized, somehow, in the brain. If the cortex is impaired, these may be as well. Floating sensations, or mislocated sensations, or a sheer absence of sensation may result. Lived space is thus apparently dependent upon objective space. This, certainly, is the common sense attitude and the one that grounds the practical importance of medical professionals as a sort of priesthood empowered to interact with special objects determining individual fates. It is also true, though, that bodily space exists only insofar as it is lived. Without that lived experience, there is no body schema or body image—those terms become meaningless. The body to which the body schema most intimately refers is not the other’s body as that appears focally to the surgeon, but the organized system of fine proprioceptions

⁵⁴ “...but there is no question that the sensations coming from the inside of the body have no inner meaning before they are brought into connection with the body-image.” *Image and Appearance*, p. 105.

⁵⁵ “One of our patients had lost his left leg sometime before the appearance of the cerebral lesion which destroyed the power of recognizing posture. After the amputation, as in so many similar cases, he experienced movements in a phantom foot or leg. But these ceased immediately on the occurrence of the cerebral lesion; the stroke which abolished all recognition of posture destroyed at the same time the phantom limb.” *Ibid.*

and fine habits felt by the surgeon as himself, which carry out the surgery in conjunction with his focalization upon the objectified brain.

Is the body image, therefore, objective, or subjective? On the one hand it appears as an objective entity (deduced, though never seen or heard) foundational for a subjective experience. On the other it appears as a pre-subjective framework constituting the possibility of objective presences. To answer the question decisively is to take a position with regard to which perspective, the deductive and surgical, or the immediate and lived, has an epistemological authority and hence a social power.

Freud's Bodily Ego

The other key source for the concept of a body image, and the other one upon which Schilder drew heavily in his own work, is Freud. In *The Ego and the Id*, Freud makes the almost-passing comment that the ego is “first and foremost a bodily ego; it is not merely a surface entity, but is itself the projection of a surface.” In a footnote he clarifies: “The ego is ultimately derived from bodily sensations, chiefly from those springing from the surface of the body. It may thus be regarded as a mental projection of the surface of the body.”⁵⁶

Much psychoanalytic work follows a path distinct from neurology, but this work of Freud's, like his earliest work with Breuer⁵⁷ and his work on narcissism, intends to be as commensurate as possible with the neuroscience of its day. This “projection” of the body's surface, of the sensations at its skin and of the state of its viscera,⁵⁸ performs roughly the same function as Head's body image. It organizes raw sensation; the product of its functioning is a

⁵⁶ Sigmund Freud, *The Ego and the Id* [hereafter “*Ego and Id*”], p. 19.

⁵⁷ In “Project for a Scientific Psychology,” 1895. See *The Freud Reader*, pp. 86-89.

⁵⁸ “Let us now, taking any part of the body, describe its activity of sending sexually exciting stimuli to the mind as its ‘erotogenicity’... We can decide to regard erotogenicity as a general characteristic of all organs and may then speak of an increase or decrease of it in a particular part of the body. For every such change in the erotogenicity of the organs there might then be a parallel change of libidinal cathexis in the ego.” Freud, “On Narcissism: An Introduction,” p. 552.

mediated perception. More specifically, its double role is to shield the organism from potentially harmful stimuli, and to control the “approaches to motility”⁵⁹ by the various vying instincts. In this it exceeds Head’s body image, although coinciding with Schilder’s. But it is alike in this last key respect, that it flickers. Just as Head’s schemata are endlessly re-constituted, so is Freudian perception. Freud’s repeated metaphor is that of a flickering, subsumptive amoeba. It puts out “feelers which are all the time making tentative advances towards the external world and then drawing back from it,”⁶⁰ taking “samples” of the environment. The feelers consist in the “flickering-up and passing-away of consciousness in the process of perception.”⁶¹ More specifically:

...cathectic innervations are sent out and withdrawn in rapid periodic impulses from within into the completely pervious system Pcpt.-Cs. So long as that system is cathected in this manner, it receives perceptions (which are accompanied by consciousness) and passes the excitation on to the unconscious mnemonic systems; but as soon as the cathexis is withdrawn, consciousness is extinguished and the functioning of the system comes to a standstill. It is as though the unconscious stretches out feelers, through the medium of the system Pcpt.-Cs., towards the external world and hastily withdraws them as soon as they have sampled the excitations coming from it. Thus the interruptions [are] attributed by my hypothesis to the discontinuity in the current of innervation; and the actual breaking of contact [to] the periodic nonexcitability of the perceptual system. I further [have] a suspicion that this discontinuous method of functioning of the system Pcpt.-Cs. lies at the bottom of the origin of the concept of time.⁶²

There is obviously more contained here than in Head’s account, and much, like the agency of “the unconscious,” which is specific to psychoanalysis. But similarity remains in the flickering acquisition of the sensory circumstance, and transport of sensations into a mnemonic system. In Freud’s account this “cathectic” (energy-endowing) process involves a pulsatile, electricity-like “current.” By 1948, Norbert Wiener would already have the idea that this repeating cathectic framework could be identified with the alpha-bandwidth brainwave,

⁵⁹ *Ego and Id*, p. 19.

⁶⁰ Freud, *Beyond the Pleasure Principle* [hereafter “*Pleasure Principle*”], p. 31.

⁶¹ Freud, “Some Notes on the Mystic Writing Pad” [hereafter “*Mystic Writing Pad*”], p. 211.

⁶² “*Mystic Writing Pad*,” p. 211-212.

scanning the occipital lobe as a cathode ray scans a television screen. I will leave the rest of the above passage unexamined for now, to pick it up again in chapter 2.

To turn to what is specific in Freud's "bodily ego," and to what Schilder derives from it, the obvious beginning point is its erotic character. The electrical current above is not really, in Freud, electricity, although in many ways it acts like it, having vibratory characteristics and a capacity to build in charges, either static or in flow.⁶³ Rather it is libido. If Head's body image is ontologically reducible to a mnemonic form, existent in associational memory, sedimented from past sensations and brought into contact with present sensations in the process we are now familiar with as perception, Freud's bodily ego is itself "cathected," a reservoir of libidinous energy. To be precise it is a small reserve of energy intercouring carefully with an ocean of it. While Head's body image simply subsumes schematically, in what for communications thinkers like Norbert Wiener or, as we will see shortly, Donald Broadbent, amounts to a machinic, calculative pattern recognition, an algorithmic schematism in a system involving feedback, Freud's ego reaches out to the world, erotically. Its probings require energy, they are distributions of energy in search of erotic connections. What is always sought is a channel by which to direct a motion, a channel by which a real tension in the somatic body may be released. The ego, as a projection of the "surface" of the body, or more specifically a lived, felt projection of the set of sensational positivities of all kinds, including the sensations correspondent to desire, seeks the diminishment of each of those positivities through a connection to some and an avoidance of other perceived things.⁶⁴

⁶³ Libido may be either "bound" or "unbound." When bound it remains within some particular psychic apparatus; when unbound or mobile it may travel between them. This notion is presented first with Breuer in "Project for a Scientific Psychology" in 1895, and reappears in various forms in the later period I am concerned with here, to some degree in "On Narcissism: An Introduction," and then more fully in "2 Principles of Mental Functioning," *Beyond the Pleasure Principle* and *The Ego and the Id*. It represents Freud's closest approach to a purely neural theory of psychic operation, nearly but not quite coinciding with neuronal function. These were explicitly referenced in the 1895 "Project."

⁶⁴ The pursuit of the "pleasure principle" therefore corresponds with the tendency toward equalization Deleuze critiques in "orthodox" perception, in *Difference and Repetition*.

We cannot deal at present with the notion of pleasure as diminishment of tension, which is a prejudice Freud shares with all thinkers of the equilibrious “organism.” What should be emphasized for the moment is the libidinous quality of each of the gestures of consciousness, each little pulse of awareness outwards into the world. Even if the ego and perception still amount to a projection and hence not a direct contact with the sensation in its raw materiality, and even if the desires driving behavior are endlessly mutilated, disguised, mistaken for one another or something else, in any case what is carried out by the ego in its tumultuous negotiations is a connection between the somatic and the sensate. There is real, material energy on either side of this surface. The surface, though virtual, facilitates or denies a real connection. Another name for these pulsations is “attention”: each of the perceptions of the ego corresponds to a gesture of attention, and attention thus appears on this theory first of all as a distribution of energy, and secondly as a distribution of energy according to the larger-scale motions of a body in its environment.

The Labile Body

Schilder synthesizes Head’s body schema with Freud’s bodily ego. The result is a body image in constant correspondence with the motions of limbs, viscera, etc., consistently reconstructed and destroyed, but also eroticized, sexual, moving. There is nothing that Schilder emphasizes more than this erotic element and this motion. The body image changes, not only with posture, but in many other ways as well. It is driven in this change, it turns out, by some libidinous drive in excess over the image, which delights in its breakdown; probably by the somatic body itself, pressing and pressurizing the image, distorting it through technological expanse, and escaping it for fragments of time, in the systolic series running parallel to perception, a diachronic harmonic of perception which is accessible through sheer speed and dance.

Following Freud, Schilder notes that certain parts of the body are more important, socially, sexually, even environmentally, than others. Particularly the openings of the body are privileged in our organic and in our sexual activity. The projected body image, then, which on Freud's account results from the "erotogenicity" of the organs it expresses, must express sexualized regions to a proportionally greater degree. The body image is warped compared to the "objective" one. Its lips, nipples and genitals, its nostrils and anus and mouth are profound; the middle of its back almost nonexistent. In time, and in real sexual experiences, this distortion or dilation is amplified, the whole body turning into a fringe focused upon one or another excited region.⁶⁵

Schilder also accepts Freud's account of the development of the individual through a series of sexual phases, oral, anal and genital, emphasizing now one and now another of these anatomically-privileged regions. With each developmental phase the body image shifts in its emphasis and organization. The resulting psycho-sexual constitution of a particular individual as having developed in a specific way is also lived in terms of the importance of one or another aspect of her sensed body.⁶⁶

⁶⁵ "Observation quickly shows that we feel especially the eyes, the mouth, the nipples, the genitals, the urethra, and the anus...The enormous psychological importance of all the openings of the body is obvious, since it is by these openings that we come in closest contact with the world. By them we ingest air, food, sex products; by them we eject urine, sex products, faeces, and air. We have therefore distinguished points in the postural model of the body. These points are at the same time points of erotic importance... Manifold investigations and experiments have shown me clearly that the difference in the libidinous structures is reflected in the structure of the postural model of the body. Individuals in whom a partial desire is increased will feel the particular point of the body, the particular erogenic zone belonging to the desire, in the center of their body-image. It is as if energy were amassed on these particular points. There will be lines of energy connecting the different erogenic points, and we shall have a variation in the structure of the body-image according to the psychosexual tendencies of the individual." *Image and Appearance*, p. 124-125.

⁶⁶ "In the whole structure of the schema of the body, the erogenic zones will play the leading part, and we have to suppose that the image of the body, in the oral stage of development, will be centred around the mouth; in the anal stage, around the anus. The libidinous flow of energy will strongly influence the image of the body. But there is no reason to believe that in eroticism concerning the surface of the body the muscle activities will be without significance. We suppose that every action of the ego in the analytic sense, every grasping, groping, and sucking, will again have an enormous influence on the structure of the body-image. The senses will influence the motility, the motility will influence the

In this regard Schilder emphasizes the role of the touch by other persons, parents, lovers and peers, also one's own hands, in determining the value and hence the presence of one or another part of the lived body. What is touched more, exists more. What is touched less, exists less. And what is never touched, does not exist.⁶⁷

This is true for the body image also on a momentary scale. For Head, it is composed materially of nothing but immediate sensations, localized according to a mnemonic schema. Absent sensations, no material, and hence, no body. Schilder points out that therefore at any given moment, our lived body is composed especially of those points of pressure between us and other surfaces. These, along with the points of tension in our own body, form a momentary "frame" upon which the rest of the body image is stretched.

We may generally say that the distinct surface of our skin is perceived only when we are in touch with reality and its objects. It is true that the mere contact with an object which has no importance and is not perceived as such, already gives the strict outline to the body.⁶⁸

...it is worthy of note that even the tactual part of our body is indistinct so long as the body is without contact with the outside world. It does not appear that we perceive our own body different from any other object... Further orientation is gained by the openings of the body and the parts of the skin that are tense over bones. When the frame of the body-image is drawn, further gradual elaboration of the frame, which is marked by the important points, sets in.⁶⁹

Physical conjunction frames the lived body. Not only, therefore, do we reach out and touch only what we desire or what we need to touch to relieve tension; not only does such reaching involve the distribution of our own energy; but the positivity which becomes constituent of the

senses, but the motility is also directed by strivings, tendencies, desires..." *Image and Appearance*, p. 123.

⁶⁷ Genital organs "force the individual into a continual contact with the outside world, and there is no question that we discover our body at least partially by these contacts with the outside world."... "Parts of the body which can easily be reached by the hands are therefore different in their psychological structure to parts of the body which can be reached by the hands only with difficulty."... "but... our own activity is insufficient to build up the image of the body. The touches of others, the interest others take in the different parts of our body, will be of an enormous importance in the development of the postural model of the body..." *Image and Appearance*, pp. 125-126.

⁶⁸ *Image and Appearance*, p. 86.

⁶⁹ *Ibid.*, p. 98.

body image itself consists in a conjuncture of this somatic energy with some resistance from without. Beyond being a relational entity in terms of functional position, it is a relational entity in terms of material cause. The same might even be said of visual and auditory sensation, which consist to begin with in conjoint energetic motions between environment and body. We will thematize that in discussing J.J. Gibson's "ecological" model of perception in Chapter 2.

The body image, or something behind it, pressing through it, even rebelling against it, loves to change. It does this constantly through the usage of tools.

I have many times emphasized how labile and changeable the body-image is. The body-image can shrink or expand; it can give parts to the outside world and can take other parts into itself. When we take a stick in our hands and touch an object with the end of it, we feel a sensation at the end of the stick. The stick has, in fact, become a part of the body-image. In order to get the full sensation at the end of the stick, the stick has to be in a more or less rigid connection with the body.⁷⁰

The body image consists in the summed set of body schemata, themselves continually re-articulating what is stable in the system of behaviors. Nude, that stability corresponds to the body alone, albeit the erotic body, in a particular attitude and hence a certain morphism correspondent to nudity (which, in a certain way, is to say that there is no nude or "natural" body image at all). But once dressed, once engaged with the surrounding world, with its pens and keyboards, its car keys and doorknobs, its clocks, the stability shifts. The re-articulation of what is stable, what is me, in reference to that upon which I am acting and that which I am sensing, comes immediately to include whatever moves in a stable relationship with me. The body image includes my computer as I type, the soldier's gun as he aims. It is in reference to me and my computer, the Marine and his gun, that percepts appear. Habit modulates attention. Each of us is engaged in a motor space, framed by a system of re-articulating movements, in relation to which whatever else, the dogs barking in my back yard, the shells exploding

⁷⁰ *Image and Appearance*, p. 202.

nearby, the word or the enemy, is. A woman's body image may include the feather in her hat—an example in *Head*, reiterated by Schilder and then by Merleau-Ponty. Our lived body may include our cars.

A woman may, without any calculation, keep a safe distance between the feather in her hat and things which might break it off. She feels where the feather is just as we feel where our hand is. If I am in the habit of driving a car, I enter a narrow opening and see that I can 'get through' without comparing the width of the opening with that of the wings, just as I go through a doorway without checking the width of the doorway against that of my body. The hat and the car have ceased to be objects with a size and volume which is established by comparison with other objects. They have become potentialities of volume, the demand for a certain amount of free space.... The blind man's stick has ceased to be an object for him, and is no longer perceived for itself; its point has become an area of sensitivity, extending the scope and active radius of touch, and providing a parallel to sight. In the exploration of things, the length of the stick does not enter expressly as a middle term: the blind man is rather aware of it through the position of objects than of the position of objects through it.

To get used to a hat, a car or a stick is to be transplanted into them, or conversely, to incorporate them into the bulk of our own body. Habit expresses our power of dilating our being-in-the-world, or changing our existence by appropriating fresh instruments.⁷¹

Perhaps the most striking of such examples or the most impressive is the incorporation by the musician of his instrument. No good musician focuses upon the instrument that he plays. His attention is with the music, moving through the music. James described this process in terms of the becoming-subliminal of habitual sequences. Merleau-Ponty notes further that such sequences are not limited to specific circumstances. Together, the whole system of habits known as musicality (Watson would call it the music-system or the piano-system) or musical skill forms a polymorphousness of its own, a malleability and a facility to engage with any physical circumstances of a particular kind. Merleau-Ponty makes this point with the example of an organist who is able to play an organ with which he is unfamiliar after a very short period of practice.

He sits on the seat, works the pedals, pulls out the stops, gets the measure of the instrument with his body, incorporates within himself the relevant directions and

⁷¹ Maurice Merleau-Ponty, *Phenomenology of Perception*, p. 143.

dimensions, settles into the organ as one settles into a house... the stops, pedals and manuals are given to him as nothing more than possibilities of achieving certain emotional or musical values, and their positions are simply the places through which this value appears in the world. Between the musical essence of the piece as it is shown in the score and the notes which actually sound round the organ, so direct a relation is established that the organist's body and his instrument are merely the medium of this relationship. Henceforth the music exists by itself and through it all the rest exists.

Merleau-Ponty quotes Proust. It is

...as though the musicians were not nearly so much playing the little phrase as performing the rites on which it insisted before it would consent to appear.

Then he continues:

There is here no place for any 'memory' of the position of the stops, and it is not in objective space that the organist in fact is playing. In reality his movements during rehearsal are consecratory gestures: they draw affective vectors, discover emotional sources, and create a space of expressiveness as the movements of the augur delimit the *templum*.

The whole problem of habit here is one of knowing how the musical significance of an action can be concentrated in a certain place to the extent that, in giving himself entirely to the music, the organist reaches for precisely those stops and pedals which are to bring it into being. Now the body is essentially an expressive space...⁷²

Body image is thus indefinitely dilatable, and in every case its expansions and contractions enter into a motive-material arrangement which, in its action, constitutes the subliminal, felt or horizontal ambience in which whatever happens—music, for example—happens. The orientations of the body, and its habitual movement together with its instrument, are equatable with a "ritual" by means of which appearances of a certain sort, phenomena of one kind or another, may be brought into existence, may take place. In phenomenological

⁷² *Phenomenology of Perception*, p. 146. Merleau-Ponty's identification here of the drawing of "affective vectors" as constitutive of a motor space underlying representational, "objective" space has influenced Jacques Paillard, a contemporary figure concerned with the body image, taken along explicitly cortical lines in the tradition of Head. Paillard identifies a vectorial "action space" underlying and in opposition to an object-oriented "representational" or "configuration-space" founded upon it. Action space consists in a habitual-mnemonic system of known possible movements, "coded" in terms of origin and aim. Configuration space consists in a three-dimensional coordinate system within which objective points may be plotted. See for example Paillard, "Vectorial versus configural encoding of Body Space: A neural basis for a distinction between Body schema and Body image," in Knockaert and Preester, *Body Image and Body Schema*, 2005.

terms the “living body” that Merleau-Ponty develops on the basis of Schilder takes the place of Heidegger’s “Dasein” and Husserl’s “transcendental ego,” being more material than either, but retaining their privileged capacity for “making a world.”⁷³

Yet the emphasis here upon material motion, stemming from Schilder and, in the background, James or Nietzsche, distinguishes the present discussion from the bulk of phenomenology. It is worth noting that this motion, really, is the same in kind as the points of contact Schilder identifies as constitutive of the “frame” of the body image. As on James’ earlier account, every muscular action, every adjustment of the posture, is attended by subtle sensations which, while perhaps not rising “above the ideational line” are nevertheless not absent either. This subliminal domain of feeling is, as I have been saying, the body image, or the body image is the name given to the unity of that domain, in contrast to episodic fluctuations either at the felt or at the perceptual level. Now each of the sensations produced in postural adjustment are the result of points of pressure within the objective bodily system, that is, frictions between a tissue and a bone, a muscular fiber and its sheathing, etc. Motions carried out in relation to tools have this character as well, as does the scratching of the blind man’s cane against the objects in his environment. In each case we have a pressure of x against y , and these points of pressure all together constitute the “frame” of the body image, across which a unity is extrapolated and felt. Motion executes a serial re-framing, through specifically-distributed material frictions or (pre)spatially arrayed energetic interactions.

Under the influence of Freud, Schilder presses further than Merleau-Ponty. He notes that movement is desirable from an erotic perspective not only for its role in producing a beautiful music. The expressive body, for all its world-making, remains a unified body and a

⁷³ This is a phenomenological theme which Humberto Maturana and Francisco Varela will play on extensively, putting it in conjunction with Jacob von Uexküll’s emphasis on the multiplicity of animal worlds, and positing that world-making is a capacity of all embodied beings. For “world-making” they will develop the term “autopoiesis.” The two key books in this regard are *Autopoiesis and Cognition* and later *The Tree of Knowledge*.

constrictive one, and some element of the erotic soma, some libido, enjoys competing with that very unity, trying to outrun it, escape it, destroy it. Thus the typical human interest in gymnastics, dance; thus, for example, the Futurist fascination with speed, and the love of decibels in the era of electrical amplification.

The body image is not indefatigable. Its rigidity may be “dissolved” or “weakened.” “The previous scheme of the postural model remains in the background and upon this previous scheme the new scheme is built up. When we move, we depart from the comparatively rigid primary picture; it seems in some way loosened and partially dissolved till the body returns into one of the primary attitudes.”⁷⁴ Schilder asserts that dancing “must be considered from a similar point of view,” and then he draws an interesting analogy to the phenomenon of “trails” in fast-moving visual objects. “During every rapid movement, as Kanner and I have shown, there exists a tendency to see several objects in the path of the movement.” Motion likewise multiplies the unity of the body image, thereby weakening its constrictive unifying force. Signaling an acceptance of the Jamesian theory of emotion as a correlate of somatic performativity, Schilder adds that

... There is no question that the loosening of the body-image will bring with it a particular psychic attitude. Motion thus influences the body-image and leads from a change in the body-image to a change in the psychic attitude.⁷⁵

Every emotion... changes the body image. The body contracts when we hate, it becomes firmer, and its outlines towards the world are more strongly marked... We expand the body when we feel friendly and loving. We open our arms, we would like to enclose humanity in them. We expand, and the borderlines of the body-image lose their distinct character.⁷⁶

Again, this loosening is something desired intensively by the person. “When the experimentation with the movement is not sufficient, then we add the influence of the

⁷⁴ *Image and Appearance*, p. 207.

⁷⁵ *Ibid.*, p. 208.

⁷⁶ *Ibid.*, p. 209.

vestibular apparatus and of intoxicants to the picture...⁷⁷ Both intensive stimulation of the vestibular apparatus and intoxication involve the possibility of a blur between [x] (perhaps the somatic body, or libido) and the body-image. Schilder considers for example fast elevators moving downward, which alter the bodily sense of gravity, lessen the sense of pressure on the soles of the feet, and even stretch the body-image vertically. When the elevator stops, the body-image, which interestingly Schilder calls in this example the “body-substance,” continues downward, through the floor. In upward motion, the opposite: the body contracts vertically; upon stopping it continues through the ceiling. Schilder distinguishes between this [x] and the body-image or experienced body as between the “real” body and the “phantom” body. The real body stops, the “phantom” continues. We might add that in a world of constant motion in cars, trains, and planes, such phantom-real fracture is a constant reality, occurring more the faster we drive and corner, and certainly more in the cockpit of the fighter plane than just about anywhere else. Boccioni’s depiction of a speed-driven cubist motion, as if the motion were ahead of the image, or Marinetti’s celebration of the race-car driver distorted by his machine, are in exact correspondence with Schilder’s observations. We love our machines because they pull us beyond ourselves; their fervor extends our own; erotically they pull us into a motive space beyond function, or a rebellion beyond identity. One key point I would like to make over the course of this study is that this rebellion, putting the rebel like the religious man in contact with something greater than himself, may move the body equally into a felt freedom, or the divine, or into slavery or the demonic. Either escape takes its character from an interpretation upon the sheet of phenomena, but that sheet never exists outside the continuum of history and power. In fact history and power are only such sheets, together with their built-in tendencies for interpretation. Mussolini was a great reader of James and of Bergson.

⁷⁷ *Ibid.*, p. 210.

The body-image is endlessly distortable, and its distortability corresponds to a power pressing through it, behind it or in front of it. Thus, primitive magic:

The body-image changes continually and we triumph over the limitations of the body by adding masks and clothes to the body image. This is the explanation of the animal masks of primitive peoples which actually identify the wearer with the animal...

The possibility of transforming the body-image is the basis of the widespread belief of primitive peoples in transformation. It appears that their power of rebuilding the body-image is greater. According to Preuss, every animal and every object can transform itself into innumerable shapes. A human being turns into a wolf. The transformation of one thing into another is the speciality of all so-called demons; the War Gods of the Zunis possessed as a specific faculty the power of transformation and the spirit and breath of destruction.⁷⁸

Man the Machine

But... that is the body as it is lived, from the inside, even as it is lived by "primitives," possessed of outmoded customs and unscientific world-views; many of us in this respect are primitives. It is not, in the least, the body as it is seen from without, by a sensible person who is charting its behavior, the stream of its activity, in search of regularities, productive or unproductive habits, accidental and intentional conjunctions of stimuli producing new conditioned responses. From this perspective the changes observed are much more mundane. A child learns fear of a snake from its hiss, or from its sudden movement, learns love of its mother through touch, especially on the genitals, becomes enraged when prevented from pulling its siblings hair. A man develops repetitious cycles involving a woman who is not his wife; a woman turns into a gossip. Each of these alterations involves the body, involves habit, very subtle somatic regularities. From a certain perspective, the behaviorist one, they are reducible to that. Here the above lability, that dynamic fluctuation, erotic distension, love of speed and lust for freedom, do not appear at all. Scientifically, they are not real. They are, really, things that are said; but saying very much appears to be a highly patterned moving of

⁷⁸ *Image and Appearance*, pp. 204-205.

the lips, tongue, larynx and glottis. There is a lability of the larynx, to be sure, and a lability of the body. But neither is a means of escape. The body as lived and erotic yearns for release; the body reduced to object calls for control.

In 1924, before he was deposed from his respectable professorship at Johns Hopkins and forced into the lucrative business of advertising, John B. Watson wrote a book called *Behaviorism* in which he sought to define, defend, and demonstrate the significant social value of behaviorist psychology. One simple distinguishing feature of behaviorism which he noted was its radical break with introspectionism, through the outright denial of the scientific reality of anything meeting the definitions of “consciousness,” “soul,” or “attention.” The behaviorist, Watson writes, has “dropped from his scientific vocabulary all subjective terms such as sensation, perception, image, desire, purpose, and even thinking and emotion as they were subjectively defined.”⁷⁹ Being subjective, such entities are outside the possibility of observation, and hence nothing can be said about them except that people seem to talk quite a bit about them. Accurate and careful descriptions can however be given of the externally-manifested behaviors traced by the individuals claiming to have such “experiences;” the “inner” can be re-coded, clarified and legitimized, as outer. It is simply a matter of realizing that individual experience does not yield the truth about living; people have difficulty telling what they themselves are actually doing; they are deluded, they lack perspective. One’s neighbors, on the other hand, see quite clearly what one is all about.

This is the fundamental starting point of behaviorism. You will soon find that instead of self-observation being the easiest and most natural way of studying psychology, it is an impossible one; you can observe in yourselves only the most elementary forms of response. You will find, on the other hand, that when you begin to study what your neighbor is doing, you will rapidly become proficient in giving a reason for his behavior and in setting situations (presenting stimuli) that will make him behave in a predictable manner.⁸⁰

⁷⁹ *Behaviorism*, p. 6.

⁸⁰ *Ibid.*, p. 10.

But clear observation is not the essence of behaviorism; it was to be a much more practical discipline. Instead of standing unproductively outside the social apparatus, outside of business, war, the affairs of philanderers and gossips, it intended from the beginning to engage them. “The interest of the behaviorist in man’s doings is more than the interest of the spectator—he wants to control man’s reactions as physical scientists want to control and manipulate other natural phenomena. It is the business of behavioristic psychology to be able to predict and to control human activity.”⁸¹

More specifically, the aim was to produce a human that was efficient, productive, moral, and easily integrated into large-scale, corporate organizations. Watson thought such an ambitious project of social engineering possible because in principle, all the realities of the human are open to external view and to external manipulation, according to extremely simple principles. Despite the fact that Watson, like the other most prevalent behaviorist of the period, Robert M. Yerkes, positioned his own psychological project in opposition to William James, whose “superstitious” fixation upon consciousness he thought both methodologically and substantively erroneous, in identifying the basic character of the everyday life of persons he agreed with him fully. All the automatic processes, the physiological ones and the learned ones, the intentionally-acquired skills and the accidentally-acquired eccentricities, even at the most minute level, can be adequately comprehended under the heading of “habit.” Habit is bodily, and the body is a system of habits. More accurately: a system of systems of habits.

Each element of the functioning of a body, from its nervous function to its vascular function, to its amorous engagements to its linguistic endeavors, constitutes for the behaviorist a habit-system; and every habit-system can ultimately be traced to some syndicate of bodily motions. Speech, as I have said, is a habit-system of the throat, tongue, glottis, larynx. Thought is subvocal speech, which is simply slighter movement within this same musculature.

⁸¹ *Ibid.*, p. 11.

Man is a machine.⁸² Watson did not outright deny the existence of any freedom for the individual. He was not interested in freedom, but in efficiency, productivity and success. But he noted sufficient automatism in every coalition of behaviors called a “person,” that were these automatisms initiabile from without, the person as a whole could be fabricated intentionally. And it turns out that indeed, every single habit composing a habit system has its root in an environmental moment, in which occurred a fortuitous conjunction of one accidental element with a pre-existing disposition. All human behavior rests on habit; every habit has as its genetic element a “conditioned response.” “[T]he conditioned reflex is the unit out of which the whole habit is formed. In other words, when a complicated habit is completely analyzed, each unit of the habit is a conditioned reflex.”⁸³

Watson positioned himself very well to pronounce with regard to the course of such personal construction, by gaining experimental access to infants from the moment of their birth. Through experimentation in conditioned response, which he modeled on Pavlov’s work on dogs, Watson determined that very few of the alleged “original” fears of humans are in fact original. He was particularly concerned, for some reason, to dispel old “wife’s tales” about natural phobias regarding snakes, spiders, etc. In fact, Watson showed (albeit by dubious methods), that there exist only three original responses, all others being fabricated through fortuitous conjunction with these. One is born already disposed only to fear, love, and rage. Further, these responses occur primitively only to very specific stimuli.

Stimulating a properly brought up infant at any age with snakes, fish, darkness, burning paper, birds, cats, dogs, monkeys, will not bring out that type of response which we call ‘fear’ (which to be objective we might call reaction ‘X’) which is a catching of the breath, a stiffening of the whole body, a turning away of the body from the source of stimulation, a running or crawling away from it...

⁸² “...let us try to think of man as an assembled organic machine ready to run,” *Ibid.*, p. 269. More specifically, let us assemble this machine so as to run as an efficient element of a given social organization... It is worth noting the long lineage in which Watson here participates. It begins in the modern period with Hobbes, who considered both the individual and the social body essentially to be mechanisms, susceptible to the same analysis and engineering as other machines.

⁸³ *Ibid.*, p. 207.

On the other hand, there are just two things which will call out a fear response, namely, a loud sound, and loss of support.⁸⁴

Beyond this, the reaction ordinarily called “love,” which is a vulgar name for what is technically a “cessation of crying; gurgling, cooing... changes in circulation and in respiration, erection of penis, etc.,” may be called out by “stroking [the] skin and sex organs, rocking, riding on foot, etc.,” while the remaining reaction, “rage” (“[s]tiffening of [the] whole body, screaming, temporary cessation of breathing, reddening of face changing to blueness of face, etc.,”) can be dependably produced through “restraint of bodily movement” (desisting, of course, as soon as blueness appears).⁸⁵ These three sets of prompts for these three sets of reactions exhaust the pre-programming of the infant. Everything beyond that has to do with the combining of one of these existent stimulus-response dyads with a third term, which after repeated appearance in this company becomes substitutable for the original stimulus. The production of very specific character traits (in terms of typical response to certain stimuli) is easy. “Suppose we first let a boy go alone into a well lighted playroom and begin to play with his toys. Suddenly we release a small boa constrictor or some other animal. Next we may take him to a dark room and suddenly start a miniature bonfire with newspapers.”⁸⁶ Then sneak up behind him and make a loud noise. Watson reported success by such means in making a 3-year old afraid of “darkness, all rabbits, rats, dogs, fish, frogs, insects, mechanical animal toys.”⁸⁷

⁸⁴ *Ibid.*, p. 7.

⁸⁵ *Ibid.*, p. 156-157.

⁸⁶ *Ibid.*, p. 147.

⁸⁷ *Ibid.*, p. 143.



John B. Watson, engineering a small human

To review: fear is primitively linked with loud noise and loss of support, love with touch, rage with restriction of movement. Everything beyond that is the constructive work of chance, society... or advertising. When Watson was dismissed from Johns Hopkins shortly after his well-received book for an improper relation with a graduate assistant that became public, this was the burgeoning business in which he found employment. Together with Freud's nephew Edward Bernays, Watson was instrumental in determining the basic principles of advertising. "Conditioned response," the productive substitution of a new stimulus for an older one through arbitrary conjunction—the assembly, actually, of behavior—became by this means a real tactic in a real and extremely widespread social engineering. That these original advertising architects knew the nature of their endeavor is clear, as is the fact that both thought it entirely worthwhile.

The only thing that I might point out, given the fact that so much else is obvious, is the irony of Watson's dismissal of attention. Attention, recall, as a purely subjective phenomenon apparent only to introspection, does not really exist, at least in the scientific sense. From the outside, what appears instead is a notably total engagement of the behavior of the individual with some other observable reality.

As soon as a situation begins to call for the dominance of a certain habit system, the whole body begins to unlock: the tensions in every set of striped and unstriped

muscles not to be used in the forthcoming action are released so as to free all of the striped and unstriped muscles and glands of the body for the habit system now needed. Only the one habit system, the operation of which is called for, can work at the maximum efficiency. The whole individual thus becomes ‘expressed,’ his whole personality is ‘engrossed,’ in the act he is doing.

This way of looking at the dominance of habit systems removes from the psychology of the behaviorist any need of the term *attention*. *Attention is merely then synonymous with the complete dominance of any one habit system*, be that a verbal habit system, a manual habit system or a visceral one. ‘*Distraction of attention,*’ on the other hand, is merely an expression of the fact that the situation does not immediately lead to dominance of any one habit system, but first to one and then to the other. The individual starts to do one thing but falls under the partial dominance of another stimulus which partially frees another habit system.⁸⁸

The job of the advertiser, in vulgar language, is to compel attention and forestall distraction. In scientific terms, it is to engage the entirety of the body of the individual with some image, some message, finally with some product. We will see that this is also the job of the manufacturer of “control” technologies, who is, not by chance, also an applied psychologist. And according to this model, the task is always accomplished by a more or less indirect synthesis of an arbitrary percept with a pre-existent fear, or love, or rage. What we will have to see shortly is how this observation fits with a new casting of experience as an exchange of information.

The Functional Cycle

The biologist Jacob Von Uexküll was repelled by the behaviorist approach. Having a personal interest in animals and their worlds which extended beyond the wish to disprove old peasant’s stories about the unluckiness of black cats, he thought the reduction of animals to mechanisms understandable exhaustively on the model of stimulus and response repugnant, oversimplistic, and false. Likewise the making-machine of man. He presented these objections directly in the opening sections of *A Stroll Through the Worlds of Animals and Men* in 1934, urging other members of his field to approach the question of living things from the side of the

⁸⁸ *Ibid.*, p. 277.

subject, and to understand that to be living means to perceive, to have a perspective, precisely not to be reducible to the perspective of another. Drawing on Kant and the new language of semiotics as laid out by Peirce and Saussure, he set out to rewrite the story of stimulus and response, substituting a “functional cycle” involving an interpretive behavior on the part of any animal, and a capacity to produce its own world, which he called an “Umwelt.” While he acknowledged that the “Umwelt” of human beings was significantly larger in scope than that of most other animals, including as perceptions within it some interpretive perspective upon other animal worlds and hence making science possible, he also stated explicitly that theoretical frameworks themselves have the character of producing worlds of particular sorts. He singled out behaviorism, asserting that this was a manner of science which, just by means of the way it framed the world, as a result of its founding assumptions, produced a certain Umwelt specific to itself, within which living things appear as machines.

On the one hand certain readers might recognize here a predecessor to Heidegger’s critique of instrumental reason in *Being and Time* and “The Question Concerning Technology,” or the similar critique by Adorno and Horkheimer in “The Concept of Enlightenment.”⁸⁹ Uexküll certainly was an influence particularly on the later Heidegger, as well as upon Merleau-Ponty, Humberto Maturana and Francisco Varela (who we will discuss in Chapter 2). But what is more interesting, strange and perhaps unfortunate is that he was equally an influence upon Norbert Wiener, offering an account that ultimately foreshadowed the communications revolution contemporary with World War II. What is strange about this is that Von Uexküll’s stated intent in establishing a “biological semiotics,” in substituting a semiotic behavior on the part of the organism for a mechanical conveyance of a mechanical stimulus, through its tissues to a mechanical response, was to establish a model of the animal

⁸⁹ See pp. 1-34 of Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments*.

as clearly distinct from a machine. Yet the new machines of World War II, first the “Turing Machines” and then those developed by Wiener for the automation of anti-aircraft batteries, were precisely symbolic machines, machines which did not simply conduct a mechanical force, but which received a stimulus, interpreted it as code, performed certain calculations related to the machine’s physical constitution or a set of rules, output a behavior on that basis and, further, determined their own future input and hence their own future behavior by these means. In objecting to the mechanization of animal and man, Uexküll, by accident, presented them as communications devices engaged in feedback processes. He made them, and us, communications machines.

On Uexküll’s model,⁹⁰ the split between sensation and perception which we considered above is again explicitly stressed. Uexküll notes the specific orientation of sensory organs towards a very small set of ambient stimuli. Animals are built, from the beginning, in a certain “musical” conjunction with the world. They fit together with other material elements, and link together, without ever really knowing it, with other Umwelten, as motifs and themes link together in a musical score. This sensory engagement, like the motor engagement that always accompanies it, and in fact that always corresponds with it precisely, is strictly to be distinguished from perception. The reason for this is the same as before: it is Müller’s reason, namely that what happens in the temporal moment posterior to sensation is not just a conductance of a stimuli into the interior of the organism. Uexküll casts it instead as a signaling. The photoreceptive cells, or the auditorily receptive cilia, or the tactile receptors on the skin, etc., are tuned as it were to particular stimuli. When they receive such stimuli in a pre-ordained magnitude, correspondent to their own physical structure and state, they begin to behave. They send a signal, their own signal, specific again to their own structure and

⁹⁰ The following is a summation of various points in Jacob von Uexküll, *A Stroll Through the Worlds of Animals and Men*.

behavior, inwards into the organism. At each cell, through the organism, a new signal is sent, in each case characteristic of the cell which sends it. Each cell, then, communicates, according to its own material specificity. Not only ought we to comprehend the animal as a subject, not a machine, the same is true for each of the animal's components. Each one engages in a semiotic gesturing, which on Uexküll's account implies a variety of thought, recognition, and choice. Certainly the thought, recognition, and choice are distinct from the human varieties of those things. But that is part of the point: we are not dealing with a human, but with another embodiment of subjectivity.

That the signals thus circulating through the organism are completely distinct from the stimulus that elicits them means that whatever it is that this subject perceives is not the thing it senses, in any objective sense. In this regard Uexküll repeats Kant: no organism perceives the things in themselves, just as they are outside it. Although it does actually act upon that material world, with material gestures, even those gestures themselves fall outside the scope of its perception. What it perceives, instead, is its own product, corresponding first to the manner of the cells within it that signal, and then to the specific, anatomical pattern of their gathering, and beyond that, to a primitive creativity, allowing for a "projection" of a world. When signals from auditory nerves, for example, gather in a certain region of the cortex, and the animal has a unitary perception of a sound "from a source," that unity of percept, at that moment, is a creative act on the part of the animal. It has to be, because while it is relatively clear that mammals do experience unified percepts, and (almost) totally clear that humans do, since we have access to that experience even if certain humans assert that we don't, that very unity is distinct from what is happening anatomically. A gathered set of signals is still a multiplicity. If at a regular point in the career of perception they form unitary qualities of unitary objects, which are then heard as being "out there," this we have to call "projection." Particularly the "object" (in my example, the "source"), of which certain "perceived" qualities appear as

aspects, is a projection. Like Kant's "appearance" or "representation," it is not "there," but here. It is a feature of the manner of the experience of the individual, and not of externality. What is so intriguing about animals of all sorts is that they do therefore have their own experiences, which are unique to them. Those worlds are not windows upon the outer, "objective" universe, if there is such a thing (Uexküll states that it is hidden, even from human science⁹¹). Rather they are like soap bubbles floating within it⁹² (one can recognize here late phenomenology's "opening," its "dilation of space-time"). And yet each one of these closed perceptual worlds is nevertheless calibrated to that hidden materiality, since the semiotic behavior and the world-projection of the animal still results, as in the original reflex arc, in a behavior integrated with it. When the animal acts, its action engages a materiality outside it, which it cannot see. Or to be more precise, every animal perceives that its action is oriented toward some "object" outside it. But that object is a perfect hallucination. What is remarkable is that the hallucination so perfectly facilitates an action that touches the world.

The "functional cycle" that Uexküll describes is a re-writing of the reflex arc to allow this complex, semiotic and projective process to nestle within it. It is also an insistence that the response of the organism is always in tight relation with the stimulus. Perhaps as a result of evolution, each animal is so configured that, however they produce their reality for themselves, they only receive stimuli proper to external realities with which they may be functionally engaged. There exists a pre-ordained harmony. Further, when they act, they act so as to interrupt the efficacy of the preliminary stimulus, but typically orient themselves so as to receive another, again correspondent to a possible action.

Uexküll thus presents the *Umwelten* of any animal as imperceptibly structured by two frames, one spatial and the other temporal. Spatially, animals project their perceptions in some

⁹¹ *A Stroll Through the Worlds of Animals and Men*, pp. 76-77.

⁹² *Ibid.*, p. 5.

kind of a volume, a visual space, a tactile space, an “operational” space,⁹³ etc., in every case based upon the animals’ anatomy. All animals with vestibular systems with three semicircular canals registering three dimensions of movement, he hypothesizes, exist subjectively within a three-dimensional space.⁹⁴ These spaces are thus structured before hand—they set up, in the Kantian language, “conditions of possibility”—so as to facilitate only a specific variety of projection and hence perception. Such a pre-construction occurs also in terms of temporality. The temporal pattern of the world of the animal is constrained by the number and type of its functional cycles, which place it in a specific material conjunction with the surrounding material world, in more or less complex ways. Simpler animals like Uexküll’s beloved tick can only be stimulated by a very few types of stimulus, in response to which they have only a very few types of behavior. While we don’t know what it is like to be a tick, still we can see from without the material circumstances determining the parameters of its possible experience. Unfortunately we cannot see our own constraints, and we tend to forget that they’re there, hence taking our produced perceptual world for reality itself.

Both Uexküll’s theory and its fate are instructive. In its content, it brings into sharp relief the distinction between an outer material reality and the perceived one. This outer reality forms us and our perception, offers us stimulation, and is formed itself by our activity. And yet we remain systemically oblivious to it. We cannot encounter it, no matter how careful our approach, because of the very form of our perception, even because of the fact of our having perception. Where there is no object, organisms with objects before their gaze, however brightly lit those objects be, are blind, and blinder the clearer their sight. It is due to the indefinite slippage between these two domains that interpretation has such free rein.

Misapprehension is a condition of the production of unified worlds. Behaviorism can make

⁹³ See here again Jacques Paillard’s “action space,” composed of vectoral units designating possible motions.

⁹⁴ Uexküll is thus clearly one of the “physiological” interpreters of Kantianism.

both animals and humans into machines, and is in the end every bit as right as any other interpretation, whatever its malintent, because the facts, whether produced by “consciousness” or by experiment, are always already products entering into assembly. The best that an interpreter glimpsing the ubiquity of interpretation may do is to grasp the role of the interpretation in some behavior it facilitates. If behaviorism, as no one has trouble now recognizing, was a project of social control, we need as well to ask to what project our present fixations correspond.

As for the fate of Uexküll’s theory, that too is worth observing. Behaviorism, Uexküll perceived, engaged in a mechanization of animal and man that could only have bad effects, that would facilitate and legitimize those effects, that would make them likely. An animal world that is without life is not an interlocutor, not an obstacle for any of our pursuits. It is only, as Heidegger says, a “standing reserve,” a possibility for instrumental organization aimed at an increase in sales. Yet the truth that Uexküll produced about the animal and about man entered into a new production, of both as computers. What is the lesson? That the truth, being an aspect of action, is defenseless taken alone.

Manufacturing Perception

Roughly speaking, this brings us to the present epoch. My interest is not in establishing the exact location of “epistemic breaks,” but it seems that something of that order occurs in the period around World War II, with the information or communications “revolution.” What does concern me is how exactly this change plays out in terms of the theories of perception we have been considering. I have been leading particularly to the intriguing work of the Applied Psychology Unit at Cambridge University, which was established during the war specifically to deal with problems of attention in functional military settings. On the whole this institute is of interest because it illustrates the total integration of

institutions of theoretical production with practical behavior. Here, in a sense, we have a social-institutional “perception” of the very nature of perception, existing in functional lockstep with a material functional cycle, military and then industrial, an order of blood and commodities, of a completely different sort than the “computational,” “signal-processing” reality it depicts theoretically. Here action and perception, production and truth, are happily and faithfully married. Together with other institutional arrangements of identical pattern, for example Vannevar Bush’s “National Research Council” (of which the key behaviorists including Watson were members) in the war and various other projects with which Norbert Wiener was involved, the force of that union has been profound, such that today we live in a world covered with control arrays engineered specifically to our physiologically-based attentional quirks, in our cars and on our remote controls, and in an atmosphere of scientific truth having everywhere the smell of data. Having fallen into disfavor with behaviorism, attention becomes important again, as a disposition favoring communication or signal flow. What is just as remarkable is the degree to which modulations of the body, its systems within systems of habits, drop from theoretical accounts. With the APU there is still an ongoing study of adjustments of eyes, head and ear musculature. Indeed there is a participation in the production (chiefly through design) of small architectural spaces and functional perceptual fields meant to work in tight conjunction with these extra-cortical motions. But it is no longer the case that bodily and attentional habits, as autonomous players engaged with the rest of everyday life, constitute a decisive structuring role with regard to perception. Rather they become servo-mechanisms, feedback functions under full central control by what will come actually to be called a neural “central executive.” Discourse is now completely centered on information, computation, and output: input into, calculation within, and messages sent from, the brain. Everything impeding smooth flow through it is technically recoded as “noise.” At the same time, all the historical productions which even on the behaviorist model bear upon

the patterns of individual life, the touching of children in certain ways, socially-typical combinations of fear, love, rage and environment, the effects of advertising and technical training, the manufactured character of social space, disappear. The body, like bad wiring, becomes noise; history becomes history. We are engaged in a perpetual now conducting a widening volume of information.

The Applied Psychology Unit at Cambridge (now the Cognition and Brain Sciences Unit) was formed in 1945 by the Royal Navy to study attention. Such a study was necessary due to increasingly complicated control surfaces confronting military personnel, particularly in the operation of radar and airplanes, and the profoundly distracting effects of circumstances of battle, particularly the problem of great noise, which proved a problem for anti-aircraft gunners, even once their job had been partly automated. The APU's predecessor institution was tasked with increasing the efficiency of production at munitions plants in the first World War, particularly through the better management, distribution, and ergonomic environments of its workers. It thus fell clearly within the domain of rational management initiated by Frederick Taylor, Frank and Lillian Gilbreth, and also by behaviorism, which was very keen to sell its personnel testing packages to the military. In the first World War John B. Watson spent his brief time overseas at just that task.

It is strange then that contemporary students of attention within the now-vast domains of cognitive psychology, neuroscience and cognitive science, who unilaterally point toward the third APU-director Donald Broadbent's *Perception and Communication*, published in 1958 on the basis of studies with soldiery from the war forward, as the seminal text in their field, and who nearly unilaterally identify William James as the key figure in its prehistory, also bemoan the suppression of attention as a valid study for so many years, and thus distance themselves from behaviorism. It is true of course that behaviorism identified attention as a false problem. It is also true, however, that the approach to attention now carried out at the

APU was oriented entirely toward observable, quantifiable behavior—response times, fatigue times, observable interactions with stimulus arrays—and therefore operated in no tension at all with behaviorism. If anything, its work constituted an updating of behaviorism into the new language of communications theory initiated by Claude Shannon and Norbert Wiener.

Even the behaviorist insistence upon the concrete applicability of psychology is reiterated here. The output of the institute was always double: on the one hand it produced studies contributing to a widening body of technical knowledge regarding the human perceptual and cognitive apparatus. On the other, it designed perceptual spaces for optimal human interaction—radar screens, cockpit arrays, gun-sights, surveillance stations, factory lines, eventually ergonomic layouts at post offices, street layouts and signage. If behaviorism was happy to state its interest in control outright, a very small change in rhetoric takes place at this point. Now it is not that human behavior has to be controlled. Human behavior is no longer the object. Rather the human needs to be understood as an element within a “control system,” of which he or she forms a communicating element. Like Uexküll’s cells, each human is a signaling subjectivity, positioned somewhere in a signal path, expected to receive data, to evaluate it in a manner exactly correspondent to their local structure and function, and to output a signal further along the line. The signaling operation is overseen by managers, executives and officers, whom lower functionaries assist through a dutiful activity. Control remains, then, in two ways. First, all the signal-processing done by the brains in military systems is still for the sake of controlling troop and artillery movements, or in the civilian sector, for controlling workers. Both are to be controlled for the transparently-desirable reason of Efficiency, which is always the abstract telos of record. Secondly though, the sort of control that John B. Watson had sought, the control which was to produce integratable elements in automated processes again oriented toward efficient production, of commodities or destruction, is here too, but in the background, as a *fait accompli*. That goal has been achieved.

Man the machine is a readily obtainable component. Now proceeds his assembly in much larger machines.

The history of the APU's studies offers one view upon the history of that assembly. Looking over it gives a clear sense of the manner in which cognitive psychology facilitated large-scale social-industrial integration. The institute has fairly consistently engaged in studies on perception as an aspect of cognition. This gets underway particularly by 1958, with Broadbent's book. As time has passed, it has expanded the range of such studies to include specific perceptual modalities and particular varieties of cognition, always under the heading of "information intake," "processing," etc. Besides these general concerns, however, three distinct focal periods are obvious in the institute's history. From the period 1946 through 1960, there existed a continuous interest in what was referred to variously as "climatic psychology" or "unusual environments," and eventually "background conditions of work." No such studies seem to have been carried out after 1960, although around that same time a new category of study under the heading of "stress" briefly appeared. The APU's focus on "display and control" problems is also strongest in this period. A long period of interest in motor skill and training took place between 1950 and 1985, but that interest disappeared at just that latter point. At the same time, around 1985, a whole set of relatively unprecedented concerns appear. These are memory, language, and emotion.⁹⁵

These are the three periods: 1. from 1945-1960, emphasis on atmosphere and display and control; 2. from 1960-1985, emphasis on perception as information uptake, and the analysis of bodily motion and skill; 3. from 1985-2002 (the last published report), emphasis on memory, language and emotion. They can be correlated with the institutions with whom the APU worked most closely, for whom they did the greatest amount of work, and which

⁹⁵ APU progress reports. See <http://www.mrc-cbu.cam.ac.uk/history/electronicarchive/progressreports/>. Last accessed February 22, 2011.

provided them with the greatest amount of funding. Early on, roughly co-extensive with period 1, the APU was basically a military institution. It was staffed in part by the RAF and the Royal Navy, it took the bulk of its projects from those sources, and it received the bulk of its experimental subject pool from them as well. This changed around 1960, at which point the majority of the studies became civilian. The post office and then information industries are the chief clients throughout period 2. In period 3, the major clients, for whom the most work was done, were pharmaceutical and medical.

It is clear that the work the APU did was always in the interest of its clients—a fact which just reflects good business. Another way to look at the course of its history, though, is to say that the “noise” interfering with clear signal transmission shifted its position, from the outer world into the interior of the person. In stage 1, it was real noise, explosions, artillery, or other atmospheric reality posing a threat to function. In terms of the relation between the human being and a command/control technology (including weaponry), what is at stake here is the dependable binding of the human with the machine, in an environment operating as a systematic “distractor.” By 1960 it appears that this problem has been solved. Now what gets underway is the important work of integrating perception with motor skill, of facilitating attention, understood as a process of channel selection and signal uptake. In the post office the attention is to information on individual, mobile parcels, and the concrete task is the setting up of work situations allowing careful segregation of different sorts of item, without allowing distraction to disrupt dependable sorting. In the new circumstance of the person seated at a personal computer, the problem of attention takes on a different character. Ergonomics are still important, but the possible distraction has more to do with fatigue, and the elements in need of intentional, functional distribution occupy a smaller space, now limited to a discrete volume extending from the screen and keyboard to the eyes and fingers. Noise here has to do with speed and fatigue on either side of the display-perception pair, and the task of applied

psychology is the human engineering mirror of the task of chip development. In stage 3, it is as if this coupling too, of eyes and fingers with communications technology, is already given. Now the problems, of memory, language and emotion, are internal ones, having to do with the computational processes of information itself (language), the storage of information (memory), and the noise within the information machine—the feelings of the body, “emotions.” Emotions are, for the APU and the information-processing model in general, still information phenomena; but they are a contemporary problem worth studying because they are phenomena incompletely integrated with a large-scale social-technological flow of information. The design techniques employed in this regard are largely chemical. This is our present moment.

It is worth emphasizing the degree to which William James’ work foreshadows that of the later 20th century. What I have called stage 2, above, the period from 1960 to 1985, during which the APU’s most significant work was the development of Donald Broadbent’s “filter model” of attention, deals explicitly with those two dimensions of attention James identified. Here the ideational web has become an informational and memory system, but there remain two dimensions, cognitive and motor, operating in synchrony to distribute attention, which is a filter determining the intake of some information and not the rest, which is suppressed. As in James, what passes the filter enters perception, and what enters perception passes to memory, becoming accessible in future recall, and bearing in the future upon attentional selection. In stage 3, the problem of emotion is addressed as a physiological phenomenon. In James emotion had to do with physical postures, on a very fine scale, and here it has to do with brain chemistry. In both cases however, as for the behaviorists, in its physicality it is explicitly susceptible to external manipulation, and this manipulation is desirable in crafting a balanced personality—that is, one capable of doing respectable, sustained work. Even the atmospheric concerns of stage 1 bear some relation to James, who as we have seen was concerned with the

ongoing determination of physiological states by environmental regularities, and on a religious level with the passage through the periphery of attention of forces radically Other. Here of course God has been replaced by overwhelming noise, bombs and gas. Otherwise the sublimity of the relation remains.

In short the progression from James through behaviorism into cognitivism is relatively continuous. What is absent however is the other progression we have traced, of the introspective method, and of the theory of the lived body. If the body image is an habitual assembly of propriocepted elements correspondent to erotic attachments with a physical environment, determining attention, it is still at play in the manufacture of cockpits and control panels. Only now, as in the art of advertising, its constitution and its regularity are established from without. The construction of an image drawing attention, or on a much more sophisticated scale, of a control panel experimentally designed to facilitate vigilant monitoring and dependable flow of information through an attendant human component,⁹⁶ is functionally also the manufacturing of a lived body. Recall Schilder's emphasis on points of contact. The cockpit determines bodily position entirely. It structures tactile, auditory and visual fields precisely. The particular concrete products of the APU, the control apparatus it designs, are exactly the "frames" upon which a body image is stretched, or the points of environmental contact Uexküll identified as conditions for the possibility of one variety of perception as opposed to another.

The capacity to shift experiential shapes is therefore a key condition underlying the production of an information-processing animal, and the manufacture of technological interfaces⁹⁷ is not only a manufacture of perception, but a manufacturing of the body. The

⁹⁶ In the chapters to come, beginning with Chapter 3, I will insist that "works of art," and particularly pieces of music, recorded and played back, likewise constitute such a production.

⁹⁷ "Interface" is a newer technical term used to designate control arrays like the cockpit or dashboard as well as various media. In *The Language of New Media*, Lev Manovich traces the term back to the "Graphical User Interface (GUI), popularized by Macintosh" (p. 63) in the 1980s. He notes that "in the

production of a functional perception (with regard to vision, “planned seeing”⁹⁸), or more precisely, of a perception functionally integrated within a material behavior-system to which the pilot, the pc-user and the automobile-driver may well remain blind, is achieved by means of careful operation upon the “objective” body. Scientific study determines how to isolate the body, in its erotic-machinic embrace, from the more extensive atmosphere. It carefully calibrates the motions of that body in synchrony with the flow of data through attention. It inflects the soma chemically, in the cockpit with benzedrine, at the pc with Prozac, seeking optimal informational processing conditions. If one were to take the “primitive” seriously, which of course in this paradigm is strictly disallowed, one could say that the manufacturing of perception is demonic. It possesses the soul of the individual, seizes hold of the spiritual capacity for experiential transformation, for the real alteration of the phenomenal world, and modulates it with distant precision. It forecloses the possibility of erotic escape by pre-configuring the animal’s connections to the material world in such a way that libidinal excess, that which would press for escape, is the primary channeled content.⁹⁹ What is most sinister is that, in the absolute calibration of perceptual transformation with dominant social systems,

information society... work and leisure activities not only increasingly involve computer use, but... also converge around the same interfaces.” (p. 65) Participants in a 2001 “witness seminar” at the Cognition and Brain Sciences Unit at Cambridge (which was the Applied Psychology Unit, to be discussed below) noted that the APU had connections with Xerox researchers, who designed the WYSIWYG (“what you see is what you get”) interface preceding the GUI terminology. (See Reynolds, *The MRC Applied Psychology Unit...* p. 29) Previous to this usage, the dominant language was “display and control,” which two terms denoted the dials vs. knobs (givers of information vs. receptors of bodily activity) proper to cockpits and the like. In this study I will use “interface” chiefly to denote the screens linked to computers and handheld devices like ipods and iphones, but also on occasion more broadly in connection with the verb “to interface,” as a means to invoke the “interactivity,” the joint activity of perceptual presentation and bodily behavior, so often applauded with regard to technology and even installation art. What is significant about the interface is precisely this, that it is a structuration of the perceptual field which to some significant degree determines perceptual performance along with a much broader range of bodily activity, including quite centrally bodily posture. The same may be said of a movie theater or a television screen together with the recordings they play back, or in the auditory register, a stereo and its sounds. Manovich emphasizes these correspondences, as will I.

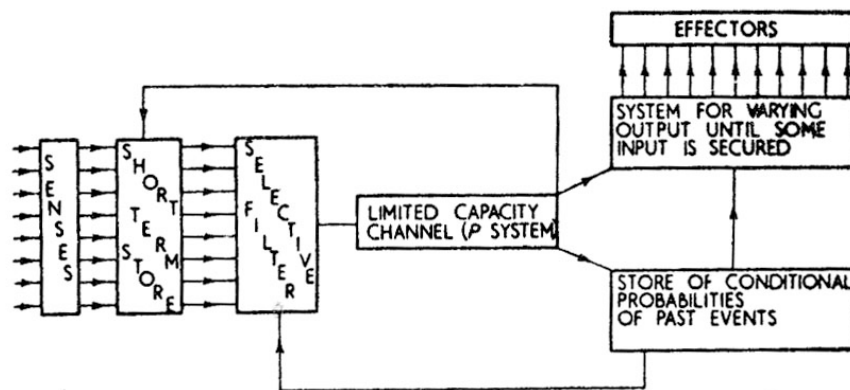
⁹⁸ *The MRC Applied Psychology Unit...* Footnote 11 cites Bartlett F C, Mackworth N H (the first two directors of the APU), *Planned Seeing: Some Psychological Experiments*, 1950.

⁹⁹ A significant portion of what follows in the rest of this study is aimed at tracing the real elicitation of bodily energy by means of the modulation of ambient (immediate, surrounding, nonfocal) space, and the distribution of this energy into functional productive or destructive processes.

this spiritual capacity is lost sight of, and the desire for rebellion, desire itself, becomes pathological. “Almost every era has its new magic,” wrote Watson, “black or white, and its new magician.”¹⁰⁰

The Filter Theory of Attention

What is now the dominant model for understanding the reality of human perception, as a variety of cognition and hence a manner of informational signal processing, was probably first articulated in Broadbent’s *Perception and Communication*. That the central feature of that book was a new modeling of attention is significant for the perspective I am trying to elaborate. It was necessary first to understand how the “intake of information into the man” could take place, and could be made dependable, before moving toward the later problems regarding the nature of the neural informational computation. Broadbent’s “filter theory” of attention fulfilled that need. Here is an early version of his famous diagram depicting the human attentional apparatus:



Broadbent’s filter

That we have here a signal-flow schematic, which could very easily describe a computer, is not coincidental. While Broadbent did not make any assertion that human physiology actually

¹⁰⁰ *Behaviorism*, p. 2.

looked like this, he did offer the model as a testable hypothesis for functional flow. That is, in terms of function, the human attentional apparatus is equivalent to a computer. It has an input, a short term memory store, a switching mechanism facilitating a parallel to serial conversion, a long-term memory store, and an output function. The challenge to physiological researchers is to uncover how this function is realized at the level of wetware.

Given the long history of models of perception which we have now traced, just about every element of this design should be familiar. Again, sensation and perception are distinct. Perception involves attention and memory; it is nested in a larger system linking sensation with motor behavior. What was the reflex arc for the 19th-century physiologists, for James and for behaviorism, a functional cycle for Uexküll, a feedback loop for Wiener, is now a signal flow diagram, but it contains all the same elements. What this re-interpretation achieves is not therefore a brand new insight into previously unknown functions. It is not a discovery. Rather it allows the “human element” in a control and communication system to be treated according to the same vocabulary as is used for the other technological components. The “senses” above are diagrammed as channels. Each ear is a channel, and each eye, the nose and the mouth, and the skin. Further development of the filter model will quickly involve the observation that sub-channels within these anatomical channels are completely possible. Not only at the level of nervous structure, but also at the level of functional engagement with the environment (that is, with an information source), certain sub-sectors of activity may exhibit a communicational unity. A channel consists then in any structural possibility for a flow of data encoded in a series. The encoding takes place first at the input, just as on Uexküll’s model, but further encoding is possible at any stop along the signal path. In fact any such articulation can just as well be understood as a calculative function as a spatial location in the brain. Again, those distinctions are for an anatomist to decide. At any rate, on this description, perception itself appears as a single, serial information channel accessed and loaded by the attentional switch,

through which encoded stimuli pass on their way to behavioral output. As even on the associational model, perception feeds both behavior and memory, and memory is engaged again with attentional selection.

The next director of the APU, Alan Baddeley, would add one important dimension to the same model, under the title “working memory.” Working memory consists ultimately in two independent circular functions digressing early from the perceptual channel, and relinking at the attentional filter. Each designates a capacity of the perceptual apparatus to re-experience certain “data,” or to keep some small perceptual segment in consciousness. This it does, basically, by a performative reiteration. Anything of which we remain conscious for any period of time past its initial appearance remains within the perceptual corridor (somehow inhabited by consciousness) either through visual-spatial reiteration, by means of the “visuo-spatial sketchpad,” or through auditory-temporal reiteration in the “phonological loop.” “Working memory” thus becomes the new name for what we know typically as “short-term memory.” Both the sketchpad and the loop are communication functions, like buffers, capable of a certain load of information but no more, and constrained in terms of their operation. A remembered image will be reiterated by the sketchpad, cyclically; a remembered word or duration of music within the phonological loop, again, in a cycle. Thus in any perceptual experience involving a mnemonic grasp, like the receipt of a message, or listening to music, the individual apparatus enacts a performance in conjunction with the new, incoming data stream.¹⁰¹

On Broadbent’s and Baddeley’s model, conscious experience is added in at the last moment, as some sort of character of the “limited capacity system” following attentional selection. It may be that for Baddeley the very temporal dilation of that channel is possible

¹⁰¹ Baddeley offers a succinct overview of these basic figures, formulated decades ago, in his newer book (oriented toward the present concerns with “action” and “enaction”) *Working Memory, Thought, and Action*. See Ch. 1, “Introduction and Overview,” pp. 1-13.

only on the basis of the machinic-performative functioning of working memory, such that consciousness resides in a position temporally posterior to sensation. In this later theory, the word used to cover consciousness, which by all accounts is a “hard problem” for science, is the “central executive.” As there is an executive within a social organizational system, so there is one in the interior organizational system. Now this denomination is probably too glaringly strange to require much further comment.

What does deserve comment, since it is the basis of much criticism of the cognitivist, information-processing, “representationalist” model, is the strange fact that, once we allow that sensation involves a re-coding of information, and cognitive distribution of that information neurally a continual re-assembly, resulting in some serially displayed data along the single perceptual channel, whether looping reiteratively in a mnemonic cycle or not, we seem to have reproduced the problem of perception itself, now as a purely internal event. Whether it is “consciousness” or a “central executive” who is aware of the digital parcels floating down this channel, this very dyadic, oppositional circumstance seems to reconstruct the conditions that the model is supposed to explain. Now perception, of a representation of the external world, happens inside the brain. How would this perception work? Is there a moment of sensation in which the contents of the channel are taken up as code and then processed into a representation to be observed by a chief shareholder within the mind of the central executive? Etc.

2 Productions

All the history that I have presented in this chapter, whatever intentional selection I have carried out in assembling it, leads decisively towards this major shift through and after World War II. Something major happens to perception in this period, and just what has happened is registered in the filter model given above. There are a number of key elements

that need to be emphasized both with regard to the transition and with regard to what it is that, by 1960, has fully been formed.

The first thing to clarify is that what I above referred to as the “manufacture of perception” occurs on two levels; there are two dimensions of the production of perception, one intellectual, the other concrete. To be more precise both are concrete productions—even the intellectual is concretely produced, in hard form as textbooks and images, etc.—and both are socially distributed. On the one hand there is a discursive production of scientifically-persuasive, acceptable or normative pronouncements on the nature of perception. As Cray notes, that scientific-discursive production was in the early 19th century still a non-institutionalized, idiosyncratic and non-systematized affair, stemming from practitioners like Helmholtz who established experimental circumstances within their own homes. The network of these discursive producers was loose, and it took time for their work to be compiled and to achieve a uniform consent. That is the sort of thing that began with Müller’s 1833 *Handbuch*, and that was in certain ways only completed with James’ *Principles*. As was also the case with so many other industries, however, it was chiefly the two world wars that occasioned a near-total systematization of knowledges in this field, demanded their interplay, and excluded incommensurate contenders like introspectionism. By 1958, Broadbent’s *Perception and Communication* could have as its chief aspiration acceptance within a unified professional community founded upon a dual consent with regard to theoretical axioms and experimental techniques. When an oppositional account like that I will discuss in the next chapter under the headings of “Ecological,” “Embodiment” or “Enactment” appears on the scene and somehow gains access to publishing, its hope is identical: the discourse aims at hegemony, either as a target to destabilize, or as a telos, or both.

But cognitive psychology, like all our contemporary, dependably worldly sciences, does not produce only text. The verity of its texts must be established by the applicability of

the principles within those texts to concrete production of technical items integratable into a concrete, functional system. If what the science shows can be expressed in a technical device that works, the science is valuable and its pronouncements are true. This is the case with the success of the APU. What is intriguing is that the technical devices it helped to produce were designed scientifically to integrate the human attentional apparatus—human perception—into a communications network. The exact placement of dials, knobs, meters, the selection of aural or visual cues, the mode of presentation of different families of information for monitoring, signaling, or command, all are established on the basis of experimental regularities of attention determined in experimental circumstances.

Science goes to work on perception. It takes part in the production not only of knowledge, but of material perceptual fields specifically capable of producing or organizing perception of a particular kind, namely that which is functional in a communications environment. In broad terms it does just what advertising does, distributing expanses of visibility and audibility, concretely in a lived space, which are intentionally internally organized so as to consequently organize the perception and the behavior that comes into conjunction with them. A potential force is arrayed without, in social space, which operates upon the space and upon the forces of the individual in a pattern-giving fashion. This is precisely how Foucault, following Nietzsche, defined power, as force which operates upon force.¹⁰² The production of the APU, then, is directly double, but functionally triple. It produces scientific truth; it produces instrumental arrays (performing chiefly the design tasks). But indirectly it then produces, by means of these arrays, an organization of perception. Functional architecture, especially that designed explicitly as an element in a “control system,” produces or modulates a body image. In the sense that Schilder or Merleau-Ponty

¹⁰² See the afterword by Foucault, “The Subject and Power,” in H.L. Dreyfus and P. Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics*, pp. 208-26, esp. p. 220. Deleuze cites this text in his book *Foucault*, p. 28, where he clarifies: “...the power relation, that is to say, the *relations between force and force*, ‘an action upon an action’.”

give this term, a sense which retains something “spiritual,” the APU indirectly produces body images. Directly it achieves this through contributing to the manufacture of machines for altering the patterns of phenomena constituting lived reality.

To this we could add the ideological fact that, through the production of discourses presenting the theoretical truth of perception which themselves are distributed and disseminated in a hegemonic fashion, the APU produces perception as an interpretive reality for educated persons. On the one hand there are manufactured surfaces for perception, which orient it in one way rather than another; on the other hand there are manufactured discourses of perception, which are utilized by a learned person in codifying their own perception as having the characteristics specified by the discourse. Given the ergonomic layout of the computer at which I work, I synchronize my eyes, my hands, and my otherwise motionless, sitting body, in an extremely specific way. Given the set of institutional truths with which I am familiar because I have been to college, I can verify that I process data received from the screen here, and output command signals to the musculature in my hands which results in the appearance of letters here on the screen. I can say that, clearly, there is a communicational feedback loop going on between me and my technology. I will not have falsified anything in this account; I will have accounted for whatever is present. Only I will have done so in a specific way which happens, not at all coincidentally, to echo the decisive texts which I know as authoritative.

Everything that is not Communication is Noise

The degree to which the above production integrates the individual, both on an abstract theoretical and on a profoundly practical level, with a large-scale industrial-military communications apparatus, differentiates cognitive psychology from its forerunners. The other thing that distinguishes it is the unique fashion in which it incorporates the theoretical work of

the particular bodies of study we have just considered, while simultaneously erasing large sections of their emphasis.

Recall that for Broadbent, attention is a switching function according to which the perceptual channel attaches itself to one or another incoming informational channel. On the developed account that Baddeley offers, this serial channel achieves a continual synthesis of mnemonic and new data in an ongoing feedback cycle somewhere beneath the skull, behind the eyes and above the neck. Now the practical question for these deeply practical experimenters is how to maintain the proper connections, between this cortical internality and an external source set, and then, once the signal is input, how to maintain its clarity through the course of internal processing, to the point of output. In all cases the functional question regards continuity of signal. When attention adjusts to take in one stream of information rather than another, it facilitates one or another continuity—it opens a circuit. The interface problem has to do with the functional modulation of perception from one circuit to another. We want a smooth switching which corresponds to the needs of the overall communications system within which the individual perception channel constitutes a function. Inside the individual apparatus itself, the question is how to maintain the integrity of a signal and to see to it that the signal is processed in dependable ways, such that the data output bears the imprint of just the required calculative operations and no others. The movement of an operator's hand expresses this data. The functionality of that movement depends upon the continued integrity of information within the neural system.

Everything that occurs within this functional circuit is communication. Everything that interrupts it, on the other hand, is noise. This specific determination of the meaning of noise was offered in Claude Shannon's communications theory: noise designates the full set of

external forces operating destructively on a coherent data stream.¹⁰³ The entropic force of material resistances within wires, or in air, but then also the interference caused by other channels of communication, or by atmospheric phenomena having a material character of a kind with the communications modulation (for example, electrical or magnetic phenomena interacting with a signal sent through an electrical wire), etc. are all noise. The founding moment of communications theory is Shannon's codification of noise as a "perturbation" of structure in a flow of code.¹⁰⁴

Wherever there is a problem worth addressing in the human communications apparatus, previously known as the perceptual system, there is also a problem of noise. This may be environmental distraction including actual sonic noise, or individual distraction involving mental processes of non-functional sorts. I have already traced the history of locations of noise with regard to the human communications function. What I wish to emphasize in closing this chapter is the manner in which everything that is not signal, within the individual, and in the course of the individual's practical formation, becomes noise. Desire, whatever that is (desire may have a definition in psychoanalysis; in communications, it has none, unless it is one information source among many), and fear, and love, and rage, all those primary emotions, are noise. They may be grappled with insofar as they prevent communication, but they will always have a horizontal character, and a definition that is dialectically parasitic upon signal flow. They are precisely what is not presented in a signal flow diagram like that famously depicting the filter theory. Whatever they are, they are first of all and mostly not-signal. Even when emotion becomes a key object for study in the 1990s and up to the present, it has this character. Either it becomes a structural aspect of a communications circumstance—a sort of fluctuating but knowable reality of the brain whose

¹⁰³ Claude E. Shannon and Warren Weaver, *The Mathematical Theory of Communication*. See for example p. 5.

¹⁰⁴ *Ibid.*, p. 34.

regularities must be grasped if the coherence of through-put is to be retained (by calculating out these variations)—or it itself becomes a form of data, input at some point in the internal processing series, and entering into calculations in that process. Really these two amount to the same. At best emotion, etc., will be a foil, a pure noise. They will never signify a reality independent in principle from the logic of code, because in principle, there is no other reality. Hegemony here expresses its force in a dumb incomprehension performed dependably by institutional intelligence.

But if desire, emotion, whatever aspects of the lived body are not easily comprehended under the banner of informational flow, become noise, the fate of the production of the conditions for such informational function is even worse. This, the history of the production of particular bodily habits facilitating the conjunction of eyes, fingertips etc. with particular aspects of the physical world, is erased entirely. It is as if behaviorism, as perhaps the Foucauldian disciplines of the preceding century, and the older “bodily practices” described for example in Marcel Mauss,¹⁰⁵ had finally completed their efforts. The well-behaved human, from a communications perspective, is always already assumed. If there are investigations, and ongoing ones, into the correlation between bodily gestures and attentional adjustment, the questions posed regard the eternal nature, the scientific regularity, the ahistorical truth about the functioning of the body. Or if there is a history, it is an ancient one whose nearest point of reference is the Neanderthal. After the Neanderthal, no significant history, because the only scientific history is evolution. Other historical questions are the concern of the humanities; not admitting of quantitative precision, they are inadmissible to discussions of the real truth regarding perception.

¹⁰⁵ In “Techniques of the Body”. See Margaret Lock and Judith Farquhar, eds., *Beyond the Body Proper: Reading the Anthropology of Material Life*, pp. 50-68.

The production of perception that is performed by contemporary mainstream science, in its discursive and its concrete forms (you could say, in its biopolitical and its disciplinary forms), is thus also a manufacture of a numbness, a silence or an invisibility, of the very conditions of the continual functioning of that perception. Perception as communication requires sophisticated bodily training and bodily habit; it requires an ongoing manufacture of physical-technological circumstances, in which those habits may cycle: but perception as communication requires both the theoretical and the phenomenological suppression of those circumstances and the history of their production. The human as a communications apparatus is the human constituted as ahistorical and a-libidinous. More: the person performing well in a communications environment—after all, these abstractions have real functional correlates—is a person regularly suppressing the environment facilitating communication. To focus on the signal, to bring one's attention to that point, is to suppress the periphery, both somatic and temporal. To be attentive now to these many streams of information that surround us and of whose overwhelming multiplicity we are daily re-informed is to be actively oblivious to the manufacture of this environment and to the possibility of a reality that is not in code. It is to be a participant in a perpetual present which has the strange character of orienting always away from itself, since it must always interpret the significance of any present element of code on the basis of the earlier and still to come moments of the communication.

On the one hand the communicator annihilates the past and the present, as real social history and real material environment; on the other she annihilates her own present communicational function, as she becomes a passive synthesis for a code which passes through her. The physical dimension of an historically-produced material environment is systematically, functionally suppressed by a functionary who then suppresses her own present in the course of channeling a perpetually past or future meaning.

CHAPTER 2: COUNTER-PRODUCTION

There is no one that idolizes the organism as a whole so much as I do.

-John B. Watson¹

Perhaps the most unifying characteristic of the theories we have so far considered is their agreement with regard to the basic internality of perception. Even for Locke and for Condillac (as for Descartes) it is taken as given that perception somehow happens “in here,” while what perception is perception of is “out there.” What distinguishes this 18th century account, which quickly comes to appear as rather naïve, is that it takes the communication of the nature of that external reality to be unproblematic. While the subject remains effectively within her own head, her eyes are clear windows. With Müller, the windows are shut, and if colors and sounds continue to make some appearance, they do so as does a movie. Perceptions are “projected” somehow in an internal space, leaving a perpetual question as to their correspondence with an external world from which, in some equally obscure fashion, they originated. What this means is that for everyone we have looked at, to one degree or another, perception follows after sensation and must be an assembly in conjunction with memory, projected in continual relation to some subject, in a space which is not identical with physical space. Even for phenomenology, which directly rejects the physiologist’s claim to epistemological privilege, the space of the appearance of phenomena is strictly specific to human experience, to be distinguished from the perceptual worlds of animals in qualitative ways² and from the interplay of energy and matter treated of by physics. While therefore

¹ Quoted in *Mechanical Man*, p. 116.

² See for example Heidegger’s essay on “The Thing,” and Giorgio Agamben’s critique in *The Open: Man and Animal*.

Merleau-Ponty can point out that the physicist's account of an "objective" reality is given within a lived experience which is the condition of its possibility, this never excludes the other possibility that the processes the physicist intends in her account actually exist as well, reciprocally conditioning Dasein, nor does it exclude the fact that independent perceptual experiences take place in animals. There is still a typically human "inside" which is to be distinguished from an outside.

On the cognitivist model, which now wields epistemological supremacy in the social field, this internality is in a certain respect absent, but in another respect absolute. Insofar as perception is ultimately a question of signal uptake, processing and behavioral output, it happens on a physical level completely co-extensive with the outer world. The various transductions at the sensory surfaces are each and every one physical, such that what happens in perception is perfectly describable either by physics, or by chemistry, or by biology, just depending upon the scale of the interaction and which exact forms of energy the transduction transitions between. At no point in the path of energetic communication is physicality left behind, and so in this respect perception is one among many physical processes, the same in kind as sound, light, wind, electricity and war.

Admittedly there is a strange intermediate ground here, since the point of calling a particular stream of energy a "signal" is to suggest that it can be "understood" as something other than an energetic stream, as having a meaning. While it may seem however that this immediately implies a subject in the manner of Uexküll, a positional or relational consciousness which comprehends, this problem can be gotten past by insisting upon operationalist definitions of the reception of a message. If we say that comprehension is a conscious process, then it seems to imply a subject. But if we say instead that receipt of the meaning of a signal is given granted only a certain consequent behavior, the requirement for

an internality is bypassed. In this manner genetic code is “comprehended” by the tissues replicating on its basis, without our ever feeling the need to posit a consciousness at that scale.

So to some degree cognitivism requires no sentience at all. This is one way in which it displays the same tastes as did Watson, who considered the concept of “consciousness” a remnant of folklore, a barely veiled religious appellation with no scientific merit and no corresponding objective reality. Even Bertrand Russell thought the behaviorists’ “subvocalization” theory of language appealing for just this reason.³ And contemporary cognitivists in psychology and neuroscience do hypothesize a large volume of “internal processing” that is completely unconscious.

Nevertheless the behaviorist insistence that there is just no such thing as individual perception, distinguishable from externally-observable behavior, has not on the whole been accepted. In Broadbent there is only one thin line depicting both the objects and the awarenesses of the phenomenological subject, but that line is nevertheless a part of the diagram. In fact there is a large-scale, dominant account here which goes under the heading of “representationalism.” What the representationalist theory posits is that perception consists, again, in an internal construction, in an internal space, of a vast plenum of data into some comprehensible projection supposed to be a depiction of external reality. Like a movie viewed by a mind. And decidedly, inside a brain.

This present chapter begins by considering an oppositional depiction of perception as a form of externality; a portrayal coming immediately after the World Wars, but becoming especially significant in the 1960s and 1970s. These are accounts very often cited today by opponents of the information-processing model, especially within the humanities and the arts, where the signal-processing nature of reality on the whole seems to have settled less easily. These “ecological,” “embodiment” and “enactment” approaches present perception as a

³ Buckley, *Mechanical Man*, p. 118.

modulation of the external world, and they involve outright denials of some of the grounding tenets of cognitivism. We may regard the theories of J.J. Gibson, Humberto Maturana, Francisco Varela, Alva Noë and Kevin O'Regan as tentative steps into the world outside the head. In this chapter those small steps will be followed by a much more aggressive counter-movement on the part of the external world itself, vigorously and physiologically, through the body.

On the whole this chapter is aimed at perceiving that externality as a domain of force, rather than as a hollow volume; of a wealth of force immediately present upon the physical body and acting upon the closed sphere of perception so laboriously constructed in our laboratories, which so precariously defend their controlled and controlling subjects. If on the one hand phenomena like flicker vertigo show a vulnerability on the part of the enclosed, cognizing mind to raw external force, a vulnerability quite akin to that of lived space to a bullet in the cortex, they also present a potential means of resistance to the construction of a perceptual reality that is in systemic collaboration with large-scale systems of social control. The enemy of my enemy is my friend: such is the manner in which discoveries along these lines were strategically apprehended by 1960s and 1970s aesthetic movements devoted to overwhelming sensory environments and stimulus-types tending to elude functional perceptual uptake.

Ecological Perception

This time around, we start with the environment, rather than with sensation or perception. These we will establish subsequently, as some sort of occurrence within or upon the environment, rendering it “perceived” without relocating it to some interiority or altering its ontology such that it becomes “representational” rather than immediate. The figure most strongly associated with “ecological” thinking in regard to the question of perception is James

J. Gibson. In his two best-known books, *The Perception of the Visual World*, published in 1950, and *The Senses Considered as Perceptual Systems*, published in 1966, he laid out the principles of an ecological approach to perception, designed explicitly to counter the behaviorist model; and then in 1979, in *The Ecological Approach to Visual Perception*, he updated those same positions as an opposition to cognitivism. That his legacy is primarily in the “embodiment” and “enactment” models is indicative of his own emphasis, which asserts perception always to involve a situated body, outside a laboratory, moving in a concrete or at least allegedly concrete environment.⁴

What is an environment? It is a surrounding regularity at the scale of the human. What is present physically exists in various ways for various organisms or technologies. While it is certainly true that for scientific instrumentation the room in which you are now sitting is a massive, cycling structure of atoms which among other things exchange or divert energy from incoming photon barrages, it is also true that it is very simply a room, with walls, a floor and ceiling, furniture, light switch, window and door. The distinction here is not between physical reality and perceptual projection, but between different scales in one external world. If we look for micro-structure, and we have the requisite instrumentation, we can find it. We however are not concerned primarily with the micro-environment but with the human one. We are interested, so Gibson says, in “ecological” rather than “abstract” space.⁵

The simple answer to the question, then, is that the environment is composed of the things around us. More precisely, Gibson answers, like a painting instructor, that the visual environment (which is his specific focus) consists in a set of colored surfaces arranged in some specific fashion. It is still true, on the micro-scale, that one can conceive each surface as

⁴ In what follows I will refer chiefly to Gibson’s 1979 book *The Ecological Approach to Visual Perception* [hereafter “*The Ecological Approach*”], which neatly synthesizes the content of the first two books with later work on “direct perception” and “affordances.”

⁵ James J. Gibson, *The Ecological Approach*, p. 65. “Whereas abstract space consists of points, ecological space consists of places—locations or positions...” “Instead of a geometrical point in abstract space, I mean a position in ecological space, in a medium instead of in a void.”

a complex structure from which light is pointilistically re-emitted in rays, some of which land upon the retina. That these surfaces are mediated to us by light is important, but even more primary, at least upon Gibson's initial gesture, is the fact that what is perceived is never the light, but only the things themselves. This is important because it means that there is no way in which perception can be a composite of individual stimuli, which we never see at all. It is supposed to be, rather, a direct engagement with the surfaces that surround us.⁶ Gibson terms this allegedly-immediate connection to surrounding surfaces "direct perception," which he means to establish a certain "realism" in perception (what we see is what is there) and to counter the central representationalist thesis, that what is perceived is ontologically something other than this real material circumstance.⁷

But the account is actually more sophisticated, more complicated, and more intriguing than this. The reason is that perception occurs, in the real world, at every step within a concrete space. This means that even though the environment can be defined on a first attempt as the set of surfaces perceived (a definition, note, which does not seem to work for auditory perception), the fact that they are perceived "at a distance," (from the perceiver's body) means that whatever is actually most direct in Gibson's "direct perception" is not that environment, but its mediator. By definition, then, the environment is the set of things perceived, as we will see, on the basis of the regularities of their variation in the course of perception. But the immediacy of that perception, and the real place that perception occupies, is a point or locus of points within a volume, "in a medium instead of a void," surrounded by these surfaces. This Gibson refers to as the "ambient array." Arrays may be simple or moving, a point surrounded

⁶ "The supposed sensations resulting from this stimulation are not the data for perception. Stimulation may be a necessary condition for seeing, but it is not sufficient." *The Ecological Approach*, p. 55. The proof is that stimulation may be present, while perception is absent, for example in Wolfgang Metzger's "ganzfeld". A ganzfeld is a stimulus plenum lacking any structural regularity, like a dense fog or white noise.

⁷ "...when I assert that perception of the environment is direct, I mean that it is not mediated by *retinal* pictures, *neural* pictures, or *mental* pictures. *Direct perception* is the activity of getting information from the ambient array of light. I call this a process of *information pickup*..." *Ibid.*, p. 147.

by shapes, or a line along which a sphere of shapes varies; either variety is positioned within the “ambient field,” which latter term designates some structured volume in which perception may occur. We will make use of these concepts for the rest of this study: they are the key sources for the term “ambient” in its title. When I say “ambient power,” I mean power operating via the materiality and the functional structuration of Gibson’s ambient field.

What then is the ambient field? Visually, it is a set of overlapping, discretely-populated spheres, potential ambient arrays, each opening out from some point in a reverberant volume. Any physical volume, existing at the human scale, which we may enter and in which we may have some visual experience, will already be inhabited by a steady state of illuminating resonance, moving at 186,000 miles per second. The light will be ubiquitous throughout, but it will not be homogeneous. The founding condition of the ambient array is this ambient field, this reverberant volume of light. To perception, light is completely invisible; nevertheless its reverberation constitutes the infrastructure supporting a situated perception, through which an ecologically-understood perception moves. Here is Gibson’s key account:

If the illumination is conceived as a manifold of rays, one can imagine every point on every surface of any environment as radiating rays outward from that point, as physicists do. Every such radiating pencil is completely ‘dense.’ One could think of the rays as completely filling the air and think of each point in the air as a point of intersection of rays coming from all directions. It would follow that *light is ambient at every point*. Light would come to every point; it would surround every point; it would be environing at every point. This is one way of conceiving *ambient light*.

Such an omnidirectional flux of light could not exist in empty space but only in an environment of reflecting surfaces. In any ordinary terrestrial space, the illumination reaches an equilibrium, that is, it achieves what is called a *steady state*. The input of energy from the sun is just balanced by the absorption of energy at the surfaces. With any change in the source, a new steady state is immediately reached, as when the sun goes down or is hidden by a cloud. No matter how abrupt the rise or fall of intensity of the light coming from a lamp, the rise or fall of illumination in the room is just as abrupt. *The system is said to be open rather than closed* inasmuch as addition of energy to the airspace and subtraction of energy from it are going on all the time, but the *structure* of the reverberation remains the same and does not change. What could this structure be? It is possible to conceive a *nested set of solid angles at each point in the medium*, as distinguished from a dense set of intersecting

lines... *the angles of intercept, based on the environment*. The flow of energy is relevant to the stimulation of the retina, but the set of solid angles considered as projections is more relevant to stimulus information.⁸

Gibson distinguishes between “radiant” light on the one hand, and “illuminating” or “ambient” light on the other.⁹ So long as we think of light as coming from the surface of its most recent reflection, we have radiant light in mind. Reflection here is a sort of re-emission, and the point is that in this case we retain the idea of light as a manner of communication, in a line, between what we see and ourselves, both of which are assumed before the communication. “Ambient” light, on the other hand, has to be thought in the other direction, from relational space to the surfaces it conjoins, rather than from surfaces to relational space. If, as Gibson says, we think of a volume crossed by infinitely many lines of light, then any point in that volume will be a node surrounded uniquely by a dense sphere, not exactly of light, but of what is illuminated—a certain, exact set of surfaces clustering about that point, like an orb about its center. Speaking of light as ambient is a way of denoting that an absolutely determinate situation of light exists at some specified point in space, and further, that the exact constitution of the light existing there specifies (together with the structure and habits of the perceiver) the exact character of that space for vision. This situation is still constituted by the exact reflective circumstances constructing it. When those change, as also if the illumination changes, immediately so does the sphere about this point. Nevertheless, while reflection and physical circumstance are the condition of the ambient field,¹⁰ the ambient field is the situation and the medium of perception. Perception is a traversing, along some determinate path, of a field that is structured in this manner. Seeing is a traversing of some volume of structured light, from ambient point to ambient point, at each one looking out at the

⁸ *Ibid.*, p. 50.

⁹ “Radiation becomes illumination by *reverberating* between the earth and the sky and between surfaces that face one another.” *Ibid.*, p. 50.

¹⁰ In what follows I will use “ambient field” and “ambience” as having basically the same sense.

closed circumference of that particular ambient sphere. Hearing is a traversing of structured air, or structured water.¹¹

The “nest of solid angles” arrayed about some point is the nested set of sections of the ambient sphere. These may be conceived like the pie-piece wedges one can cut out from a circle, but in three dimensions, with an ovoid terminus at the outer perimeter of the sphere, and a center on the ambient point in question. Each such “solid angle” (a term derived from projective geometry) is determined in its specific shape by some real feature of the environment—some edge, or overlap, shadow or hill, etc. So each ambient point is a completely-specified conjunction of just those aspects of those environmental surfaces. *The place of the ambient point, one could say, is a place of places.* The ambient place is a place where environmental places meet, and the path of perception links such conjunctions, like a string links beads. Light links space; vision links light.

Now consider the material constitution at some ambient point. At some level not detectable by any eye, although acting upon all of them, the material reality underlying what is seen is moving at 186,000 miles per second. Neither the ambient point nor the sphere of solid angles are therefore stable objects, and this is important for Gibson because he wants to deny that what is perceived is either the light or the momentary spasm of a photoreceptive cell reacting in its presence. A river of light underlies a stable ambient array, and a river of sensory phenomena, first upon the retina, and then within the optical nerve, the lateral geniculate nucleus, and the occipital cortex, underlies perception. But the light is not the environment, and the river of activity in the brain is not the perception. The former may be necessary for the

¹¹ We can note that the actual “shapes” of each ambient bubble along such a path will vary from one sensory modality to another, and even between the space of a particular modality and another “motor” or “operational” space that coexists alongside it (this last point will become increasingly significant through the course of this chapter). The beginning point for the list of such perceptual “spaces” is Uexküll, followed by Paillard. The differences between types of perceptual field are also detailed in certain phenomenological analyses, for example those of Don Ihde, in *Listening and Voice* and *Technics and Praxis*. The “sphere” discussed here is typical of an optical array .

latter, but the latter is not reducible to the former. Just as the existence of an environment of stable visual surfaces is a reality, just at a different level than that of the atom or the photon, perception is a reality existing at a level distinct from sensation. It is neither a compound of sensations, nor a temporally posterior interpretation of some infinitely complex pattern of stimuli. It simply denotes a regularity of environmental behavior, at the scale of the human being, when that is accessed by means of a gesturally-particular positioning of a perceptual system at an ambient point. Perception is “pickup” of “stimulus information,”¹² which is a meta-property of a flow of potential stimuli, or of ambient events.¹³ The eye participates at a series of points in the ambient field; it does so intelligently, seeking out both relative stabilities and regularities of change. “Ambient light is structured... and the purpose of a dual ocular system is to register this structure, or, more exactly, the invariants of its changing structure.”¹⁴

By this means perception perceives both things and its own body. What changes rapidly “specifies” no object. What changes with dependable and reversible regularity specifies the features of an object of some sort. What does not change, as everything else does, specifies some feature either of the perceiver’s body itself (for example the profile of a nose) or of some apparatus moving in conjunction with that body (for example a steering wheel).

The optical information to specify the self, including the head, body, arms, and hands, *accompanies* the optical information to specify the environment. The two sources of information coexist. The one could not exist without the other. When a man sees the world, he sees his nose at the same time; or rather, the world and his nose are both specified and his awareness can shift. Which of the two he notices depends on his attitude; what needs emphasis now is that information is available for both.

The supposedly separate realms of the subjective and the objective are actually only poles of attention. The dualism of observer and environment is unnecessary. The information for the perception of ‘here’ is of the same kind as the information for the perception of ‘there,’ and a continuous layout of surfaces extends from one to the other.¹⁵

¹² “Perception is not a response to a stimulus but an act of information pickup.” *Ibid.*, p. 54.

¹³ The present vogue is to refer to such higher-order pattern as “emergent.”

¹⁴ *Ibid.*, p. 57.

¹⁵ *Ibid.*, p. 116. Notice the strict correlation of this position with James’ notion of the “sheet of phenomena” in Ch. 1 of this study.

Certainly a complicated system of neural and muscular phenomena accompanies the conjoining of a sensory surface with an ambient array. This whole system together with the surface constitutes a “perceptual system;” but by no means does it consist in the conducting of information.¹⁶ The information is outside: “information” for Gibson denotes “regularity of pattern,” and such regularities constitute the very patternedness of nature. We do not need to engage in cryptography or cryptoanalysis to produce it; it is already there. Any model of perception asserting that the environment is already analyzed into channels, that a sort of communication emanating from it produces a dense code in the bundled rope of optical nerves thereafter requiring interpretation, is engaging in over-complication.¹⁷ At any rate this model leads to the above-mentioned problem of the perceiver within the perceiver. Who is it, after all, who will view the “representation” resulting from decryption of nervous code? Who is this “central executive” who will issue a command to the musculature? The whole model is unnecessary.

Ecological Space

There are two routes to follow from this point, both of which need to be developed. On the one hand there seems to be a sort of tension, or a confusion regarding the “directness” of Gibson’s “direct perception,” the exact position of perception and its objects, and the “ecological space” in which these take place, as opposed to the “abstract space” assumed by

¹⁶ “...stimulus information is not anything that could possibly be sent up a nerve bundle and delivered to the brain... information as here conceived is not transmitted or conveyed, does not consist of signals or messages, and does not entail a sender or receiver.” *Ibid.*, p. 54. “A stimulus... [is] a brief and discrete application of energy to a sensitive surface... But a flowing array of stimulation is a different matter entirely.” p. 57.

¹⁷ “It is not necessary to assume that *anything whatever* is transmitted along the optic nerve in the activity of perception. We need not believe that *either* an inverted picture or a set of messages is delivered to the brain. We can think of vision as a perceptual system, the brain being simply part of the system. The eye is also part of the system, since retinal inputs lead to ocular adjustments and then to altered retinal inputs, and so on. The process is circular, not a one-way transmission. The eye-head-brain-body system registers the invariants in the structure of ambient light.” *Ibid.*, p. 61.

quantitative science. On the other hand we need to develop the details of Gibson's account, specifically with regard to the manner in which a perceiver moves, and how one is to conceive the continual inter-dependence between movement and alteration within the perceptual array. Gibson's account of "how perception works," with its emphasis on the regularities of change within a perceptual array, moves us both toward Varela, Noë and O'Regan, and their ideas of "structural coupling" and "enactment," but also to the point where we can see how Gibson's work has been of "applied" value, again in the construction of particular types of interface.

Let's look first at the complication Gibson passes by, the omission of which renders his own account solidly common-sensical and usable in practical manufacturing. I already touched on this complication when I pointed out the tension between what Gibson calls the "environment," which is the set of surrounding surfaces, and the "ambient field," which is the structured volume of light in a steady state amidst those surfaces.¹⁸ The former constitutes what is perceived, the latter where perception occurs. Since Gibson is well-known for asserting that perception is in direct contact with the perceived, a problem arises, which I have already noted. Where exactly is perception, and with what, at that point, is it in direct contact? The answer is that, clearly, a perceiving body will be at one or another ambient point, and each such point conjoins some discrete set of aspects of environmental surfaces. What is directly participated is that local sphere of structured illumination, what is accessed by means

¹⁸ I might re-state the problem by asking: is the ambient field really amidst the surfaces, or are the surfaces amidst the field? If we are thinking in terms of explanatory causality, and radiant light, the first is the case: the field depends upon the physical structure of the space in which it reverberates. If we are thinking in terms of what Merleau-Ponty calls the "primacy of perception," and noting the primacy of ambient light for perception, then the surfaces are amidst the field: each surface is present in infinite multiplicity, in an infinite series of small permutations of perspective, at the infinite number of points of radiant conjunction. To say the same thing again, in terms of our capacity to act upon the array, we take it as dependent upon fixed and unitary objects, which now we cast as independent of their perceived reality; in terms of their material reality for a "direct," material perception, we recognize that, really, the objects hover in infinite multiplicity in the middle of the room. This duality of approach is related to Uexküll's observation that what the object is, is related directly to the operations that an organism may perform in regard to it. For productive or destructive action, with a goal, we need to identify a target for our motor activity, and our convention in this regard is to name an object with an objective location. When we are concerned with perception as itself an activity, the constructed nature of this previous target begins to make itself known.

of it is the surfaces composing its perimeter skin.¹⁹ On the basis of a probing movement through the space, a perceiver becomes aware of which aspects, which lines, edges, colors, remain intact and can be returned to, and which are completely passing. To the former the perceiver will assign the meanings “object” and “objective quality,” to the latter no perceptual meaning at all, or the meaning “accident.” To those aspects of the perceptual array remaining completely immobile through these transformations, like the shape of one’s access upon it (the circularity of the field of vision or the uneven sphericity of hearing), or the fact that wherever one moves, when one looks down one sees hands, the perceiver will assign the meaning “me.” As on James’ account, entities and identities, even one’s own, are generated out of a flux of perceptual positivity; on Gibson’s account, however, these stable features are taken to be realities of the external world.

This whole process takes place in the world, and Gibson is at pains to insist that we have never left this world except in dreams and in the fictional problems of people like Descartes and Broadbent, who assume an insularity and distantiation which because it is axiomatic can never be overcome. For Gibson, all perception occurs in ecological space; it is a phenomenon of that space. But here is the problem that remains. What exactly distinguishes ecological from abstract space? Consider the ambient sphere. At each ambient point there exists a sphere of shaped colors, joining together around the circumference like puzzle pieces. That this set of surfaces can be sampled or perceived by a perceptual system at just this point in the ambient array means that they are really here, at this point. The problem of perception at a distance is already solved given the theory of the ambient field and the ambient array, because the ambient array is precisely a field of heterogeneous presence. When an eye is

¹⁹ “instead of a group of solid angles... a nested complex of them. The large solid angles in the array come from the *faces* of this layout, from the facades of detached objects, and from the interspaces or holes that we call background or sky... The small solid angles in the array come from what might be called the *facets* of the layout as distinguished from the faces, the textures of the surfaces as distinguished from their forms...” *Ibid.*, p. 86.

placed at the junction of various rays, it is stimulated, just because those rays in that structure are there. Both the stimuli, which are the series of different photons or light waves, and the stimulus information, which is the structural regularity maintained through that series, are present at this point. Other regularities are present at some other discrete segment of the array. The surfaces where ambient energy meets sensitive membrane are just such structural regularities. They exist at the local moments of the array: they are the material tissue underlying and performing perception.

It is insufficient, then, to say that “ecological space” is different from “abstract space” in that it involves surfaces and objects rather than atoms and photons. Something more radical has already been proposed. Direct perception is participation in an ambient array, and ecological space is the field of these arrays. The “things” which are “specified” within it, to use Gibson’s language, are specified at each and every point, or in a discrete assemblage of points. Their thingness, as dependable variability and hence perceptual “structure,” is given there, or more precisely in some series of “theres.” All this is to say that the external world exists ambiently, at no distance; it is a system of conjunctures; perceptual access to that externality simply adds to such conjunctures a perceptual system. Movement of the retina is exploration of the external world, true, such that the external world lays across a multiplicity of perspectives. But every moment of its existence is a conjuncture, either of light, or of light and perceptual system.

When Gibson proceeds to treat the ambient array, a complex space, as sitting within a physical space that is non-problematically three-dimensional or Euclidean, assuming that the real environment is a set of surfaces corresponding to objects positioned within such a Cartesian coordinate system, which are “specified” by, but not exhaustively given in the sum

of their infinite radiations,²⁰ he inadvertently re-imposes an “abstract space” as the founding framework for the “ecological space” with which he claims to be explicitly concerned, and he returns to the physicalist insistence upon the primacy of communicating objects at a distance over direct perception. He captures ecological space, as it were, in abstraction. With this he saves himself going too far. Like William James, who stops short of accepting that both Matter and Thinker are “hypotheses” generated out of a lived hum that is immediately felt, though he sees that possibility, Gibson stops short of allowing that “real,” scientific space is generated out of the ecological, that what is first is the conjunction, what is second the source and the receiver.

This may be a small point, or it may be a large one. If it is significant, it is because it bears upon that essential opening question as to what the environment is. The environment, certainly, is a space. The question is whether that space is an abstract volume populated by entities, hollow but resonant, or on the other hand whether it must be conceived as an external density, a sort of tissue of connections, out of which, at any point, an expansive volume may be generated as hypothesis or perception. This raises the question, which we cannot address at present, whether perception itself, of one or another kind (for example, visual vs. auditory, or human vs. animal), essentially involves a horizontal genesis of a non-directly perceived “space which surrounds” whatever is directly given.²¹

²⁰ “Ambient light can only be structured by something that surrounds the point of observation, that is, by an environment. It is not structured by an empty medium of air or by a fog-filled medium. There have to be surfaces—both those that emit light and those that reflect light. Only because ambient light is structured by the substantial environment can it contain information about it.” *Ibid.*, p. 86.

²¹ This is Deleuze’s explicit position in Chapter 5 of *Difference and Repetition*, where he posits a multiplicity of colliding (infinitely “differential”) “intensities” in an “implicit” field which, in certain cases of functionalization, for example the unfolding and reiteration of “orthodox” perception, “explicate” into an equilibrious space (what Gibson calls “abstract”), the signature character of which is to cancel differences or collisions, thereby to ground the possibility of quantifying treatment, and to be “common-sensically” structured as a system of qualified objects given for a distantiated subject. There is another connection to Deleuze and Massumi as well in the foregoing, in that I am attempting to develop an ambient field where “relations predate their terms.” I will return to Deleuze and Massumi repeatedly, and more focally, in the chapters to come.

The real reason that Gibson falls back upon a pre-fabricated notion of space is that he knows, as we all do, that alteration of the arrangement of the furniture will immediately be alteration of the ambient array. His “realism” is expressed by allowing that the “physical world” is at the origin of the perceived one. But this misses the point. There is no reason to assume that the “physical” world of objects which are what light reflects from has this “abstract” character, such that geometrical and quantified accounts in the other sciences maintain a normative authority over considerations regarding perception. The physical world is only ever given perceptually, which is to say ecologically. The “abstraction” here imposed has to be understood as an aspect of the manner in which we tend to act upon this world.

Movement and Perception

But now let’s move back to Gibson’s own account, ignoring for the time being whatever possibilities he has cast to the side. To sum up: perception is “pickup,” through the presence and participation of a perceptual system in a series of ambient arrays, of stimulus information. Stimulus information is a regularity of the behavior of ambient light at a point; it can otherwise be referred to as “structure.” Perception occurs when a perceptual system participates in such structure, by allowing it to carry over into a structuring upon the surface of the retina. The ensuing behavior of the brain, neck, head, extra-ocular musculature, etc., has to be understood as a further continuation of that structure. The body adopts an attitude in relation to the ambient structure which facilitates its recognition. More specifically, ability to perceive depends upon “knowledge” (“tacit” knowledge,²² or what we have been referring to

²² The term “tacit knowledge” comes from Michael Polanyi, who especially references Heidegger in developing its concept. See *Personal Knowledge: Towards a Post-Critical Philosophy*, and more recently *The Tacit Dimension*. Polanyi is deeply indebted to Heidegger, as are Maturana and Varela, among others. Of key significance in the present connection is the earlier Heidegger’s *Being and Time*, particularly the chapter on “The Worldhood of the World” (pp. 90-148), and the notion developed within it of “equipmentality.” My own idea of “ambient power” owes something to this work as well, since ambience or ambient fields and their continuity are “background” or “environmental” in roughly

as bodily “habit”) of the attitude necessary to allow a certain aspect of enduring structure to stabilize not only within the ambient array but also within the perceptual system. Every ambient array thus always includes, in principle and indefinitely, more structure than any perceiver can “pick up,” and perception is always a selection, correspondent to the characteristics and the aims of the organism which perceives. Gibson refers to those aspects particularly suited to one or another perceiver or one or another activity as “affordances.” In this he follows Uexküll, recognizing that “the” object that is perceived is never really *the* object, but a sort of totalization on the part of the perceiver of the set of affordances perceived. It is motion, together with size of the organism, receptor-types, attentiveness and acuity, which determines uptake, but it is also the manner and goal of the activity, which requires one or another aspect of the physical environment to be seized upon; as Marx would put it, different activities determine different use values. The activity of video-game production, it turns out, has seized readily upon the notion of the “affordance.”

Since first of all there is no stoppage of time in which perception takes place, and more importantly, because an utter stasis in the presence of some visual array is typically insufficient for judging what is there (at the least we move our eyes, and close attention will show that we move them, in fact, quite a lot²³), the bodily attitude I mention here is really a bodily habit, a pattern of movement, and the fact of visual perception must be traced back to a stable and skilled correlation between such movement and alterations of the visual field.

Gibson’s ambient field is always sampled in a sequence; perception carves out a curving

the way Heidegger presents those concepts. I also derive “ambience” from Deleuze and Guattari’s “body without organs,” and their continuities, as that concept is presented in the two *Capitalism and Schizophrenia* books. It should be noted that particularly the earlier Deleuze, in *Difference and Repetition*, is himself extremely influenced by this chapter of *Being and Time*, which includes the tight connection between Dasein and its essential spatiality. I will return to the “body without organs,” in Massumi’s reading of it as the “body without an image,” at the end of this present chapter.

²³ The constant, quick movements of the eyes are known as “saccades” and “micro-saccades.” They have been studied thoroughly, key founding studies having been done by Alfred L. Yarbus, and reported in *Eye Movements and Vision*, 1965.

cylinder from that volume, by lacing one ambient sphere to the next. What happens through the course of this sampling is that regularities of change become apparent. For example, a table remains a table though its perceived shape varies perspectively from point to point, from one trapezoid to another. Its endurance is not an endurance of static shape, but of the relationship of a set of angles of a surface to one another. The shape alters, the sum of angles remains constant.²⁴ A person who has been blind for some time will be unfamiliar with these typical regularities—even simple ones like the fact that “movement of the eyes to the left produces rightward movement across the visual field, and so forth...”²⁵—and will hence be unable to see, even though they are given just the same stimulus as the skilled perceiver. Alva Noë and Kevin O’Regan in particular, following Francisco Varela and Humberto Maturana, have sought to emphasize this point, saying that perception thus requires a certain “sensorimotor knowledge,” which is a knowledge specifically about what varieties of change can be expected within a perceptual field, in conjunction with movements and other sensations on the part of the body. In his most recent study, Noë writes:

An object looms larger in the visual field as we approach it, and its profile deforms as we move about it. A sound grows louder as we move nearer to its source. Movements of the hand over the surface of an object give rise to shifting sensations.

To be a perceiver is to understand, implicitly, the effects of movement on sensory stimulation.

This mastery shows itself in the thoughtless automaticity with which we move our eyes, head and body in taking in what is around us... crane our necks, peer, squint, reach for our glasses, or draw near...²⁶

²⁴ “What are the invariants underlying the transforming perspectives in the array from the tabletop? What specifies the shape of this rigid surface as projected to a moving point of observation? Although the changing angles and proportions of the set of trapezoidal projections are a fact, the unchanging relations among the four angles and the invariant proportions over the set are another fact, equally important, and they uniquely specify the rectangular surface.” *Ibid.*, p. 74.

²⁵ Alva Noë, *Action in Perception*, p.1. Gibson lists other basic variations: “*Magnification* of a form in the array means the approach of something, and *minification* means the recession of something. When a visual solid angle of the ambient array approaches a hemisphere, the ultimate limit that a solid angle can reach, an angle 180 in width, an event of great significance is specified, that is, *an object in contact with the point of observation*. This is a general law of natural perspective.” *The Ecological Approach*, p. 103.

²⁶ *Ibid.*

While Gibson's emphasis was always visual, Noë here points out the applicability of the basic model to other sensory modalities, and particularly to hearing. Eric Clarke, in *Ways of Listening*, takes such auditory regularities as the basis for an "ecological" model of musical analysis, suggesting that many of the emotional effects of music, as well as the sense of "motion" that music can elicit in a listener, should be traced to typical regularities of auditory change that occur as we locomote in an everyday world. As examples he cites "a continuous change in left ear/right ear intensity balance or phase relation; or the pitch shift of the Doppler effect..."²⁷ and he notes that an interesting effect can be achieved by varying the unity or multiplicity of voices in a certain duration of music, such that when all the sounding elements shift together, a listener typically experiences something like "self-movement," while when they move differently, the listener hears motion among those parts. This difference, Clarke thinks, can be traced back to the typical behaviors of an auditory ambient array in correspondence with bodily motion. Regularly, when we move, the background sounds shift as a whole. When we stand still, they move only in relation to one another.²⁸

We will return in more detail to the question of ambient sound in the course of this study, as well as to the power of music to produce of a sense of motion. For the present I would like to highlight one key point, which the example of music, and particularly recorded music, replayable in various locations, makes apparent. Gibson's ecological account of perception focuses on the constant correlation of movement of body and transformation of

²⁷ Eric Clarke, *Ways of Listening*, p. 73.

²⁸ "In part this may be attributed to a simple principle of ecological acoustics: if all the separate sources (real or virtual) that are specified in a piece of music are heard to move together in a correlated fashion, this specifies a listener moving in relation to a collection of stationary sound sources (i.e. self motion). If, however, the various sound sources all move relative to one another, and in relation to the listener, this specifies the movements of external objects in relation to one another. In very simple terms this suggests, for instance, that music with complex polyphonic properties is likely to be heard in the latter category—as the movement of external objects/agents in relation to one another and the listener; while monodic or homophonic music may more easily specify self-motion—movement of the listener in relation to the environment." *Ways of Listening*, p. 74.

perceptual array. Perception as an activity, or as Varela puts it, as “enactment,”²⁹ consists in the skillful modulation of each in terms of the other. But that music alone, just given the features of that music through a duration, can produce a “sense” of motion in a listener, points to the fact that individual experience may be manipulated by specific motions or regularities of transformation within a produced perceptual field. If music is produced as a discrete, portable duration, that duration has some of the characteristics of the interface technologies we saw being produced by the APU. It is capable of acting upon a perceiver, such that the perceiver feels in one or another way. This insight is a consequence of situating perception in the environment rather than within the skull, or rather, to be more clear, it is a practical truth that can best be clarified, and even formalized, on an ecological theoretical model.

Manufacturing Perception, Again

In fact Gibson’s model is even more practical than we have seen to this point. He was deeply concerned to present, as far as was possible, the regularities of transformation of a visual field, corresponding to the sequentially-realized characters of objects and motions, in an essentially mathematical language. This he achieved first of all by casting the ambient array in terms of projective geometry. Here is a manner of conceiving space (abstractly, whether Gibson says so or not) already fully outfitted with an apparatus for calculability.³⁰ Within this mathematical framework, Gibson’s careful presentations of the “deleting” and “accreting” of

²⁹ “We propose as a name the term *enactive* to emphasize the growing conviction that cognition is not the representation of a pregiven world by a pregiven mind but is rather the enactment of a world and a mind on the basis of a history of the variety of actions that a being in the world performs.” Varela, Thompson and Rosch, *The Embodied Mind: Cognitive Science and Human Experience*, p. 9. ... “...cognition is no longer seen as problem solving on the basis of representations; instead, cognition in its most encompassing consists in the enactment or bringing forth of a world by a viable history of structural coupling.” *Ibid.*, p. 205. We will clarify the meaning of “structural coupling” shortly. We will also need to inquire just how seriously any of the proponents of this field take the “history” of the perceiver they theoretically conceive.

³⁰ Heidegger’s careful etymological critique of “mathematics” as a finding always of what was put in beforehand, or what is always already known, especially number, in “The Question Concerning Technology,” is of direct pertinence here.

perceptual presence with formulaic regularity, for example along rounded as opposed to sharp occluding edges, etc.,³¹ which I have not had the space to go into here, offers to a technically-minded person a ready-made template for the design of visual arrays capable of reproducing a sense of motion and of self-motion. It is not an accident, then, that Gibson's work has been seized upon voraciously at this point by several generations of computer programmers, involved in the production of video games involving a "first-person" perspective, like the popular "shooter" games that are also used in military training, and of training simulators, particularly flight simulators. It may seem strange, but in retrospect it is completely comprehensible, that Gibson, who sought to re-legitimize a neo-Aristotelian "realism" with regard to perception, became a key figure in the production of a new, virtual reality.³²

Virtual reality video games and simulators reaffirm the weakness I have noted in Gibson's depiction of the environment, and also the strength in the concept of the ambient array. In order to account for "embodied" perception, it is not necessary to point toward some set of real surfaces on real objects, at a distance in a "real," Euclidean space. Perception just involves motion through a set of conjunctions which are present at the position of the

³¹ See for an example of this formalization *The Ecological Approach*, pp. 117-120. It is worth noting in passing that the mathematics of variation underlying projective geometry were not only Gibson's focus, but also Edmund Husserl's, previous to his career shift into philosophy. Though he never to my knowledge cites him, it is clear that Gibson, like Varela, draws quite extensively on Husserl's phenomenology, particularly in understanding the sequential realization of the regularities and identities of objects through variation of perspective.

³² Gibson himself worked extensively on flight simulators and their production, as I will discuss below. As an example of that work, see J.J. Gibson and O.W. Smith, "Sensory Cues and Dynamic Distortion in a Helicopter Flight Simulator." The application of Gibson's ecological perceptual theory to virtual reality and video game production, as well as general interface design, has been widespread, with particular emphasis on the notions of "affordances" and the general insight regarding the applicability of projective geometry to motion of a perceptual field. Some general sources showing this connection include Howard Rheingold, *Virtual Reality: The Revolutionary Technology of Computer-Generated Artificial Worlds—and How it Promises to Transform Society* (1991) (pp. 131, 144-145); Stephen R. Ellis and Mary K. Kaiser, *Pictorial Communication in Virtual and Real Environments* (1992); John N. Latta and David J. Oberg, "A Conceptual Virtual Reality Model" (1994); Andreas Greyersen and Torben Grodal, "Embodiment and Interface," in Bernard Perron and Mark J.P. Wolf (eds), *Video Game Theory Reader 2*, pp. 65-84. Donald Norman, who worked for some time at the APU and was involved in the later development of Macintosh interfaces, used Gibson's theory in his book *The Psychology of Everyday Things* (1988).

perceiver. Their source is, as James says, an hypothesis. The “virtual source” from which a perceived reality emanates, like the fictional enemy shooting at us in a game, or like the “virtual instrument” created symphonically as a fictive but apperceived source of a fused sonic figure,³³ comes into perception in just the same way that a “real source” does. This means, from the perspective of perception, that the “real” and the “virtual” are actually the same; they are hypothetical in the same way. The Euclidean, “real” environment that Gibson asserts lies at the basis of the ambient array is only as real as the enemy who shoots at me in a perfect video game. Or rather, as we all know, that environment is more real, but only because we can act on it, and experience it in a manifold of ways exceeding the present visual one. This fact influences our evaluation of source. All the same, it is an evaluation, and not a direct perception, which is my point.

But if “natural” perception carries out a construction of a virtual source-domain, without recognizing it, in the process of co-varying bodily movement with visual transformation, virtual reality carries out the reverse operation. In this case, the source domain is pre-fabricated, as a fictional frame; what is given is the transformations of the visual array;

³³ Clarke takes the idea of a “virtual source” from Stephen McAdams. “McAdams coined the term ‘virtual source’ by analogy with the term virtual image (or virtual object) in optics, where it refers to the objects and images seen in mirrors and pictures, and which occupy the virtual space behind the plane of the picture or mirror. In a similar manner, musical sounds may be organized in such a way that they specify a source that has no real, physical existence. Various tricks of orchestration are an obvious example, where the impression of a ‘virtual instrument’ that has no empirical presence can be created through the fusion of sounds coming from various actual sources.” *Ways of Listening*, pp. 71-72. Note the exact correlation here to Gibson’s language: a positivity within the perceptual array “specifies” a source. The point I am making is that this specifying function is the same whether the source “exists” or not, whether it is “virtual” or “actual.” It is thus “hypothetical” in the manner of James’ “thinker” and “matter”.

This hypothetical character of the source/object construct is also what makes perception susceptible to deconstruction, as for example in the music of La Monte Young and Eliane Radigue, which I will discuss in Ch. 3. In these cases composition intentionally aims, particularly through the use of long duration, to disable the “common sensical” structuration of the perceptual field. With this erosion, the body image, the spatial matrix which on the one hand distributes percepts, but which on the other is nothing but a reiterative distribution of this common sensical sort, also breaks down. There are analogues in various other media. The intentional destruction of “orthodox” perception in the arts deserves special treatment, particularly given the intentional construction of that perception and its attendant body by dominant institutions.

and what is constructed in experience is the “sense” of motion. A “felt self” in the sense of William James can be fabricated by means of a manufactured perceptual array. What simulators in particular show is that bodily motions themselves, and through their repetition, bodily habits, may actually, physically be constructed by these means. The shooter games that soldiers play while they are state-side, like the planes that pilots fly in simulators, still train both infantry and pilot to do their job well. Through interaction with a system of perceptual motions, a real tacit knowledge is generated, which can be enacted in the real environment. The video game and the simulator are technologies capable of producing bodily habits by means of a carefully-crafted visual array, just as were the APU’s control panels. (And in both cases a discursive body of knowledge finds itself tied to a practical production of concrete interfaces.) Clarke’s suggestion is that a musical recording may be comprehended in the same fashion.

An Oppositional Model?

The Ecological movement opposes itself, as I have reiterated, to the presently-dominant (because mathematically-oriented) information-processing model. It does so explicitly on several key points, including the idea that what enters through the sensory nerves is a code requiring interpretation, that this data is processed by internal computation into some sort of representation, that there is an internal “mind” that would be the viewer of such a representation and the issuer of commands to the musculature, and that the whole perceptual process is internal at all. These are the explicit points of contention. But there seems also to be, particularly in Maturana and Varela, a social-political or an ethical objection, to the production of a model of the human being as the exact equivalent of a machine. Varela, after

all, was a student of Wiener's,³⁴ and a reader of Uexküll. It seems possible that the objection extends to the deep involvement of cognitive psychology and computational cognitive science with large-scale military and industrial organization. We have seen the childhood of the APU, for example, spent in the lap of the RAF; cognitive science as a computationally-oriented research discipline likewise has its origins in war or in the preparation for it, having been spawned together with "systems analysis" from studies of artificial intelligence for the purposes of predictive war games at the RAND corporation in the early 1950s.³⁵

These preferences are apparent in the self-identification of the approach, which deems itself "ecological," as opposed to computational; "embodied," as opposed to disembodied, Cartesian, dualist (spiritual or superstitious, but in a cold, machinic fashion); enacted as opposed to passive. On the whole the rhetorical situating of these discourses, on the part of the original authors themselves, and more so on the part of those who make use of them and propagate these titles, is anti-machinic, natural, accepting of the human as animal. The deep failure of the information paradigm, runs the general complaint, is to overlook the natural dimension itself. In engaging so thoroughly with machinic functions and particularly with code and its transmission, it loses sight of the very environment through which those signals fly. I have offered a similar objection myself in the previous chapter, which shows my greater sympathy with this particular theoretical camp. An ecological approach, by its very title, is supposed to be more eco-friendly, less destructive. Indeed the approach emerged most fully with Gibson's second book in 1966, in the heat of an anti-war movement, with which, to some extent, Gibson sympathized.³⁶

³⁴ Who shortly after writing *Cybernetics*, showing the applicability of information and feedback theory to everything, and the likely automation of nearly everything, wrote a cautionary follow-up called *The Human Use of Human Beings*, in which he stated that an automated society could be humane only if it is not capitalist.

³⁵ See Manuel DeLanda's *War in the Age of Intelligent Machines*, especially pp. 101-103.

³⁶ *Perceiving the Affordances: A Portrait of Two Psychologists*, by Eleanor Gibson.

But the punch line is that James J. Gibson, too, was in the employment of the armed services. Through World War II he was the director of the U.S. Air Force Research Unit in Aviation Psychology. Afterwards, he ran a research program at Cornell under large-scale Air Force funding. His first book, *The Perception of the Visual World*, was produced on the basis of studies conducted during and immediately after the war; his second, *The Senses Considered as Perceptual Systems*, during the time of his Air Force funding at Cornell. Financially speaking it was the United States' analogue of the RAF that produced this particular model of the nature of perception, and the reason is that, functionally speaking, it was this particular institution which had need of such a model in order to deal with "Aviation Psychology." This is why the key situations considered in Gibson's books involve the flow of the optical array during flight, and especially at its most dangerous points, at takeoff, in landing, in turbulence. If his depictions of the natural world in the end seem a little bit hollow, if they already have that antiseptic character of the gridded three-dimensional landscape in video-games (constructed perceptually, of course, by the implementation of a non-Euclidean, projective geometry), bereft of smells, sounds, people, cities, cars, offices, jobs, aches and so forth, leaving us instead with computer animation desert, mountain and rectilinear living chamber, this is just the foreseeable consequence of the fact that, even when we are positioned for theoretical purposes on the ground, functionally we need very soon again to become airborne. Gibson's is the perception of the pilot, not of the infantryman, and certainly not of the civilian, in fear or protest on the ground. There is no fear in Gibson's perception; if there is a rage it is well-harnessed and put to work.

Now it really is the case that in some contemporary academic discourse, Gibson, Maturana and Varela, Alva Noë and Kevin O'Regan, along with the old favorite Merleau-Ponty and new apostles of the body image like V.S. Ramachandran, are invoked as more civilized responses to a militantly quantified science, which speaks a language most of us

cannot understand. They are referenced in music, in the arts, in new media, with the unspoken implication that they offer a legitimate because still-scientific explanation of what is happening in perception, both functional and aesthetic, but without the ethical baggage; their explanations are supposed to get to the real heart of things, protecting what that industrial-military abstraction puts in peril, “the body” and “the environment.” And yet Gibson manufactures an account of perception for a very familiar client. If the APU are adversaries theoretically, militarily they are compatriots, and in the end, if there is a battle in the discourse, there is a complete alliance in the cockpit. Specifically, the APU manufactures the control panel and the means of understanding the human’s integration with it; Gibson manufactures the means of understanding what happens in the world in the windows, as that moves up, down, left, right; as the landing strip magnifies within those frames. And if his work seemed less applicable in the short run, its usefulness for simulation has now been discovered.

The Functional Organism

I am seeking among other things to show that the behaviorist project of manufacturing a particular person, who is perky, obedient, efficient and productive, has not been thrown away. It survives in parody, of course, in advertising—in parody, since its production there is one of consumption, its efficiency hence one of waste, though its obedience is real enough and its perkiness as trite as it sounds—but beyond that, it survives in the integrated enterprises of the theory of perception and its application in the manufacture of socially-distributed interfaces (among which are the aesthetic emissaries called ads). The information-processing brain, and also the ecologically-perceiving body, are in the highest degree functional, balanced, and integratable within a pre-given, highly-engineered functional environment, the history and ultimate telos of which are never specified in these dominant post-war accounts.

The result of this systemic omission is that workers in these fields can in good conscience contribute to the production of a highly-specific perception and a highly-specific space, both specified by dominant industry and governance, while continuing to understand their own work as nothing but the uncovering of the natural truth. Common sense continues to present contingency as necessity; here as elsewhere, “human” science, in its veiling of history and power, thus functions as ideology.

After behaviorism and outside the sphere of an increasingly quaint-seeming phenomenology, no further mention is made of the personality, the emotions, the social context of the person who processes information or whose motions modulate some perceptual array. The functions, even when in principle they involve “the body” and “the environment,” outshine and subdue whatever is not functional. What is not information-processing in the mind, as I have noted, becomes unilaterally “noise.” What is not a direct correlate of a visual transformation realizable in a cockpit window or on a video screen, in the body is absolutely silent. Even in Merleau-Ponty that disequilibrating something that pressed at Schilder’s body image, transforming it, distorting it, delighting in its fracture and flicker in dance, is gone, becoming instead a unitary, intact existential subject, felt, it is true, more than known, but still purposive and whole. Even in Merleau-Ponty it is an equilibrating subject who can elect to engage in change. Even in Varela and Maturana, as in Uexküll and Freud, James and Müller, it is “the organism,” always understood as a knowable structure aimed at keeping itself intact and balanced, ridding itself of incoming stimuli, shunning tension and intensity, which perceives. The functional organism is a legacy.

It also true, however, that something in excess over the regularity of this organism makes an important appearance in functionality itself. As Schopenhauer had already noted and as James laid out in detail, bodily habits have among other things a determining role for attention. The control panel, the ergonomic cockpit, the rationalized factory and the video

game all share the quality of systematizing bodily motion, and on that basis at least the rudiments of emotion; in doing so they act upon attention, eliciting it when it is absent³⁷ and channeling it in one direction or another. The control panel and the cockpit constitute “frames,” material fields establishing points of contact, upon which a body image, as a matrix for the possible distribution of attention, is stretched. Integration with that environment, grasping of those “affordances,” establishes a particular felt self, whose motions and hence emotions encompass both body and machine. The pilot’s motion is the plane’s; the plane’s is the pilot’s. Love occurs with the opening-up of fuel lines and acceleration; fear with the alarm signal³⁸ or with a sudden turbulence; rage with the incapacity to maneuver out of danger’s way. “Tied to his machine,” writes Paul Virilio, “imprisoned in the closed circuits of electronics, the war pilot is no more than a motor-handicapped person temporarily suffering from a kind of possession analogous to the hallucinatory states of primitive warfare.”³⁹ Fair enough; we should not forget however that it is precisely this capacity for hallucination that the cockpit demands; this is what is missing when the cockpit is empty.⁴⁰ If the pilot is “possessed” by the technologies surrounding him, divided up (according to Virilio, his personality fragmented) between the control panel and the window, the radar and the computer, and inhabited, in the center of his head, by the continuous stream of auditory communications and commands,⁴¹ still the technologies are vitalized by the pilot, who

³⁷ Technically this is referred to as the “passive orienting” of attention.

³⁸ Designed in its spectrum and morphology, incidentally, at the APU, so as to sit perceivably amidst the other dominant frequencies of the cockpit without being masked, so as to route attention without inducing startle. There is a strange symmetry here between functional design and musique concrète.

³⁹ Paul Virilio, *War and Cinema*, p. 85.

⁴⁰ The case of the unmanned aerial vehicle is not really an exception: in this case the operator, with his libidinal lability, is simply at another spot, with a joystick in front of display screens—and another spot, not surprisingly, also designed in its earliest stages by the APU. Still his attention and his adrenaline enter into the circuit of control.

⁴¹ Referring to Vietnam-era American pilots: “The disintegration of the warrior’s personality is at a very advanced stage. Looking up, he sees the digital display (opto-electronic or holographic) of the windscreen collimator; looking down, the radar screen, the onboard computer, the radio and video screen, which enables him to follow the terrain with its four or five simultaneous targets, and to monitor his self-navigating Sidewinder missiles fitted with a camera or infra-red guidance system.” *Ibid.*, p. 84.

converts information to action; the pilot is the condition of the possibility of activation; and it is this activity, in conjunction with the attention that moves across the stretched, lived space, the body image pressed flat against the constructed ambient array, the elicitation of which is the purpose of the design. The cockpit is a machine for invoking the excess of the organism, a high-speed séance.⁴²

What this excess is, is open as always to question. In James, ultimately, it was “will,” which is a nice determinate way of not answering the question; in Merleau-Ponty it is an “embodied” “intentionality”—which is an eco-friendly way of saying that it is a unitary transcendental ego, which as in Husserl and Kant is, again, a way of pretending to answer a question only by stating it in fancier terms.⁴³ In Baddeley it is the work of a central executive, commanding some resources or other. Probably these resources are energy; that is the way that attention is treated in some contemporary approaches, often contained within the more determinate if still empty term “arousal.”

⁴² As this study progresses I will increasingly emphasize the parallel between this sort of adrenal or attentional exploitation and what happens on the classical Marxist account (in *Capital*) in the factory. Outside the factory, and here, in the explicitly-engineered technological and communications systems, there is equivalent exchange, of forces and of meanings. Inside the factory, and at this point of erotic friction between the body and its social insertion, an elicitation of an excess that is both hidden and indispensable. Without this systemic, veiled theft, there would be no functionality at all. In large part this is the contention of the present study: opposition to large-scale systems of bodily integration and environmental destruction can be countered only by the alteration of bodily practices and the immediate spaces in which they take place. The conclusion that these two productive moments should be autonomized is therefore Situationist or anarchist, in tight correspondence with recent writing like that by Tiqqun (for example as *The Invisible Committee* in *The Coming Insurrection*). The idea that attention is a key resource extracted by contemporary capitalism is developed variously as analyses of “attention economy,” and in discussions of “immaterial labor” and the “externalization” of labor. In these respects, see Mauricio Lazzarato’s “Immaterial Labor” (in *Radical Thought in Italy: A Potential Politics*, ed. Paulo Virno and Michael Hardt, pp. 133-150), Jonathon Beller’s *The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle*, Christian Marazzi’s *The Violence of Financial Capitalism*, Paulo Virno’s *A Grammar of the Multitude*, Negri and Hardt’s *Multitude and Commonwealth*, etc. What distinguishes my treatment is that I wish, for the course of the study, to focus explicitly on the joint productions of perception and space; in this analogy: I wish to analyze the productive context and to explicate the meaning of its autonomization.

⁴³ In *Beyond Good and Evil* Nietzsche makes fun of Kant, who he says every time a new problem presents itself, dives into the bushes and pops up with a new “faculty” in hand, the “solution” to the problem. See pp. 17-19.

None of these answers are really answers at all because the thing needing named is by definition outside the typical system of names. The functional organism, defined explicitly in all these accounts, classically in biology and recently still in its eco-friendly variants as that which maintains itself in equilibrium, that which retains an invariant structure, shows something else in attention, as it does, in the factory, in labor. In both cases it yields a surplus; and it is the purpose of a perceptual apparatus to harvest and direct that surplus, as it is the purpose of a factory to compel and accumulate it. The legacy of the functional organism is therefore a legacy of distracting attention theoretically in order to seize upon it and focus it practically. At the same time it is a tradition of producing a normative passivity by calling it unproduced and “natural.”

In all these ways, and with ever greater sophistication, the social-engineering problem of harnessing attention has been solved. Future distributions of attention and hence action, complete with determination of modality—for example, the modality of targeting⁴⁴—can even be secured through a present virtual practice. When perception is manufactured, discursively and concretely, the products operate ideologically and as a form of fixed capital, respectively, to produce this productive expenditure. One key question, then, is whether there are machines for invoking physiological, or spiritual energy, which are not by their nature fitted to functional integration. If music is a modulator of the body, or if even a painting is, if these produce motions and emotions, habits of behavior and arousal, to what end then are these disequilibriums put? A disequilibrium with regard to a circumstance is a potentiality, a capacity to do work. It is force. What becomes of such force? Are we such functional organisms that we have to get rid of it immediately, because it is an irritant? Or can we

⁴⁴ Not to become tedious, but the APU, of course, developed apparatus and practices oriented explicitly toward the training of a targeting vision, to facilitate improved bomb and missile aiming, for example under the heading “Mean Point of Impact Assessor Training.” (See the history section on the CBU/APU website.) In related studies concerning the landing of aircraft they also developed early versions of “eye-tracking” systems, which are regularly employed today in analyses of the attention-seizing efficiency of web pages, product labeling and billboards.

become something other than an organism? What if Maxwell's demons worked for autonomy rather than capital? What would we be if we simply did not transfer our force to a military-industrial machine? What kind of strange, aching, overfull plateaus? These were the questions of Antonin Artaud and Hijikata Tatsumi,⁴⁵ as eventually the signature question of Deleuze and Guattari. This is where we are moving at the end of this chapter and into the next; but we cannot address the questions yet. Apparently the force of the body outside the body image is insufficient to achieve its own liberation. It needs an ally, something to break the functional grip. Perception has to be overcome from without.

Flicker

In the terrestrial array, light and shade exchange places slowly in one direction; they do not oscillate. In the aquatic array, light and shade interchange rapidly in both directions; they oscillate. In fact, when the sun is out and the ripples act as mirrors, the reflection of the sun can be said to flicker or to flash on and off. (Gibson)⁴⁶

Edmond Dewan was another civilian employee of the United States Air Force, in the 1960s, investigating the perception of pilots. Like the work of all such employees, if technical and abstract, his was in principle oriented toward a real practical problem. This problem, like those addressed during the war by the APU, was one of atmospheric interference with human-machine function. In the air above the jungles of Vietnam (but also, really, anywhere, given a strong light and a propeller, which together manufacture their own ambient field, their own environment), the atmosphere had again become a sort of harassing agent. This time the problem did not regard noise, or shocking explosions, or gas. The problem was light. Specifically, it was what the rotating blades of helicopters did in conjunction with light in producing a specific ambient array, within the cockpit and laying upon the pilot's retina, where the light flickered, strongly, like a strobe. Somehow, for some reason, this compelled

⁴⁵ I will treat these figures at some length in Ch. 5, as a means by which to reconstruct Adorno's aesthetic theory as a theory of gesture and bodily habit.

⁴⁶ *The Ecological Approach*, p. 92.

nausea, disorientation, vertigo, even unconsciousness. In the worst case, the crash of the helicopter into the jungle. Its own explosion instead of the enemy's. Perception: informational pickup of a particular sort of information; the participation of a perceptual system in a particular ambient point, a certain stability of change emergent upon a broken flow of light: perception itself was shut down by this particular form of perception. This kind of perception turned the functional perceiver dysfunctional. The pilot's job, as we have seen, is to control his aircraft through diligent distribution of attention (or will, or arousal, or whatever), and to do this as commanded. It is to control and be controlled. But a flickering environment causes a loss of control. Dewan's job was to determine why this was the case, so as to avoid it.

One sort of hypothesis could be taken already from Gibson, who had an interest in Wolfgang Metzger's "ganzfeld."⁴⁷ A ganzfeld is a sensory array lacking in stimulus information. In a thick, indeterminate mist, for example, or in the midst of white noise, stimulus is given, but perception, as the uptake not of stimulus but of "stimulus information," is impossible. There is a material plenum but a perceptual vacuum. This however is not the case for "flicker vertigo." The pilot of the helicopter still sees both his control panel and his environmental optical array. In terms of stimulus information, there is still stability. Even though they are temporally broken or oscillatory, the same contours, colors, positions and relations persist, and the pilot continues to act for some time in conjunction with them. The failure of perception does not stem from the structural paucity of the environment. If anything, in flicker vertigo there is too much structure, a structure that, for one thing, is ubiquitous across the field. Wherever the pilot flies, he brings his propellers with him. These propellers, like his hands, are invariants. But ultimately, the problematic structure is temporal.

The flickers that interfere with vision and potentially even with consciousness, Dewan determined, are those in the range from 8-13 hertz. The reason that this particular frequency

⁴⁷ See Wolfgang Metzger, *Laws of Seeing*, 1936.

range has significance, when characteristic of a visual stimulus array, is that visual perception itself has a frequency, also in this range. Hans Berger, the inventor of the EEG machine, and Grey Walter, author of *The Living Brain*, published in 1953 (again on the basis of wartime studies⁴⁸), had already shown that vision is strongly connected with the “alpha” bandwidth of brain waves, and Walter had shown that strange things happen when light stimuli within that range enter into perception. What seemed to be taking place in flicker vertigo was that the energetic behavior of the ambient array was interfering, somehow, with the energetic behavior of the brain. Flicker vertigo is a sort of short circuit between brain and environment, undermining perception. In a mild form it produces nausea, in an extreme case, epileptic seizure or unconsciousness.

Walter’s book⁴⁹ reported a whole tantalizing array of effects, including the perception of hallucinatory, geometrical patterns, especially spirals and grids, as well as more elaborate, dream-like visual experiences. Walter’s revelations were welcomed with excitement by a whole group of 1960s figures, in the arts and in a countercultural movement oriented strongly toward perceptual alteration, including Aldous Huxley, who wrote about flicker in *Heaven and Hell*. Elaborate accounts of this broad reception are offered in Branden Joseph’s *Beyond the Dream Syndicate*, in the chapter entitled “Flicker,”⁵⁰ and in John Geiger’s *The Chapel of Extreme Experience*.⁵¹ Both include significant discussion of Grey Walter’s experiments, of Brion Gysin’s “dream machine,” a rotating cylinder lit internally, with slices cut out so as to permit the emission of flickering light within the alpha bandwidth, and of Tony Conrad’s

⁴⁸ Walter was involved in the development both of radar and of guided missiles. He would later become a seminal figure for robotics.

⁴⁹ Grey Walter, *The Living Brain*. The key chapter describing these discoveries is “Revelation by Flicker,” pp. 83-113.

⁵⁰ Branden W. Joseph, *Beyond the Dream Syndicate*, pp. 279-352.

⁵¹ John Geiger, *Chapel of Extreme Experience: A Short History of Stroboscopic Light and the Dream Machine*.

experimental film “The Flicker,” which involved various rhythms of flicker pattern, again within this frequency range.

The Alpha Wave

A “brainwave” is a periodic regularity of neural firing across some region of the brain. Brainwaves can be detected with EEG machines, which, through the positioning of electrodes on the scalp, register voltage fluctuations in the cortical tissue beneath the skull at a specific location. Regularities of neural firing are determined by analysis of a set of ongoing signals from such electrodes. The human brain exhibits periodic regularities from below 1 hertz up to roughly 100 hertz. Experimentation in labs like Walter’s established that dominant frequencies could be clustered into specific bandwidths which seemed to correspond, in some fashion, to somatic and cognitive functions (like perception). They gave these bandwidths the names of Greek letters. Some of the bandwidths were localized cortically, the alpha wave (8-13hz) originating or being most concentrated in the occipital cortex. This region, we know since Head, when damaged corresponds to loss of visual function, and it is therefore also referred to as the “visual cortex.” Experimentation increasingly determined correspondences between particular bandwidths and particular functions. Sleep and so-called hypnotic “trance,” for example, are accompanied by a pronounced amplification of lower frequencies, in the 0-4 and 5-7, delta and theta bandwidths. Linguistic function and “higher-order” intellectual processing (conscious thought) meanwhile correspond to higher frequency rhythms, in the 30-100 or “gamma” bandwidth. Alpha, again, is affiliated with vision.

Just what the manner of this affiliation is has not been decided. Contemporary researchers seem still to be split between two camps, one originating with Grey Walter and Norbert Wiener, both of whom postulated that the alpha wave operates as a “scanning wave,” moving across the assembled stimuli on the occipital cortex and performing the function of

“binding” them into one coherent “perception,” which is then sent on for “higher” processing,⁵² and another associated with Francisco Varela, who hypothesized a similar unifying or “framing” function for the wave, but thought that this unification was sufficient to account alone for perception, there being no necessity for a sequential model or any subsequent processing.⁵³ A perceptual moment is just the firing together, the “structural coupling” on a micro-scale, of these regions of the brain with these present stimuli. A high-speed, neurally emphatic version of Gibson. On either model, the kind of continuous, smooth visual movement Gibson seems to have assumed to take place within the environment, and that Broadbent may have assumed to take place along a channel once selected in the brain, is discarded. We are back at Freud’s model of an organism which “puts out feelers” to the world in pulsations, and the intriguing image of a continual disconnection, in addition to a continual reconnection, from or with that world, re-emerges. This pulsation is legible either on a cognitivist or an ecological model. For the cognitivist, it would be an internal discontinuity, happening on the cortex and passing on parsed information in a serial stream—a perfectly reasonable hypothesis for a Broadbent. For the ecologist, the pulsation would be a feature of the animal in its distribution across an ambient corridor. Nature would pulse with perception, and that pulsation would be animality.

But what I am primarily trying to establish, and as the disabled pilot already establishes, in his mute lethargy, beyond hypothesis, is that it is not only the pulsation of perception that matters. A pulsation of stimulus is active too, not only within the environment, but also upon, within and through the perceiver. What the whole tradition that Crary traces excluded so carefully, the external world, and then sensation, from perception, here act together against it. If the environmental pulsation occurs in the same range as the bodily

⁵² See I.A. Shevelev et. al., “Visual illusions and traveling alpha waves produced by flicker at alpha frequency,” *International Journal of Psychophysiology* 39, 2000, pp. 9-20.

⁵³ See Francisco Varela et. al., “Perceptual Framing and Cortical Alpha Rhythm,” 1981, and “Perception’s shadow: long-distance synchronization and brain activity,” 1997.

pulsation constituting the other half of sensation, it can disrupt perception entirely, create a new, “sourceless” perception (the geometrical hallucinations of Walter’s subjects), or just plain shut it off. The environment here is no longer a benign field awaiting perceptual cultivation, as in Gibson’s ambient array. The ambience itself is energetic; in the manner both of its function and of its form it is ontologically commensurate with physiology;⁵⁴ potentially it is invasive.

This is an invasion that an imprisoned Eros had long been awaiting, probably since Nietzsche. What longed to be beyond the functional, beyond the organism, beyond the body image, and hence beyond a regularized perception, in Schilder, saw with Huxley, William Burroughs, Brion Gysin, La Monte Young and Tony Conrad, etc., its liberator in an avenging environmental surge. It rushed to meet it.

Music for Solo Performer

Edmond Dewan was an aficionado of music.⁵⁵ He had struck up an acquaintance with the composer Alvin Lucier, who was at the time of Dewan’s experiments also a professor at Brandeis University. He suggested to Lucier that it might be interesting to use his EEG equipment (which he had purchased as military surplus) in a composition. Lucier accepted, and the piece he produced he called “Music for Solo Performer.”

In it, the performer sits on stage, in a chair, with the EEG electrodes stuck to his head, and tries to produce alpha waves. The EEG signal passes through an amplifier and then through a bandpass filter which sorts out the alpha waves from the rest. From here the signal is passed to speakers. Because the alpha range is sub-audible for humans, Lucier connected

⁵⁴ Both ambient array and neural net are microscopic, micro-temporal, distributive rhythmic pulsation of energetic positivity. The overlap of these domains is the surface of the body. But this surface is not the same thing as the functional organism, with its unity and its penchant for placid equilibrium.

⁵⁵ According to Alvin Lucier, he was “an accomplished amateur organist.” Program notes for “Music for Solo Performer,” “Alvin Lucier & Friends” performance, Sept. 15, 2006, U. Virginia.

various percussive devices with the speaker cones, or placed them in close proximity to a speaker, so that when the speakers vibrated with the alpha rhythm, they themselves vibrated and produced sound that could be heard.

The technical possibility of the piece rests on the peculiarities of the production of alpha waves. One thing that Dewan had worked out in his laboratory, if not how to prevent flicker vertigo, was a way for EEG-equipped subjects to transmit Morse code without using their hands, by allowing alpha to flow in longer and shorter bursts, to be translated as dashes and dots.⁵⁶ The peculiarity of the alpha wave on which his invention rests is that alpha stops or is significantly suppressed when attention, primarily but not only visual attention, takes place. If a person focuses on a target, and particularly if in so doing her eyes converge, producing one perceived object, then alpha is suppressed. When on the other hand the eyes relax, are closed, or simply when focus recedes and a visual “distraction,” to use James’ language, takes its place, alpha again is amplified. The alpha wave is particularly strong in meditation.⁵⁷

In order for Lucier’s performer to control sound, then, he or she has to interrupt the type of behavior otherwise involved with control. A visually passive attitude must be taken

⁵⁶ Edmond Dewan, “Occipital Alpha Rhythm Eye Position and Lens Accommodation,” in *Nature*, June 3, 1967: “...it is possible voluntarily to control one’s alpha activity by the manipulation of oculomotor configuration and accommodation with accuracy sufficient to send Morse code to a computer and to have the latter type out the corresponding letters automatically on a teleprinter...” p. 975.

⁵⁷ “Its presence is associated with a meditative, quiescent state whereas its absence (cortical desynchronization) is associated with focused attention and arousal.” This is a commonly recognized association, or at least it was in the 1960s and 1970s, after which time the study of brain waves in conjunction with meditation becomes a sort of cottage industry off the map of major research. This quote is from Jay D. Glass, “Alpha Blocking: Absence in Visuobehavioral Deprivation,” *Science*,... Oct. 7, 1977. In this article, Glass shows that stimulation of a single eye does not block alpha. The blockage requires optical convergence, which, note, is a certain muscular technique according to which what is potentially two visual fields synchronize to produce one field with the new feature of “depth.” It is in this muscularly-facilitated field that objects with their typical dimensional regularities persist. Absent that convergence, individualized entities are much more one with their field (they are distinguished in fewer respects from the surrounding sensory positivity), and are perhaps more clearly here, upon the membrane, as opposed to there, at some distant point in an allegedly Cartesian space (since it is depth, distance along the z-axis, that is absent). An art concerned with investigation or manipulation of perception itself has this technique at its disposal. If it can muddle convergence it can multiply percepts, and if the unique percept is multiplied, at least one half of the basis of “orthodox” or “common-sensical” perception (the subject-object structure) is challenged.

with regard to the environment, and the formation of a discrete object through ocular conjunction and conscious focus has to be avoided. Thus through releasing control, through allowing vision to become dysfunctional, sounds are allowed to occur. One releases the activity of the body by relaxing the activity of the conscious, controlling mind. One could read the piece as a very subtle comment on war, or on spectator society. Lucier for his part says that he was “touched by the image of the immobile if not paralyzed human being who, by merely changing states of visual attention, can activate a large configuration of communication equipment with what appears to be power from a spiritual realm. I found the alpha's quiet thunder extremely beautiful and... chose to use it as an active force in the same way one uses the power of a river.”⁵⁸

One additional dimension of the piece has to do with the relation of the performer, who is visibly hardly doing anything, and the audience which is watching. There is a dynamic here which is largely visual (if the room were dark, the audience-performer tension would largely disappear as well), which makes the performer's task more difficult, since that task requires relaxation, and which also thematizes the task specifically. What the performer has to do is precisely what the audience, if they are focused upon the performer, is not doing. Interestingly, even a focus on sound, any focus at all, may “block” alpha.⁵⁹ What the performer has to avoid is producing a unified source for his or her perceptions. If sound is encountered as passing, as event or process, no focus and hence no blocking. If sound is made into an object, or if an object producing the sound is conceived, the alpha is blocked.

Attention seems thus to correspond to the formation of a virtual source, to the formation of a perceived object, and this in turn to a suppression of the automatic, rhythmic behavior of the resting “organism.” Could it be that the formation of the object (which

⁵⁸ Lucier, “Music for Solo Performer” program notes.

⁵⁹ Dewan: “...intense mental concentration on mental tasks or on non-visual stimuli and the perception of surprising, alerting, or affective stimuli favour the ‘abolition’ of alpha activity.” p. 975.

corresponds, we might recall, for the Husserlian tradition with the formation of the subject) is an interruption of vision? This would, certainly, ruin all common accounts of vision. *This would be saying that to focus is—to blind.*

Entrainment

The activity of the ambient, an activity distinct from that of perception, tending to act upon perception, upon its conditions or upon its frame, exists not only in the special case of flicker. In fact there are a whole range of ways in which periodic behavior on the part of environmental energy leads to similar behavior on the part of the body. All such synchronizations can be called instances of “entrainment.” Though it was not objectively shown until later, La Monte Young already knew it in 1960, when he asserted that the brain hums along with the ubiquitous 60hz power transformers.⁶⁰ In 1962 Young composed his “Second Dream of the High-Tension Line Stepdown Transformer” to drone continually, like those transformers, or to expand temporally in long sonic breaths far exceeding the capacity of a human lung, and to exhibit a set of frequency relations mimicking, to some degree, the transformer’s signature chord.⁶¹ The later Theater of Eternal Music would begin as a long-term performance of Young’s “Four Dreams of China,” all of which centered on this chord, and “Trio for Strings,” which I will discuss at length in the next chapter, already centered on it. Further, Young thought that ambient continuous tones—“musical” or everyday—which in the terms we have been using constitute a field character of the sonic ambient field, were either productive of an accompanying emotional state, or constitutive of one. Like Gibson, he

⁶⁰ In “Lecture 1960,” in La Monte Young and Marian Zazeela, *Selected Writings*. Tony Conrad, one of Young’s collaborators in the continuous-tone Theater of Eternal Music, called 60hz “the true tonic of our social lives,” with which we “hum.” “60 cycles is pumping and surging all about the heart of the civilization.” In “On 60 Cycles,” published on a Rhys Chatham program of music and video, 1972. Quoted at length in Joseph’s *Beyond the Dream Syndicate*, pp. 335-336.

⁶¹ “...those pitches [C,F,F#,G] are something like what you can hear in an electrical hum. You can find the 17th harmonic up there and put it in the range of 12, 16, 17, 18.” Interview with William Duckworth, published in *Talking Music*, p. 241.

played with the idea that sonic perception was not an intake of sonic information, but an accessing of a structured sonic environment, by physical participation. Like James, he intuited that emotion or affective state were first performances occurring at a subliminal level, and further, that at that level, the performing system in question includes both the human body and all the drones it synchronizes with, unconsciously. That ecological body is one of those perceptual paths, draped across a thickened space; in this case a corridor perforated by vibrating matter. Sonic structuration, then, the making of sound, whether that is a byproduct of other functional processes, as in the case of the 60hz hum, or the product directly intended, as in sonic art, bears directly upon the emotional state of the perceiver.

The tradition of modal music has always been concerned with the repetition of limited groups of specific frequencies called modes throughout a single work and, as a rule, the assignation of a particular mood or psychological state to each of the modes. There is evidence that each time a particular frequency is repeated it is transmitted through the same parts of our auditory system. When these frequencies are continuous, as in my music, we can conceive even more easily how, if part of our circuitry is performing the same operation continuously, this could be considered to be or to simulate a psychological state. My own feeling has always been that if people just aren't carried away to heaven I'm failing. They should be moved to strong spiritual feeling.⁶²

Young's emphasis on spirituality, and his reference to Indian rasa theory, will be dealt with in the next chapter. So too will the idea, which Young expresses elsewhere, that in stepping "into sound," into this vibrating ambience, one steps out of one's self, or out of the ego.⁶³ This is a claim that John Cage, shortly before Young, under the particular influence of Zen apostle D.T. Suzuki, had himself made quite explicitly. The convergence of these

⁶² From "Conversation with La Monte Young" by Richard Kostelanetz, 1968.

⁶³ Lecture 1960: "...if one is not willing to give a part of himself to the sound, that is to reach out to the sound, but insists on approaching it in human terms, then he will probably experience little new but instead find only what he already knows defined within the terms with which he approached the experience. But if one can give up a part of himself to the sound, and approach the sound as a sound, and enter the world of the sound, then the experience need not stop there but may be continued much further, and the only limits are the limits each individual sets for himself." "Conversation with Richard Kostelanetz": "There are several ways you can approach it. One is that someone concentrates so heavily upon a given sound—he gives himself over to it to such a degree—that what's happening is the sound. Even though I could be sitting here, all I am is an element of the sound. Another approach is to walk into an area in which the sound is so abundant that you actually are in a physical sound environment."

elements—a yearning for escape from a “conditioned” perception,⁶⁴ an identification of what we are calling “ecological space” as the means and the terminus of that escape, a strong and direct “Eastern” influence, from India, Japan, or Tibet—all in the direct aftermath of a World War in which the United States opposed, firebombed and then nuked Japan, deserves serious consideration. That extremely high amplitudes offer optimal conditions for this spiritual-material secession we will have cause to consider shortly.

For now let’s return to the ongoing influence of the ambient array upon the pulsatile brain. The development of the EEG machine, and its improvement by Grey Walter and others, have led among other things to the determination that at least in special cases, in laboratories, environmental stimuli can “entrain” brainwaves. That is, given a regularly flickering light, a continuous tone or, below the threshold at which continuous sonic frequencies become to human hearing tonal, a regular click, the human brain will synchronize some of its activities to that frequency. Entrainment has been demonstrated for visual and auditory stimuli in most if not every brainwave range.⁶⁵

Individual brains differ in their favorite frequencies. Some typically exhibit higher amplitudes at one frequency, some at another. If an entraining stimulus is given at such a preferred frequency, the entrainment will happen more quickly and certainly.⁶⁶ But there is also a tendency on the part of the brain to develop “habits” in terms of preferred frequency. This means that reinforcing feedback loops can occur between a brain and a regular stimulus—a significant fact since we are thinking for the moment about regular environmental

⁶⁴ “Conditioned” having gotten a bad name from Watson; “deconditioning” being a favorite goal identified by William Burroughs; “reprogramming” one named by Marian Zazeela. Again see Joseph’s chapter on “Flicker” for a web of attempts to escape, subvert or reconfigure perception.

⁶⁵ See for example Peter Lakatos et. al., “Entrainment of Neuronal Oscillations as a Mechanism of Attentional Selection,” *Science*, April 2008, and Karin Schwab et. al. “Alpha entrainment in human electroencephalogram and magnetoencephalogram recordings,” *Clinical Neuroscience and Neuropathology*, August, 2006.

⁶⁶ J. Peter Rosenfeld et. al., “The Effects of Alpha (10hz) and Beta (22hz) ‘Entrainment’ Stimulation on the Alpha and Beta EEG Bands: Individual Differences are Critical to Prediction of Effects,” *Applied Psychophysiology and Biofeedback*, Vol. 22, No. 1, 1997.

structure. A further, presently unexplained feature that seems to be characteristic of most experimental subjects is that they entrain with exceptional readiness to the auditory frequency 40hz. One experimenter referred to the human brain as a “40hz resonator.”⁶⁷

The general significance of brainwaves, as I mentioned, is not decided, which is to say that no interpretive strain has yet become hegemonic. One of the key interpretations, though, is that one or another bandwidth is responsible for “framing” perception or other cognitive functions. For example, Francisco Varela argued that the alpha wave was the “frame” for perception; similar claims have been made with regard to the gamma wave and “cognition.” What framing means, basically, is that perception or cognition would take place at the rate of the framing wave; whatever neural positivities entered into the period of that wave, or synchronized with it across some duration, would synchronically meld together into some perceptual cognitive act, and diachronically either achieve a durational presence, or not. In this latter case, framing determines that only some stimuli trains, namely those in some steady proportion to the framing frequency, and not out of phase with it, ever become conscious. The fringe region of attention, that which is suppressed and non-focal, would here be recast in temporal rather than spatial terms. That a wave carrying out such a “framing” function can be entrained would have the profound consequence, if such theories were correct, that standing structure in the ambient array—ambient hum in the everyday world—could in one way or another determine what is perceived and what is not. One would eventually have to ask whether, when we perceive, we perceive the environment, or properly, the environment perceives us.

Brainwave entrainment is not the only variety of entrainment that has been documented. Laurel Trainor and Jessica Phillips-Silvers, for example, have shown that the

⁶⁷ See Robert Galambos et. al, 1981 and Gian Battista Azzena et. al, 1994. (Why not 60hz?)

detection of one or another rhythmic regularity can be determined by the motion of the body.⁶⁸

If one moves a body repetitively at a certain rate proportional to an unstressed auditory pulse-train, the perceiver so moved will hear that pulse train as a rhythm matching his or her own bodily motion—their own motion will add stress to select stimuli. In auditory perceptual terms, this technically is to say that bodily motion determines some features of “auditory stream segregation.”

An “auditory stream”⁶⁹ is the closest equivalent to a visual object. If a listener is asked to distinguish between sounds, without reference to their source, it will be a “stream” to which they point. So to say that movement influences stream segregation is to say that movement

⁶⁸ Phillips-Silver and Trainor, “Hearing what the body feels: Auditory encoding of rhythmic movement,” 2006.

⁶⁹ This term comes chiefly from Albert S. Bregman, whose work, along with Jens Blauert’s, is of general significance here. See *Auditory Scene Analysis*. Both of these figures are practitioners of the cognitivist, information-processing paradigm, in the auditory perceptual field. It is again worth noting that Young’s or Radigue’s music, and I would argue the whole field of drone and minimal electronic music that occurs after them, takes the stream’s instability, its capacity to meld in an ambient multiplicity and hence to disrupt normal perception and the dominant body image, as a specific target for compositional manipulation. These musics operate directly upon perception through construction of an auditory field of such a sort that accounts like those of Bregman and Blauert, fixed as they are upon the construction of objects, and committed as they are to an assumed, stable subject to which those objects are supposed (internally) to appear, are directly challenged. When one stream melds seamlessly with another, or the stream with the field, the possibility of a stable perceptual space (which recapitulates and is a recapitulation of the body image) or of a distantiated subject become problematic. One way to gloss the consequent process of collapse would be to say that the music facilitates mystical union. Another would be to say that it allows the disruption of a hegemonic distantiation from material reality, and hence nondifferentiation with physical power. In this chapter and through the next, I will try to say both things, to suggest that mystical perceptual practices like those popular in the late 1940s through the early 1970s in auditory art as well as in the overlapping culture of psychedelia, are effective, but that the domain to which they grant access is in no way transcendent. Rather it is the material world itself, with all its history and its apparatus. I also wish to suggest the complementary point, that it is that very material power, operating through singular articulations in the construction of space and the gestures of bodies, that is responsible for the formation of auditory streams and visual objects. One key way in which “ambient power” works is by producing its own peripherality, through the distantiation essential to “orthodox” perception. Hence the essential connection between normative perception and ideology that Althusser regularly asserts, and the theory of which he traces back to Spinoza. See for example Althusser, “The Only Materialist Tradition, Part I: Spinoza,” in Warren Montag and Ted Stolze, eds., *The New Spinoza*, pp. 3-19, especially p. 7, where Althusser says of Spinoza’s *Ethics*, E1App, “I saw in it immediately the matrix of every possible theory of ideology.” Spinoza’s appendix directly critiques the notion of a “subject” distinguished from the material continuities in which the body participates. Likewise Spinoza’s *Ethics* on the whole lays out the path from “imagination,” in which the sources of images are experienced as at a distance and as distinct from the body that encounters them, to “intuition,” in which this externality is erased and immanent participation in the “formal causality” of experience is realized.

determines the way in which auditory perceptual objects are formed—an assertion certainly amenable to Gibson and to Clarke. Further, in this case at least it would mean that the percept bears a content that is a conjunction of “external” and “internal” perception.

Trainor and Philips-Silver determined that the operative mechanism here is the vestibular system: the same result can be achieved by stimulating that alone, without other bodily movement. (Recall Schilder’s large emphasis on the value of this small assemblage in the ear for the erotic drive straining against the body image.)

Now to return to our specific concern with the auditory ambient field, Neil Todd has shown that the vestibular system is sensitive to high-amplitude, middle-frequency sound,⁷⁰ and he notes also that the skin and the viscera are sensitive to high-amplitude, lower-frequency sound.⁷¹ When the vestibular system is stimulated in this way, a sense of “self-motion” occurs—of linear acceleration. Now if we consider an individual in a dance club, moving to high-amplitude sound emphasizing low and middle frequencies (the range of kick drums, bass, synthesizers and guitar), we see quite an elaborate bodily-ambient entrainment machinery. The dancer, like a musician who plays along with other musicians, entrains to the shared rhythm, in part consciously. Her body meanwhile entrains in a variety of other ways, entirely unconsciously. Todd notes that the vestibular system is directly connected, for example, to the dopamine system, such that high-amplitude sound could feasibly induce chemical intoxication; such a high could be thought of as the body’s manner of participating in very loud music. Meanwhile brainwave entrainment to any and all beat frequencies (of different rhythm-section elements), and to any and all drones, might be expected. Idle talk about “becoming the music” may be “scientific” as well as “rhetorical.”

⁷⁰ See Todd, 2001, and Todd, et. al., 2009. “Middle-frequency,” of course, from the perspective of human perception.

⁷¹ The key reference here is Ronald Verrillo, *Vibration Sensation in Humans*, 1992.

Pulse Perception, Pulse Body

The whole practice of referring to brainwaves in order to identify the nature of perception, as also the tendency to point toward the “dopamine” or “reward system” in the brain, reflects a continuing shift of contemporary science toward the brain and its micro-functions as essential to explaining human experience.⁷² Nor is it coincidental that the new phenomena whose “importance” we increasingly grasp are themselves increasingly visible, whether as EEG graphs or more recently as MRIs and CAT scans. At this discursive level, a new perceiver is always being constructed, in harmony with the current practices and representational technologies of different scientific institutions, and on a large scale, in proportion with the relative hierarchy of one such institution over another—a hierarchy directly related to funding. The flickering being who we now are originates with Freud or perhaps even earlier, with Breuer or with Müller, but it begins to become hegemonic at the same time as the flickering radar and television screens, whose function “suggested” to figures like Wiener and Walter a manner of interpreting our own, even as they would to Timothy Leary.⁷³

This new paradigm does not arise from nothing: it reconfigures the existing theoretical materials. The body image still exists, for example, resolutely in the brain as it did for Head. Only now we are “clearer” with regard to the pulsatile manner of its functioning, of its continual “updating” on the basis of sensory input. Whether Varela is proven correct with regard to the framing function of alpha or gamma waves, or not, still the model of perceptual and cognitive function as basically pulsatile, as mappable directly, even if the details of this

⁷² Robert Martensen shows in *The Brain Takes Shape: An Early History*, how the brain became central theoretically in the course of the English Civil War and England’s eventual settling into a modern and centralized state, (which the body then conveniently matched), roughly between the years 1640 and 1690. Then as now there were theoretical debates reflecting in some fashion larger-scale political fissures; then as now those ideological struggles were decided in favor of the centrality of one cognitive processor within the skull.

⁷³ With Ralph Metzner and Richard Alpert, in *The Psychedelic Experience*, which I will discuss in the next chapter.

mapping are unclear, to the synchronizations and desynchronizations which the EEG machine shows, occurring on the scale of one second to 10 milli-seconds, is completely established. This has at least one major consequence for the theory of perception, on either the internalist, information-processing model, or the externalist, ecological model. This is that perceptual integration with the environment, with the machine, or whatever, is not constant. Integration itself is pulsatile; there is a moment of desynchronization, a moment of break, during which moment—and here the continued influence of this long tradition is perfectly apparent—sensation is translated into perception.

Perception is pulsatile; body image is pulsatile. Perceptual space, bodily space, in the manner that Schilder and Merleau-Ponty described them, are pulsatile. There is an in-between. Flicker vertigo, with its nausea⁷⁴ and its disorientation, is an upsurge of this in-between. It is a push given from the back-side of perception, which now shows itself as an interlaced moment, with an offset phase, of perception itself. What happens in flicker vertigo, according to Dewan's or Shevelev's theory, is that the neural and ecological energies come into such close pulsatile relation that they interfere. The geometrical illusions that the pilot may see, or that were sought after by the various practitioners of the Dream Machine, are interference patterns just as may be seen on the surface of water, or in the grains of sand placed on a surface vibrated by sine waves.⁷⁵ When the two waves are exactly out of phase, perhaps, there is utter cancellation of signal; utter cancellation of perception.

If perception is a moment in a binary oscillation, what is the other moment?

Traditionally it is sensation, and sensation in some close contact with environment. For Young, as for Dewan and for Gibson, sensation and stimulus are practically in identity. So

⁷⁴ A "nausea" intriguingly similar to that of Roquentin in Sartre's *Nausea*—which occurred specifically in the face of a raw existence exceeding the regime of meaning and regular perception...

⁷⁵ These are called "Chladni patterns," after Ernst Chladni. (See Anthony Ashton, *Harmonograph: A Visual Guide to the Mathematics of Music*, p. 46). Lucier used patterns of this sort in his piece "The Queen of the South".

then two very familiar moments in an oscillation, kept distinct. In perception we experience a continuity, but it is a continuity constructed of discrete elements. In between each, there is an element of this other continuity, invisible but active.

The Shock Channel

I am still telling the same story as Crary. It is a story about the theory of perception in covert collaboration with the social manipulation of the body and the pillage of its hidden energies. In Crary's version, the always-assumed but never elaborated hypothesis is that it is radical alteration, and specifically radical intensification of stimuli, within the lived social space—the shared ambient field—that propels these technological and ideological changes. Of course invention speeds along as always, driven by industry and war, and that offers, whether in the clockwork mechanism, the camera obscura, the electrical circuit or the computer, a potential model for theoretical assemblage. But the functional demand, the very technological need for a new, replacement theory of perception, exactly like the need for new habits, comes from a change in the ambient field. On Crary's account “attention,” as a grave social concern with epistemological accomplices and educational executors, is the late 19th and early 20th century's answer to an increasingly assaulting everyday street, and that is where, historically, his account ends. Crary does note in passing, quite correctly, that attention continues to be a discursive-disciplinary codeword, circulating in hypotheses and social compulsions around the embattled figure of the “attention-deficit” child, and now the adult as well.

But this embattled space that produces attention as its palliative already exists before the wars. What then during and after? I have tried to continue from Crary, offering “the body” as the new pet of power, and then “information,” as its new coloration. Today we have also “the environment,” a denomination whose rhetorical allegiances have yet to be solidly

determined.⁷⁶ To this point, however, I have left out the critical moment: the exploding shell, the shrapnel in the cortex: shock. And shock will lead to our new critical mantra: sensation. Shock as a codification of force in the ambient field, sensation as a solution to perception. The enemy of my enemy is my friend.

The Vibrating Common

The ambient field disrupting the brain in flicker vertigo, entraining it on the street or even in the dream house, is produced, is a product, is productive. Its vibration is always already a conjunction of nature and labor; the exact form of its vibration is the external memory both of a very recent and a very long history.

The ambient field is the social field, it is what is hyper-individual; it is the material medium of what a still not-quite-materialist Merleau-Ponty would in his later years refer to as “the flesh.” Through it pass all communications, all projectiles, all shocks and all communions. Structuration of the ambient is therefore always also structuration of possible experience. The ambient is “that common we share,” which “serves as the basis of future production, in a spiral, expansive relationship...”⁷⁷ We are bound to this commonality inescapably,⁷⁸ and engaged in the production and the reproduction it determines. Through its production we determine ourselves, or we are determined.

And yet the ambient field that comes into production leading up to and through World War I, into the second World War, performs a peculiar function, which is, among other things, to erase its own commonality, and finally even its own existence. Social space becomes a machinery for isolating individuals and for anesthetizing their experience. This at least is the

⁷⁶ The Invisible Committee identify “environmental” discourse, as seized on and controlled by corporate and governmental power, as an obstacle to the actual health of the environment with which we are continuous, both in *The Coming Insurrection* and as Tiqqun in *Introduction to Civil War*.

⁷⁷ Antonio Negri and Michael Hardt, *Multitude*, p. 197.

⁷⁸ (Except for that temporal escape into an isolated perception.)

picture that is offered by Georg Simmel in 1903, Freud in 1920 and 1923, and Walter Benjamin in 1936 and 1940. Taken altogether (and each builds on the last), they offer an analysis of urban ecological space on the one hand, and of a socially-, spatially-distributed media technology, particularly film, on the other, aimed at showing how a particular automation of the ambient field takes part in the production of a particular variety of perception, linked to an erasure of memory and to the increasingly-constrictive grasp of an amnesiac social machinery upon an immobilized, if enraged, individual.

1903, Berlin. Simmel notes a radical distinction between the metropolitan individual and his rural parents. His eyes are glassier; he is more remote. He smiles quickly, in passing, but his smile drops to the sidewalk the moment its target is passed. (The urban smile, Benjamin observes, is a sort of “mimetic shock absorber” functioning to maintain an aloof equilibrium.⁷⁹) He reads more than his parents. His work involves far more thought and far less physical motion than were required back on the farm. He is cerebral, and when he returns to the city after a holiday his rural relations remark in his wake on his coldness.

A significant alteration of character, over one generation. Specifically, a significant re-configuration of the relationship between “the individual aspects of life and those which transcend the existence of single individuals.” In his investigation of the causes of these “adaptations made by the personality in its adjustment to the forces that lie outside of it,”⁸⁰ Simmel identifies two causal elements: a money economy, and an overwhelming, shock-laced urban environment. Money economy expresses itself in various practical ways within everyday life. For one thing it makes generalization a cognitive habit. The city-dweller is more intellectual in general than the rural person simply because he is called upon more regularly to think abstractly and numerically. This is the nature of his mental work, at the bank, or in the

⁷⁹ Walter Benjamin, “On Some Motifs in Baudelaire,” 1940, [hereafter, “Baudelaire”], p. 328.

⁸⁰ Georg Simmel, “The Metropolis and Mental Life,” 1903 [hereafter “Metropolis”], p. 11.

office. But the generalization carries over also into the basic striations of urban space and time. Means of transportation are generalized. One can take a train to a number of stops; at each stop one will engage in the same monetary transaction. The train will be itself standardized, with familiar seating arrangements. There you will see the train's riders, habitually not seeing one another. Likewise the street onto which the traveler emerges from the train is constructed like other streets, decorated with identical infrastructure, for the guiding of trains and traffic, outfitted with identical lighting.⁸¹ And the generalization extends to time, which in the city is monitored and marked far more carefully and frequently than in the village. While in rural life a few bells through the course of the day are sufficient to calibrate social behavior,⁸² in the city, there are clocks everywhere, those clocks are increasingly synchronized, even between different cities. Eventually this lockstep temporal twitching climbs into the individual's pocket, where it poses as an insistent jewelry. Productive life, on which the individual's livelihood depends, requires that he heed this ticking. Very quickly he comes to believe that it measures something beyond itself, called time. This time, he knows, is money. Which is why he is in such a rush.⁸³

He must rush carefully, though, he must look where he is going. Look and re-look, listen and re-listen. Poise at each intersection. He lives in a world of shocks. Even before 1914, when the shock machines really get going, here in 1903, there is still death on the street corner, maiming by train, and yelling everywhere. The city is a density of energy, which blooms and bumps on all sides, jostling the pedestrian. Simmel sees a constancy of unexpected, "violent stimuli;" there are dangerous conditions, physically and therefore

⁸¹ Need I mention that the APU engaged in the design of streets, street signage, and street surveillance?

⁸² Alain Corbin presents the history of the bell and its importance in the structuration of shared ambient space in post-Napoleonic France in *Village Bells*.

⁸³ "...externally this precision has been brought about through the general diffusion of pocket watches," writes Simmel, "...If all the watches in Berlin suddenly went wrong in different ways even only as much as an hour, its entire economic and commercial life would be derailed for some time." "Metropolis," p. 13.

psychologically, “with every crossing of the street.”⁸⁴ Benjamin recounts Baudelaire’s experience. “Moving through this traffic involves the individual in a series of shocks and collisions. At dangerous intersections, nervous impulses flow through him in rapid succession, like the energy from a battery. Baudelaire speaks of a man who plunges into the crowd as into a reservoir of electric energy.”⁸⁵

These two influences, a generality of money (valuing generality), and a constant ambient-sensate shock, together lead to a particular psychology distinguished by its intellectuality and by its isolation, a type high on consciousness and low on emotion, whose consciousness itself constitutes the shield protecting the individual in his separation.⁸⁶

Economic circumstances call for an increase in abstract(ive) labor, while the violent flux of the ambient field calls for a serial alertness as a means of defense: the result is a concrete abstraction of the individual from his environment, with an abstractive habit that reproduces him as such. (Which he likes, because even if he is lonely, he is also free, at least of stimulation.) In the analysis that Freud and then Benjamin will develop, this self-production of a separated self, in the process of the practical and economic production of a space and time that are always equivalent and exchangeable, because made equivalent in their equally-rapid usage and dismissal, will continue in exponential growth, achieving full automation with the introduction of the movie theater.⁸⁷

⁸⁴ *Ibid.*, pp. 11-12.

⁸⁵ “Baudelaire,” p. 328.

⁸⁶ “Thus the metropolitan type – which naturally takes on a thousand individual modifications – creates a protective organ for itself against the profound disruption with which the fluctuations and discontinuities of the external milieu threaten it.” “Metropolis,” p. 12.

⁸⁷ “Film is the art form corresponding to the increased threat to life that faces people today. Humanity’s need to expose itself to shock effects represents an adaptation to the dangers threatening it. Film corresponds to profound changes in the apparatus of apperception—changes that are experienced on the scale of private existence by each passerby in big-city traffic, and on a historical scale by every present-day citizen.” Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction,” 3rd version, 1939, [hereafter “Work of Art”], fn 42, p. 281.

Perception, Energy, Repetition

1920, Vienna. What is consciousness, what is perception, that they may operate as a shield against stimuli? Freud develops an account answering this question in some detail; Benjamin draws on his account as a continuation of Simmel's.

Freud's "system perception-consciousness" (the "system pcpt.-cs."—which I'll abbreviate "pcpt-cs"), although it foreshadowed itself in his 1895 "Project for a Scientific Psychology," with Breuer, really appeared after the war, in *Beyond the Pleasure Principle* and then in *The Ego and the Id*. The system came to him, asking to be explained, in the form of shell-shocked soldiers. Having failed in their national defense (in France), they were haunted by their experience. And they wanted it removed. Freud tried his best to extract it.

The system pcpt-cs, he hypothesized, is the border between the environment and the body, the "outermost" perimeter of the organism. "It must lie on the borderline between outside and inside; it must be turned towards the external world and must envelop the other psychical systems..."⁸⁸ In earlier, simpler organisms, this border was identical with the skin; but in "highly developed organisms" like humans, it has retreated behind the bunker of the skull: "the receptive cortical layer of the former vesicle has long been withdrawn into the depths of the interior of the body, though portions of it have been left behind on the surface, immediately beneath the general shield against stimuli. These are the sense organs..."⁸⁹ The sense organs, then, including therefore the skin or its enervation, are extensions of the cortical tissue. It is to these that the deeper brain, the unconscious,⁹⁰ sends its pulsatile cathexes of energy, reaching out especially through ears and eyes, in quick, 10-ms probings of the world.

⁸⁸ *Beyond the Pleasure Principle*, p. 27.

⁸⁹ *Ibid.*, p. 31.

⁹⁰ Here Freud is at his most neurological. While it is a small leap to associate the unconscious with the deeper, subcortical brain, it is not a large one. The 1895 Project, for example, dealt explicitly with neural firing. In the 1920s work we have the same language of "bound" and "mobile" energy introduced in that early work, only absent the explicit neural reference. Nevertheless Freud does explicitly recommend a "topological" account of the various psychological territories.

It touches that world at the sensory surfaces, at which points, spatially and temporally, the organism's energies and those of the environment come together, gently or violently.

This violent mingling, for Freud as for Simmel, is the danger, and the moment of probing, when the animal touches what is around it, constitutes its greatest vulnerability. If, they reason, too great a stimulus, from the intersection or from the battlefield, enters the sensitive, defenseless neural labyrinth, it may damage that structure. The system *pcpt-cs* must be designed, somehow, to guard against this happening. It must be one or the other: there is consciousness, or there is deep structural alteration. Perception is an alternative to a deep, unconscious memory trace. It allows for the production of a conscious memory, sequenced temporally, and libidinally inert, by passing on filtered, subdued stimuli; but it shields the organism from stimuli that are too intense.⁹¹

Again we have a familiar model: perception, with attention and a correlated consciousness, determines access to conscious memory. But in this case the emphasis is not on explaining either how attention is modulated, or how perceptions enter into associational matrices. Rather it is on the danger that perception continually meets. In the absence of a heightened perception/consciousness, as in the rural village, a collaborative change goes on between the ecological space and deep bodily habit, which is the means of interaction with that space (the manner of "informational pickup"), and also the way in which character, as slow but real change in the body, the brain, and the behavior, takes place. Hence individual, local character. In the city, as on the battlefield, such a radical openness would be suicidal. A heightened intellectual life, composed really of a seriality of attentional parries to ecological

⁹¹ "...becoming conscious and leaving behind a memory-trace are processes incompatible with each other within one and the same system. Thus we should be able to say that the excitatory process becomes conscious in the system *Pcpt.-Cs.* but leaves no permanent trace behind there; but that the excitation is transmitted to the systems lying next within and that it is in *them* that its traces are left." *Beyond the Pleasure Principle*, p. 28.

thrusts, is essential to the survival of an untraumatized organism, in wartime or urban circumstances.

Freud offers a rather elaborate model for what exactly happens in the perceptual defense. Let's zoom in for a second on the basilar membrane, in the cochlea in the inner ear. The hairs on the membrane are vibrating in a closed volume of fluid, which is set in motion by the external air. On one side of the membrane there is the hydro-mechanical modulation of this fluid; on the other side there is a flow of current along a bundled auditory nerve, which merges with the cortex. Across this topologically-extended system exists a complex energy environment, in the air, upon the membrane, on the cortex. Now both the bodily and the environmental regions exhibit structure—as we have learned, a pulsatile or reiterative structure. But the overall regularities of the neural structure are greater than those of the air, which counts therefore as a domain of “events.” It is the event that we are worried about. Perception needs to see to it that no event is so extreme that it alters the bodily structure too seriously. Organisms, after all, like to stay the same.⁹²

The way to talk about existing structure in a neural situation for Freud is to say that within it, energies are “bound.” Bound energy is energy that is locked into some region or function, such that every excitation traversing that region is caused, by its interaction with that real material energy, to alter its course, to follow the route already laid out. Structure in the brain is locked energy. The interaction of an excitation with that energy is an intersection of energies, a collision. When bound energy interacts with an energy that is not bound (for example, the excitation), there is “resistance.” But whenever there is resistance, there is also, for want of a better, more precise term, heat loss. Some third sum of energy is shed in the exchange, which now needs to be bound. Its binding constitutes a new aspect of structure: the

⁹² Which requires that they engage in defense. (In France.)

brain, or the body, or character, or habit, have been changed, physically, in this process.

Which is what we don't want, unless we are rural and our town is safe and bucolic.

This is to say that experience itself is cast as traumatic in Freud—a point on which Benjamin picks up. Whenever the “instinctual unconscious”⁹³ is directly engaged by the environment, there is resistance, excess unbound energy, and an “organic” need to bind it, resulting in structural alteration, or worse, disequilibrium—instinctive pressure caused by an excess of mobile energy. Perception is supposed to prevent this happening, at least on any significant scale. It does so by meeting every influx of energy with an emission from its own supply of unbound energy, “libido.” The ego is “cathected” with a reserve of such energy, and it is this energy that it sends out in pulses in perception.⁹⁴ (Remember the alpha wave). Perception is thus cast as a direct combat, a collision and neutralization between two distinct quanta of energy. Consciousness engages the world like a machine gun engages infantry.

When things go wrong, it is because the egoic anti-cathexis has been insufficiently prepared, for example in the case when a soldier in a trench has not readied himself for the explosion that is about to occur close-by. Lacking anxiety, which is a painful because disequilibrating cathexis of the ego, he is not sufficiently alert, and he cannot send that counter-pulse, across the cortex, the auditory nerve and the basilar membrane, that will allow the high-amplitude sensate event to be neutralized before it writes itself in his memory. Put simply: too much stimulus has now gotten into the body.

⁹³ (Benjamin's specific designation to distinguish this Freudian unconscious from what Benjamin himself will denominate the “optical unconscious.”)

⁹⁴ “It may be supposed that, in passing from one element to another, an excitation has to overcome a resistance, and that the diminution of resistance thus effected is what lays down a permanent trace of the excitation, that is, a facilitation. In the system CS, then, resistance of this kind to passage from one element to another would no longer exist. This picture can be brought into relation with Breuer's distinction between quiescent (or bound) and mobile cathectic energy in the elements of the psychical systems; the elements of the system CS would carry no bound energy but only energy capable of free discharge.” *Beyond the Pleasure Principle*, pp. 29-30.

Freud was especially concerned with just this circumstance of shellshock. Assume that a soldier is resting, there in his hole in the side of his trench in the mud, defending Germany from France, in France, when an incoming shell explodes. Now the soldier may be physically injured or not. In either case his lack of anxious preparation results in a massive disequilibrium in his organism. In response to the shocking influx of stimuli—that massive sound—his body mobilizes a large anti-cathexis, to counter what it takes to be a grave structural accident—it is as if the percussive sound knocked loose libido. In the case that the soldier is injured, these energies (we might talk for example about chemicals from the dopamine system, etc.; Freud is talking about libido), go to work binding the ongoing flow of stimulus⁹⁵ from the tissues registering pain. These do constitute a large stimulus event of the sort to which the organism was responding, and its anti-cathetic libido finds incoming stimuli with which to bind. There will be alteration of the organism, but on a sub-traumatic level. The trauma in this case remains physical, rather than becoming psychological. But in the event that there is no wound, the organism has over-responded with its anti-cathexis, such that now there exists, in the instinctual unconscious (in the deeper, subcortical body), an increased quantity of unbound energy, circling about the mnemonic site of the traumatic event.⁹⁶ *Technically*

⁹⁵ This flow corresponds to that stemming from the general “erotogenicity” of organs, which Freud discusses in the “Narcissism” essay and which underlies the perpetual reconstitution of the ego/body image. In the case of pain the flow is amplified, and at the same time the body image shifts its contours such that the injury constitutes its core.

⁹⁶ “We describe as ‘traumatic’ any excitations from outside which are powerful enough to break through the protective shield. It seems to me that the concept of trauma necessarily implies a connection of this kind with a breach in an otherwise efficacious barrier against stimuli. Such an event as an external trauma is bound to provoke a disturbance on a large scale in the functioning of the organism’s energy and to set in motion every possible defensive measure. At the same time, the pleasure principle is for the moment put out of action. There is no longer any possibility of preventing the mental apparatus from being flooded by large amounts of stimulus, and another problem arises instead—the problem of mastering the amounts of stimulus which have broken in and of binding them, in the psychical sense, so that they can be disposed of.

The specific unpleasure of physical pain is probably the result of the protective shield having been broken through in a limited area. There is then a continuous stream of excitations from the part of the periphery concerned to the central apparatus of the mind, such as could normally arise only from *within* the apparatus. And how shall we expect the mind to react to this invasion? Cathetic energy is summoned from all sides to provide sufficiently high cathexes of energy in the environs of the breach.

*trauma of this sort is the environmental production of a new instinct.*⁹⁷ The soldier now experiences the circumstance of his shellshock recurrently. He is compelled to repeat that memory, is driven to repeat it compulsively: it is as if there were a demonic force, something other than him, other than his ego, something just as external as the initial explosion, which now forces a particular reiterative experience, which in turn commands his consciousness.⁹⁸

It is thus possible to produce a sort of demonic upsurge—a religious event on just the model of William James, minus the tent meeting—on a physiological, material basis, through a sudden modulation of the ambient array. On Benjamin’s account, it is by tapping this archaic instinctual source “beyond the pleasure principle,” that perceptual, media technologies work, on the one hand to “train” their perceivers so as to be competent for survival in a shocking stimulus environment, and on the other so as increasingly to deprive them of real experience, diverting their deeper experiences into an indexed series of abstractly equivalent, isolated memories—data. The whole contemporary apparatus of perceptual production and recording, with its massive databases of image and sound, might be said to be fueled by this drive of unbound energy to re-iterate its own disequilibrium, to anti-cathex a feigned onslaught. The “curious gliding, floating character”⁹⁹ of images in our social space, haloed by an anesthetic, “optical unconscious,” must be traced to the automatic reproduction of this foundational

An ‘anticathexis’ on a grand scale is set up, for whose benefit all the other psychical systems are impoverished, so that the remaining psychical functions are extensively paralyzed or reduced.” *Beyond the Pleasure Principle*, pp. 33-34.

“...the mechanical violence of the trauma would liberate a quantity of sexual excitation which, owing to the lack of preparation for anxiety, would have a traumatic effect.” p. 38.

⁹⁷ “The most abundant sources of this internal excitation are what are described as the organism’s ‘instincts’—the representatives of all the forces originating in the interior of the body and transmitted to the mental apparatus...” *Ibid.*, p. 40.

⁹⁸ “The manifestations of a compulsion to repeat... exhibit to a high degree an instinctual character and, when they act in opposition to the pleasure principle, give the appearance of some ‘demonic’ force at work.” *Ibid.*, p. 41.

⁹⁹ “Work of Art,” p. 266.

disequilibrium. Shock is the manufacture of a floating, empty, fleeting time, within which, says Benjamin, “minutes cover a man like snowflakes.”¹⁰⁰

The New Aura and its Ritual

1936, *Berlin*. Readers who are familiar with Benjamin’s “Work of Art” essay may be puzzled by my assertions to this point. Many readers of that essay have latched onto Benjamin’s assertion that film constitutes a revolutionary medium, first of all because of its incessant dislocation of the image from tradition,¹⁰¹ and then also because of its dramatic exploding of “this prison-world” with the “dynamite of the split second,”¹⁰² its apparently promising opening up of the “optical unconscious,” and its usefulness for training perception to be able to deal with a shock-riddled world.¹⁰³ Obviously Benjamin did think film revolutionary. But there are fascist revolutions, and that is just the sort he found himself within at the time that he wrote and then re-wrote that essay, such that by the conclusion he could lament the unfortunate mis-usage of film, by fascism, in a new form of mass mediated ritual—a usage of film in alliance with war, which by that alliance evades any other social possibilities of this perceptual technology.

Film does, according to Benjamin, tend to destroy the “aura” associated with unique works of art, deeply embedded within traditions of ownership, display, and most importantly, ritual—for example that of the church or of the museum. When the image becomes massively reproducible, the “here and now”-ness of it disappears. This does imply a sort of revolution, whereby the art object (if that formulation still has any meaning) seems to become public

¹⁰⁰ “Baudelaire,” p. 336.

¹⁰¹ “The social significance of film, even—and especially—in its most positive form, is inconceivable without its destructive, cathartic side: the liquidation of the value of tradition in the cultural heritage.” “Work of Art,” p. 254.

¹⁰² “Work of Art,” p. 266.

¹⁰³ Susan Buck-Morss, in her essay “Aesthetics and An-aesthetics...” opens in this same way, but continues, as I will, with an acknowledgement of the deep ambiguity of Benjamin’s reading, despite these accolades.

property. Probably Benjamin's incomplete enthusiasm rested, such as it was, on this possibility, that the masses would, in representing themselves to themselves, seize hold of "image space"¹⁰⁴ and use it for the augmentation of their own, un-alienated energies. Fascism, like Rupert Murdoch, demonstrates the real possibility of another, less fortuitous distribution of control.

But it is not only the mis-use of the medium that Benjamin notes that leads to the possibility of a critical analysis of contemporary media, which as I am presenting it needs to be understood as one among a few key elements composing a manufactured social-ambient field. It is also the whole of his essay "On Some Motifs in Baudelaire," in 1940, which deals with all the same key notions as the "Work of Art" essay, including aura, shock, and the social production of a particular form of perception. Now, however, the variety of perception which comes to be constituted from Baudelaire on, through the period we have been examining with Simmel and Freud, is a dark and ominous one, resulting explicitly in the removal of "long experience" from the individual and the increasing production of "isolated experience," which does not touch the individual's character or body in any real way. This robbery is so great that Benjamin, with Baudelaire, is led to present in conclusion a being completely bereft of character, having left only rage as the exact correlate of an incapacity for life. It is this latter, darker portrait of contemporary media, produced deeper in the war, and very close to its killing Benjamin, that I think constitutes Benjamin's closing vision.

Perhaps it is best to start not exactly with the aura, but with what I take to be its replacement, the "optical unconscious." Benjamin opposes this directly to the "instinctual unconscious." We can say that as the Freudian, instinctual unconscious is the place and also the medium within which deeper memory takes place, the optical unconscious is the place and also the medium within which isolated, indexed, data-like experience and memory exist. As in

¹⁰⁴ Walter Benjamin, "Surrealism," *Selected Writings*, v. 2, pt. 1, p. 217.

principle one could think of the Freudian unconscious as a realm extending indefinitely beyond any one memory or instinct, thus constituting a sort of rich, teeming, violent darkness around a particular instinctual phenomenon, an ocean extending indefinitely, so too we can think of the optical unconscious as a realm of smooth light, untroubled expansiveness, around any one individual image or set of conscious memories, promising always more of the same.¹⁰⁵ Both denote what lies behind the horizon; what Benjamin announces as the “discovery” of the optical unconscious, then, can also be taken as the historical production of a new virtual space within which contemporary perception is constituted, extending out beyond the spastic, automatic sallies of attention, endlessly embracing the disabled prey which those bring home. This virtual space presages a perception in which, no matter what else happens, everything will always be information. Ocean becomes sky becomes number.

Here is the classic presentation of the optical unconscious:

¹⁰⁵ “If we think of the associations which, at home in the *memoire involontaire*, seek to cluster around an object of perception, and if we call those associations the aura of that object, then the aura attaching to the object of a perception corresponds precisely to the experience which, in the case of an object of use, inscribes itself as long practice. The techniques inspired by the camera and subsequent analogous types of apparatus extend the range of the *memoire volontaire*; these techniques make it possible at any time to retain an event—as image and sound—through the apparatus.” “Baudelaire,” p. 337. The former pattern of experience, according to Benjamin, is being lost; the latter, which excludes any deep change to the individual (aside from an ever-deepening shock and the repetition it compels), is ever-growing. In *Mass Mediauras: Form, Technics, Media*, the Benjamin scholar Samuel Weber offers an interpretation of the “Work of Art” essay similar to mine and points out the tight correspondence between Benjamin’s conception and Heidegger’s characterization of the present as “The Age of the World Picture,” in which whatever exists is supposed to exist solely as a representation, and as such as a perpetual re-support for the centrality of a distantiated subject. Weber points out that the endeavor to make everything fit into this orthodox framework leaves a certain “shadow,” a slight structural lapse wherein everything of the body and the world not so amenable to this project must hover. (*Mass Mediauras*, p. 81) Massumi offers a similar point, in a different language, in *Parables for the Virtual*, where he identifies affect or passion with the lapse between body images, in the space of the “body without an image” (or the body without organs), and identifies a “visceral” sensitivity proper to this lapse perpetually pre-dating the orthodox subject-object perception. (*Parables for the Virtual*, pp. 57-62) I will return to Massumi’s account shortly. The general point here is that mass-mediated society, which consists materially in a system of ambient fields increasingly produced via the production and playback of recorded perceptual arrays (media), tends to function so as to erase whatever is distinct from its own media content, its images, sounds, and messages. This includes the erasure of its own infrastructure, which is half-constituted by human bodies. And yet this infrastructure propels the whole assemblage, particularly through the reiteration of a shocked instinct or an instinct for shock, pressing shadow back to shadow, material to periphery. Massumi gives a similar account of the repetitive social compulsion linked with fear. See below.

On the one hand, film furthers insight into the necessities governing our lives by its use of close-ups, by its accentuation of hidden details in familiar objects, and by its exploration of commonplace milieux through the ingenious guidance of the camera; on the other hand, it manages to assure us of a vast and unsuspected field of action [*Spielraum*]. Our bars and city streets, our offices and furnished rooms, our railroad stations and our factories seemed to close relentlessly around us. Then came film and exploded this prison-world with the dynamite of the split second, so that now we can set off calmly on journeys of adventure among its far-flung debris. With the close-up, space expands; with slow motion, movement is extended. And just as enlargement not merely clarifies what we see indistinctly ‘in any case,’ but brings to light entirely new structures of matter, slow motion not only reveals familiar aspects of movements, but discloses quite unknown aspects within them—aspects ‘which do not appear as the retarding of natural movements but have a curious gliding, floating character of their own.’ Clearly, it is another nature which speaks to the camera as compared to the eye. ‘Other’ above all in the sense that a space informed by human consciousness gives way to a space informed by the unconscious. Whereas it is a commonplace that, for example, we have some idea what is involved in the act of walking (if only in general terms), we have no idea at all what happens during the split second when a person actually takes a step. We are familiar with the movement of picking up a cigarette lighter or a spoon, but know almost nothing of what really goes on between hand and metal, and still less how this varies with different moods. This is where the camera comes into play, with all its resources for swooping and rising, disrupting and isolating, stretching or compressing a sequence, enlarging or reducing an object. It is through the camera that we first discover the optical unconscious, just as we discover the instinctual unconscious through psychoanalysis.¹⁰⁶

This can be reduced somewhat. Basically, Benjamin seems to be saying that the camera opens up new possibilities for vision, both spatially and temporally, and that by this means it also opens up previously-unknown possibilities for action (a vast *Spielraum*). By the “Baudelaire” essay, Benjamin will make the opposite assertion, namely that media technology like film, in their unmasterable tendency towards the production of “isolated experiences,” do just the opposite, closing down *Spielraum*: “The perpetual readiness of voluntary, discursive memory, encouraged by the technology of reproduction, reduces the imagination’s scope for play [*Spielraum*]...”¹⁰⁷ So what about these openings? The close-up and enlargement became possible with photography. What is characteristic of film is its capacity to zoom in on time. It “explodes the split second.” Aside from the leaving behind of the aura (only to produce a new

¹⁰⁶ “Work of Art,” pp. 265-266.

¹⁰⁷ “Baudelaire,” p. 337.

one with far less grace and character), and the nominally healthful promptings of shock (which in the “Baudelaire” essay Benjamin casts as equivalent to the repetitions of the gambler or unskilled labor locked to a machine), this dilation of time seems to be the only remaining “revolutionary” characteristic of film.

Slowed film reveals aspects of motion, particularly human motions of practical sorts, like the taking of a step, or the picking up of a spoon; it reveals points of contact, “between hand and metal,” which before this medium were invisible. So it is true that new dimensions are opened up, in which nothing prevents “adventure.” Nothing, on the other hand, prevents those openings from providing more footholds, points of contact, manners of control for a disciplinary power, either, in the manner Foucault ably described in *The Birth of the Clinic* and *Discipline and Punish*.

But perhaps what is most intriguing here is the relation to shock, the haptic, what is *not* the dilated image, which stretches out so promisingly into an indefinite horizon. That is to say, the optical unconscious may seem in some fluorescent Heideggerian fashion to give forth an endlessness of visual positivity. But that visuality is a scab, over a cut, which is not visual. That endless opticality is the congealed blood of something that, when it lives, is invisible. As the image is produced only as framed by the cut, attention and consciousness to perceptual presence and then to conscious memory are determined by tactile shock. According to Benjamin’s formula, shock is received “in distraction,” while attention is engaged with its lifeless prey. So there is, still, a formation of a deeper experience, a writing on habit, only now according to that endless ticking of Simmel and Helmholtz, which causes all events to pass. Increasingly, the instinct of the produced perceiver is to move on further into that optical adventure, further still, shunting away one image after another, into oblivion.¹⁰⁸ All memories equivalent, with no character but an insurmountable habit of dismissal, this new perceiver

¹⁰⁸ The critique is, again, very similar to Heidegger’s 1938 “The Age of the World Picture.”

buries time as information buried space. As though driven by a demon, the social-common ambient field becomes personal, isolated, and meaningless, by means of its serial rejection by a subjective recoil, into “perception,” an internal space wallpapered with the memories of fled communion.

The aura is lost, there is no more sense that what is seen looks back.¹⁰⁹ If it looked back, on this account, we would insufficiently have killed it. We would need to be more attentive. That looking back would spur us to higher degrees of focus, and we would see with our sharpened vision again a mechanical world, indexed to the time of clocks.

But let me be more precise. Benjamin writes that

From an alluring visual composition or an enchanting fabric of sound, the Dadaists turned the artwork into a missile. It jolted the viewer, taking on a tactile quality. It thereby fostered the demand for film, since the distracting element in film is also primarily tactile, being based on successive changes of scene and focus which have a percussive effect on the spectator. Let us compare the screen on which a film unfolds with the canvas of a painting. The painting invites the viewer to contemplation; before it, he can give himself up to his train of associations. Before a film image, he cannot do so. No sooner has he seen it than it is already changed. It cannot be fixed on. Duhamel, who detests the cinema and knows nothing of its significance, though he does know something about its structure, describes the situation as follows: ‘I can no longer think what I want to think. My thoughts have been replaced by moving images.’ Indeed, the train of associations in the person contemplating these images is immediately interrupted by new images. This constitutes the shock effect of film, which, like all shock effects, seeks to induce heightened attention. *By means of its technological structure, film has freed the physical shock effect—which Dadaism had kept wrapped, as it were, inside the moral shock effect—from this wrapping.*¹¹⁰

Distraction distracts both from thought and from distraction. One is propelled into attention, neither to one’s own associations, nor to the mechanism of one’s coming to attention, but to some new image. There is a continual sense, perhaps, of liberation, the sense of being on an adventure, but beneath that, there is that compulsion to continue. The basic idea is the same as

¹⁰⁹ “Experience of the aura... arises from the fact that a response characteristic of human relationships is transposed to the relationship between humans and inanimate or natural objects... To experience the aura of an object we look at means to invest it with the ability to look back at us.” “Baudelaire,” p. 338. (Hence Benjamin thinks it never really looked back at all, that being a projection...)

¹¹⁰ “Work of Art,” p. 267. Italics Benjamin’s.

Freud's. The cut in the film, like the explosion of the shell in the trench or, I would like to suggest, the percussive beat in a piece of music, releases an anti-cathexis. With perception happily distracted, dallying with its perpetual preludes to thought, this percussion is free to work. It attacks, it is received, it elicits a response. That liberation of libido, "the reflexive mechanism that the machine triggers,"¹¹¹ is the ever-new magic of the optical unconscious. It fuels itself, it floats, on this reiterative liberation. It captures that disequilibrium as the very material source of a symbolized, "organic" and stable world of equivalent truths.

This is the feedback loop that Simmel already observed, between an increasing consciousness and a world which demands heightened consciousness.¹¹² The latter both produces and is produced by the former. A complicating ambient array demands attentiveness; attentive labor produces a complicating ambient array. All, of course, for the benefit of whoever advertises and whoever goes to war. Such is the function of media in a revolution without a change of property relations. "War, and only war, makes it possible to set a goal for mass movements on the grandest scale while preserving traditional property relations. That is how the situation presents itself in political terms. In technological terms it can be formulated as follows: only war makes it possible to mobilize all of today's technological resources while maintaining property relations."¹¹³

Now Benjamin wished for a more egalitarian usage of the media, because of its capacity for massive self-representation. I have no hopes along those lines. What I would like to ask about though is the possibility of shock in the ambient field releasing bound energies, without passing them on to perception. For the organism, that would be mounting pain,

¹¹¹ "Baudelaire," p. 329.

¹¹² "The greater the shock factor in particular impressions, the more vigilant consciousness has to be in screening stimuli; the more efficiently it does so, the less these impressions enter long experience and the more they correspond to the concept of isolated experience. Perhaps the special achievement of shock defense is the way it assigns an incident a precise point in time in consciousness, at the cost of the integrity of the incident's contents. This would be a peak achievement of the intellect; it would turn the incident into an isolated experience." "Baudelaire," p. 319.

¹¹³ "Work of Art," p. 269.

because tension is pain for the organism. But what about for the body, that body beneath the body image, in its continual embrace with the ambient? What if those energies were invoked and sustained on some plateau such as that?

The alternative is what Benjamin identified as rage. “For someone who is past experiencing, there is no consolation. Yet it is this very inability to experience that explains the true nature of rage... *The rage explodes in time to the ticking of the seconds* that enslaves the melancholy man.”¹¹⁴ Like Watson holding his experimental infant until it turns blue, perception, manufactured bodily by ambient arrays—control panels, video games, advertisements, our endless flow of images—holds us in place, in the cockpit, at the tv, at the computer, in the car. We feel that we are floating, but we know that we can’t move. And that very tacit knowledge, on the pragmatic model of James, is rage, within which still there is a demonic, erotic pressing, calling for “its own annihilation as a supreme aesthetic pleasure.”¹¹⁵

Rage and Fear on the Shock Channel

I will continue to develop this theme of a subliminal rage, carefully choreographed but dangerously primed, beneath the benign, passive phenomenal subject. If perception is but one channel, and sensation another, along which latter channel a continuity between the irritable, denuded¹¹⁶ surfaces of the body and energetic activity in the immediate ambience exists, I am trying to establish a socially-produced regularity, of that ambience, in its connection with that body, operating via this quick vulnerability. This is what I mean by the “shock channel”: a corridor or a pattern of regular integration between individual and social-material ambience, within which behaviors are engaged by means of one or another form of shock. If there is a “communication” along this channel, it is without semantic content. Shock is “haptic,”

¹¹⁴ “Baudelaire,” p. 335. My emphasis.

¹¹⁵ “Work of Art,” p. 270.

¹¹⁶ I keep using this term. I take it from Emmanuel Levinas. See especially *Totality and Infinity*.

meaning not perceptually objective, “tacit,” meaning not consciously presented in opposition to some phenomenological, noetic act, and erotic or emotional, meaning that it twines directly with emotions and desires... especially, with those basic operators in ecological space: fear, love, rage.¹¹⁷

In making this sort of assertion I am really not original. Hobbes already thought that fear, not language, not ideation, not pride, was the key reality by which a political organization of persons might be dependably engineered:

The force of Words, being (as I have formerly noted) too weak to hold men to the performance of their Covenants; there are in man’s nature, but two imaginable helps to strengthen it. And those are either a Feare of the consequence of breaking their word; or a Glory, or Pride in appearing not to need to breake it. This later is a Generosity too rarely found to be presumed on, especially in pursuers of Wealth, Command, or sensuall Pleasure; which are the greatest part of Mankind. *The Passion to be reckoned upon, is Fear*; whereof there be two very generall Objects: one, The Power of Spirits Invisible; the other, The Power of those men they shall therein Offend. Of these two, though the former be the greater Power, yet the feare of the later is commonly the greater Feare. The Feare of the former is in every man, his own Religion...¹¹⁸

Nor am I original in the field of contemporary discourse; in fact I end up rather trendy. Not only did Simmel, Freud and Benjamin already establish the thematic of shock, insisting on a manner of epidermic engagement with ambience characterized by this variety of interactivity, acting in tandem with, but hidden from, another conscious domain in which we locate and experience ourselves. This line of thinking, and even my references to James in this regard, are at present quite popular, particularly in the lineage of scholars coming after Deleuze and Guattari, including Paul Virilio and Manuel De Landa. Most notably Brian Massumi has established an analysis very much like the one I am presenting as a history, with a focus on fear rather than rage

¹¹⁷ Recall that James notes these as the basic species of “coarser” emotion, as does Watson. *Principles of Psychology*, v. 2, p. 449. See Ch. 1.

¹¹⁸ Thomas Hobbes, *Leviathan*, p. 200. My emphasis.

I presented Simmel, Freud and Benjamin as a way of characterizing our present social-ambient field and demonstrating its functionality in respect to power. In architecture, in the movements of traffic and advertising in urban space, and then in all variety of interfaces, visual and audial, we have constructed for ourselves machineries of shock, coarse and subtle, which act upon us along a channel distinct from that of our simple perceptions. In “Fear (The Spectrum Said),” Massumi notes that this is particularly clear in the war on terror. The color-coded “terror alert system” reflects an augmented activity of contemporary governmental power along this channel. Since everybody knows that the system never deems us “safe,” which is not even a step on the scale, and since it is also the case that we never move into absolute threat, but instead hover perpetually in between, in the regions of yellow and orange, and further, since the variations of color seem from the public perspective to be arbitrary, the system is essentially contentless. A raising or lowering of the degree of threat does not properly convey a message. Rather it modulates the affective state and with that the activities of those who register its shifts. Power, according to Massumi, is shifting into a properly “perceptual mode,” operating upon “bodies’ irritability” rather than “subjects’ cognition,” by means of the presentation of stimuli that are “signals without signification,” “bypassing discursive mediations.”¹¹⁹ What happens when the color shifts is that the body jumps into a new state of performativity, a new set of motions. Which motions exactly are determined by each individual’s history, but the net result is a generalized increase in activity and in anxiety.

Of course this integration of stimulus fields with the irritability of bodies continues well beyond the system Massumi analyzes. Changes in front page news on media websites can elicit the same sort of alterations, as can blockage of roadways, power outage, the “interruption of this broadcast”... I will attend in the chapters that follow to arrangements of sensory fields in physical space, which are constructed in relation to certain systems of bodily

¹¹⁹ Massumi, “Fear (The Spectrum Said),” p. 34-35.

disposition. Even when these fields elicit something other than a startle response, they always exert a coercion, because they are always already in an unchosen, haptic relation with whatever bodies can register them. They act, and they act on action. Together local space and bodily habit thus conduct real power in both the physical and the Foucauldian sense. While we can call the present mode of their operation “perceptual,” it is better to call it “sensational,” or better yet, as I do in this study, “ambient.” The functioning of power through the continual irritable slide of space and body grounds power in its full materiality, and this slide occurs precisely before, outside, in the periphery of perception.

Massumi recognizes that “perception” in its orthodox or phenomenological sense is distinct from the moment of power. The state of fear into which the body confronted with the raised alert immediately passes is a complex gestural reality performed across any number of bodily systems: as Watson says, “a catching of the breath, a stiffening of the whole body, a turning away of the body from the source of stimulation, a running or crawling away from it...”¹²⁰ and as James might add, a shift in the secretions of the glands, the contraction of the veins, and so on. One enters this state before one so chooses. The temporal point of operation with regard to phenomenal experience is therefore futural or past; and the spatial point exterior or peripheral. During the period of its operation, the fear does not make a phenomenal appearance; rather it exists horizontally, constituting the “reality” of whatever phenomena remain. In absolute terror, there may be a total lapse into automatic action and an identical collapse of perception. The experience, as Massumi says, “is in the fear,” whereas later, as we calm down, the fear is recast as a content of experience.¹²¹ At this point an historical reconstruction takes place, in which we narratively assert a continuity of normative perception which never actually happened, in which fear features simply as a sort of object amongst other

¹²⁰ *Behaviorism*, p. 7.

¹²¹ Massumi, “Fear (The Spectrum Said),” p. 37.

objects which supposedly always retained their stable positions in a space opposed to a subject. Regardless of what is said afterward, however, the reality of the affect and of the sensational contact, as they actually occur, remain as Massumi says elsewhere in “a time out of space... in a dimension of the *flesh*.”¹²² There is a temporality and a linked spatiality, of “the body without an image,” which “coincides with the eclipse of the subject in emotion.”¹²³

The last step in Massumi’s narrative is to suggest that in the contemporary political climate, which is driven more by the distributed material media-control apparatus than by the “events” composing its distributed content, fear has become a self-perpetuating reality. His assertion, in condensed form, is that the basic responsiveness we have to “signals without signification,” corresponding to one or another performativity of fear, has gotten so out of hand that we respond similarly even to the minute movements of our own bodies. He thus offers a vision similar to the one I have above called a “new ritual,” in which any sense conjunction whatsoever is sufficient to trigger an automatic performance constitutive of fear, a certain retraction that dissociates, and that wishes to escape itself, back into normalcy, from affect back into image (and sensation into the familiarity of perception). The result is a populace perpetually toppling in and out of overriding emotion, and in an out of a tedious cognition that denies this topple ever happens. Massumi’s ominous conclusion: these tactics of power can likely “only be fought on the same affective, ontogenetic ground on which [they themselves] operate.”¹²⁴

The theoretical solution I hope to offer to this predicament in the chapters that follow hinges on the realization that fear is not virtual,¹²⁵ but actual. It consists, as James and Watson

¹²² In *Parables for the Virtual*, pp. 58-59.

¹²³ *Ibid.*, p. 60.

¹²⁴ “Fear...” p. 47.

¹²⁵ Here I oppose Massumi’s particular treatment, which links fear essentially with threat, and comprehends the latter, because of its contentless, futural character, as essentially virtual. Thus power’s mode of operation becomes virtual, etc. The problem for me with this approach is that it immediately elides the structured actuality by which fear is repeatedly provoked, and by which retractive, fearful

assert, in a certain performativity; and this performativity in turn corresponds very tightly with a system of built, functional spaces. Resistance to a power that operates via ambient space must operate via ambient space, through its construction and its autonomous control. In the next chapter I will consider aesthetic production in this light. The other point to be made before moving on is that fear may not be the proper emotion to start with. Benjamin discusses rage, the feeling of the man who is past the capacity for experience, or as Watson says, the experience of the child held so tightly he cannot move, as a basic state correspondent to media society. Peter Sloterdijk, in *Rage and Time*, also offers rage, as a key figure of the “thymotic”¹²⁶ as a political starting point. The merit of that state is that its basic tendency is to act. I will return to these considerations in Chapters 5 and 6.

bodily attitudes, like those we perform within the car, are materially and socially choreographed. In fact this opposition to the virtual is my primary difference with the whole Deleuzian line of thought. It seems to me to be based on a reading of Nietzsche and Spinoza forced into conjunction with Bergson. I would rather jettison the Bergson than accept the virtual, which seems to me an absence one actually, presently performs.

¹²⁶ A term derived from the era of Platonic philosophy. “Thymos” is usually translated as “spirit.” In Plato’s *Republic*, for example, it composes one third of the human soul, along with desire (demos) and reason (logos). Thymos is the driving factor and determinant of goals for the warlike character, as for the athlete. Sloterdijk’s point has to do with the assertion that this basically active tendency is suppressed in the present social formation.

CHAPTER 3: IMPORTING PERCEPTION

We do not need obscure fragments of Heraclitus to prove that being reveals itself as war to philosophical thought, that war does not only affect it as the most patent fact, but as the very patency, or the truth, of the real. In war reality rends the words and images that dissimulate it, to obtrude in its nudity and in its harshness. Harsh reality (this sounds like a pleonasm!), harsh object-lesson, at the very moment of its fulguration when the drapings of illusion burn war is produced as the pure experience of pure being.¹

Remember that we were flickering. We were flickering back and forth between sensation and perception, at 8 to 13 times per second. We were flickering at the same rate as ambient energy, at the same rate as the stutter of fluorescent lighting or as the hum of the refrigerator motor in the next room, or at the same rate as the power grid. Because sensation and perception happen in different moments, the cortex being patterned with the ear and eye in one moment, that stimuli being “anticathected,” bound in the next, we are flickering between present and past. Because only in the binding, assemblage, and mnemonic integration of stimuli into perception does a subject and its body exist, or more precisely a body and its many subjects, distributed in faultless synchrony with each percept and with their unity, we are flickering between self and other. Because self ends into other before other passes into self, we are flickering between death and life.

We have to be careful because all this sounds poetic and lends itself to interpretive play. (In fact everything lends itself to interpretive play, it being only a question of the distribution of fixed capital which interpretations play most in our common ambience). But it is also the case that death is really involved; we have manufactured perception to kill; even our games serve this end. On the one hand, then, an “ego-death,” correlate of one of an endless stream of avatars of the subject, on the other real death, of real bodies, the earthy ones under the spiritual. How are these related? Which death was it that eros wanted, or does it not

¹ Emmanuel Levinas, *Totality and Infinity*, p. 21.

discriminate? Doesn't it want the one precisely in order to avoid the other? Isn't it the ego that kills?

The ego, the body image, captures the living body, and it captures the living ambient, and it drags them both into the past. Our attention-getting urban surfaces, armed with little fingers of shock, facilitate these extraordinary renditions out of the present into the fluorescent cells of memory. Habit and environment operate together in the maintenance of a de-vitalized state. In the cockpit, they work together, silently harnessing life, to de-vitalize the enemy and his collateral ambient entirely. The functional organism, the functional environment, are the problem. Ego and functional ambience. Why not, therefore, ego-death and living ambience, as a solution? Lucier's motionless activity. Buddhism and the aesthetic versus capital and its functions.

The antithesis of the functional may be glossed as the "aesthetic"; it may also be the "religious" or the "meditative." The idea that "Eastern" techniques of sensing, along with an "Eastern" philosophical understanding, can interrupt the ego and the undesirable set of perceptual functions in which it is engaged, had a large influence upon the arts, and particularly minimalist music, within the same post-war period we have been discussing. The influence is apparent from the 1940s and 1950s with the Beats and John Cage, to the 1960s with La Monte Young and the Theater of Eternal Music, becoming so popular, particularly via *The Psychedelic Experience*, that it entered the music of the Beatles. It continued through the 1970s and 1980s in psychedelia, Eliane Radigue's continuous-tone music, the music of Can, and the very many developments in the past three decades drawing on these various sources. Among the latter we should include on the one hand the whole of so-called "ambient" music, which references Cage as well as Eric Satie, Pierre Schaeffer and Brian Eno as its starting points, significant portions of "noise" music, as well as electronic dance music in a variety of

forms. The “soundscape” music that I discuss in Chapter 4, as well as the noise and dance musics I discuss in Chapter 6, can be included, in one respect or another, in this lineage.

Artists within this line fit into the present discussion regarding the production of perception and space because they take part in those productions. The attitudes toward “sounds themselves” or “sound in itself” recommended and practiced by Cage and Young are aesthetic practices, involving training and a consequent alteration of the manner of integration between sensing bodies and the ambience they inhabit. Insofar as they influence others to participate in these practices, they produce a certain perception, or anti-perception. There are two key ways in which this influence—this power—may take place on any significant scale—through the distribution of text—statements, again, of the “truth” of sensation—and through the music itself. Of course the proper craft of all of these composers is the production of music, and it is essential to recognize that music, performed or played back from a recording, constitutes a real, physical structuration of the ambient field, affording one or another variety of perceptual performance on the part of the bodies immersed there, disallowing others. The same may be said of visual art, film, television, and so on. These volumes enter the nexus of physical and disciplinary power alongside the productions of those military and industrial institutions we have already discussed. “Aesthetic production” is in its materiality a production of space, and of a space one might call “psychoactive,” capable of altering perception and emotion.²

Some of Cage’s music operates through a distribution of percepts challenging or disrupting attention. Eliane Radigue’s drone-based music does this as well, and additionally

² In music there is of course a long tradition of the intentional modulation of emotion, from Pythagorean and Platonic theories about correlations between modes and affects, through the modal music of the Middle Ages, up to Indian modal music in the present. While these practices all involve a theoretical correlation between harmonic and melodic structure and emotion, it is also clear that particularly in contemporary popular music there is another correspondence between music and emotion, involving for example beats per minute and practices of high-amplitude playback/listening. This will be of particular significance when we get to Ch. 7, where we will see actual military combatants using music for emotional and arousing purposes, as one aspect of an elaborate, psychoactive technical ambience.

problematizes perception by offering few affordances for object-formation. Young's continuous-tone pieces of the late 1950s and early 1960s, in distributing a taut, relatively immobile vibratory energy across the ambient field, constitute what might easily be called "plateaus" of intensity, in the sense that Gregory Bateson and then Deleuze and Guattari give that term.³ The auditory ambient field raises and then sustains a certain intensive awareness, which includes a heightened sensitivity to sound and intervallic relation; the plateau properly speaking is the conjunction of field and bodily energies. Since these volumes have the capacity in this fashion to alter normal perception, or to disrupt it, to elicit attention, adrenaline or libido, to incite movement, they constitute ambient productions worthy of investigation. Not only these avant-garde musics, but popular music as well, particularly at high amplitude and when based on pulse and regular beat, thus participate in ambient power.

Sonic-spatial producers also produce, to varying degrees, discursively. Cage, who is sometimes referred to as a philosopher as well as a composer, is prominent in this respect. Young has written small explanatory pieces and given interviews in which he offers his views on music and the particular listening practices to which his music is related. The other figures I've mentioned are less involved in this kind of work. Yet they are still engaged with very specific "truths of perception," which enter in some way into their musical production. Everyone I have listed above has some connection to Zen, Hinduism, Tibetan Buddhism, or the esoterica of Aleister Crowley, in the particular forms these bodies of discourse took in post-war Europe and the United States. Those bodies of religious discourse may be worked over and reproduced discursively, as in the case of Cage or to a lesser extent Young; they may enter poetry or lyrics as in Angus MacLise (an early member of the Theater of Eternal Music who eventually moved to Nepal), the Beatles or Can, or they may operate as frameworks for composition, as in the case of Radigue. In every case they are treated seriously, as having

³ See Bateson, *Steps to an Ecology of Mind*, and Deleuze and Guattari, *A Thousand Plateaus*.

some bearing upon the operation of the music that is produced: they explain what the music does, or is supposed to do, to perception, to emotion, to the body. They document an ego-death that is taken to be real and desirable.

Production always consists in a certain re-formation of materials already present in ambience. This is how Marx understands production;⁴ it is true of discursive production insofar as that is an assemblage of words and concepts from some theoretical materials previously given, and it is true of the production of space through the playback of recordings, which always, by definition, have an essential relation to a prior moment of production. For the present chapter, one key question is the way in which ambient discourse enters into spatial production. The relation was simpler in the previous two chapters, where discursive production was directly paired with spatial production, reflecting it and at the same time augmenting it. In the present case it is not so clear how the discursive product operates in respect to the spatial one. Also, here there is the further complication that at some point the discursive material was imported from an identifiable external source. The ambience inhabited by these various producers, from which their materials were drawn, was itself produced through this process of import. To say it again, the religious, aesthetic, or “Eastern” truths here really constitute some aspect of a material circumstance, which is, through import, selection and physical distribution, itself constructed.⁵ These religious truths regarding perception, here

⁴ See *Capital*, Ch. 1.

⁵ It is worth noting that the influence of this “Eastern” wave is even present within the scientific discourse we have been considering, right up to the present. Francisco Varela was a Tibetan Buddhist (from Chile), who argued explicitly in his 1991 *The Embodied Mind*, with Evan Thompson and Eleanor Rosch, for a Buddhist interpretation of temporality, as perfectly integratable with cognitive science. His was the flickering model we have just dealt with, where a synthesis of percepts occurs at a certain refresh rate, where each moment makes itself (engages in “autopoiesis”), but brings along a sort of karmic balance from the moment previous. In a 1999 article called “Present-Time Consciousness,” Varela insists that on this paradigm a Husserlian phenomenology can be perfectly fitted within a cognitive-neuroscientific, discontinuous model of this sort. Buddhism, cognitive neuroscience, and phenomenology are now harmonized as an institutional opponent to cognitivism. Buddhism continues to gain headway. Slavoj Žižek has even suggested that it may, in the end, be the perfect ideology for capitalism. (In *For They Know Not What They Do*, xliii) Start over, erase, start over, erase. Every moment is new; every moment is illusion.

found as a materiality, play a significant role in real political life, since the 1960s “counter-culture,” of which most of the individuals on which this chapter focuses could easily be considered a part, appears to have been rent by a certain ideological divide, between Marxist-oriented revolution, and Eastern-oriented transcendental practice.

The overall question though is in what way “aesthetic production” enters into the larger processes of ambient production. To what degree, and in what circumstances, does it link up with dominant institutional productions of perception and space, and to what degree does it really challenge them, interfere with them, or even engage in a sort of battle for ambience and for ambient power? The contention of each of these musical producers seems to be that functional, ego-driven perception is problematic, and the explicit wish, at least of Cage and Young, is to produce a different means of listening, and a different sort of space. To this end they adopt an “Eastern” view. I wish to argue that the breakage these producers pursue is possible and real—something that is already roughly established in the preceding chapter—but that the religious interpretation, insofar as that involves a certain abstraction from history and from material context, operates to minimize the effect of these radical practices upon the surrounding social space. The set of techniques these producers pursue, and the ambient productions they achieve, have a real power to disrupt functionality. They even have a further power, to elicit and sustain actual, bodily energies. To this degree the “mystical experience” I believe can be real. That recognition is essential: it corresponds to the tactile and erotic conjunction of bodies and space, and to the possibility of real incorporation of bodies into larger bodies, for better or for worse. The question though is whether the sustain, the ecstasy, carries over into further resistant production, or not. Insofar as the interpretations consulted in the guidance of practice, the production of music, and the explanation of experience, refer essentially away from history, and toward a space deemed incorporeal, they amount to performances of interruption, of this very resistance, and of these very plateaus.

Silence

The most-discussed piece of music by John Cage, and perhaps in “avant-garde” music on the whole, is probably *4’33”*, the silent piece, broken into three parts, in which nothing happens, for this assigned duration. David Tudor, in the first performances, realized *4’33”* on piano, and articulated the movements with a silent raising and lowering of the keyboard cover. That first performance was in the woods near Woodstock; typically the piece is performed in a concert hall, such that the empty time unfolding is relatively quiet, but revelatory of the infrastructural hum, of air conditioning, breathing, shifts of bodies. It may also be revelatory of the institutional context of the concert itself, along with its attitudes, postures, and so on. In more recent years groups like Ultra-red have expanded the performance to take place in a number of different environments.

What is the significance of this piece? It is related to Cage’s interest in Zen, and fits together with his use of chance methods for the distribution of sound events in the sonic field, as for example in *Music of Changes*. In either case the composer withdraws himself from his typical, controlling position. Rather than *4’33”* being an expression of what has taken place within the distinctive, artistic soul of John Cage (genius), it is an unfolding of something that is very carefully planned not to be such an expression: it is in fact planned to be spontaneous; chance methods, like the method of strategic or performative silence, are means of getting at an experience not determined by the ego. In *Music of Changes*, Cage determined distribution and formation of sonic elements through the usage of charts based on the *I Ching*. He wrote Pierre Boulez in 1951 that “[b]y making moves on the charts I freed myself from what I had thought to be freedom, and which actually was only the accretion of habits and tastes... The

essential underlying idea is that each thing is itself, that its relations with other things spring up naturally rather than being imposed by any abstraction on an ‘artist’s’ part.”⁶

The compositional problem to which the charts offered the first solution was the problem of composition as undesirable. The charts were the first way of allowing interesting sound to happen, to organize itself. Cage’s attitude by *4’33”* is that all everyday sound is interesting, and all such sound is organized. Already in the silences in *Music of Changes* Cage must have heard “sounds themselves,” organizing themselves, even without the labor of chance operations. In this respect *4’33”* can be thought of as a sort of extract from *Music of Changes*.⁷

All sound is interesting; all sound is organized. The question is how to get people to listen to it. On this side there is a problem analogous to the vanity of the composer, or to the unfortunate hierarchical position he is typically assigned. The reason that most noise is referred to as noise, or that the background is called the background, is that people are not listening to it. One only ever hears background sounds as distractions, as some correlate to a focal experience one is trying to have. They are both the horizon and the challenge to that focalization. At least on a simple interpretation, Cage’s *4’33”* is an attempt to invert these two positions within the perceptual field, to focus upon what is typically outside of focus.

A statement goes along with this. Perfect focalization seems definitively possible only given utter peripheral silence. One point of *4’33”*, as one of the points of Cage’s 1955 lecture “Experimental Music: Doctrine,” is that such silence does not exist.⁸ There is always background noise, and where that is absent, there is the noise of the body. Silence is composed of sound. Focalization, therefore, even focalization on sound, is suppression of sound.

⁶ Jacques Nattiez (ed.), *The Boulez-Cage Correspondence*.

⁷ (Personal conversation with Charles Curtis).

⁸ Kyle Gann’s *4’33”*: *There is No Such Thing as Silence* elaborates on this point, as well as offering a rich history of the piece.

Now in everyday life, the functional subject engages in a serial distribution of attention, drawing with his behavior one of those cylinders we saw in Gibson, through time as well as space.⁹ It is a narrow corridor, in a field which, the more attentive the functional listener is, is all the more silent. A piece focused on silence is designed to invert focus, or to explode it, and with that, very briefly (and in the safe embrace of the aesthetic ritual of the concert), to explode the functional subject. Composition, as willful withdrawal from composition, becomes an ethical enterprise.

The exploding ego implodes rapidly. 4'33" is a very long breath in a serial pulsation habituated to 10 breaths a second, 600 pulsations a minute. 4'33" offers 2,730 challenges to habitual self-enclosure. It is a marathon, and undoubtedly most listeners, maybe Cage too, stop at many points along the route to rest, to remember, to be subjects. So 4'33", an arbitrary number, is still an impossible goal. Thus its breaking into three apparently more manageable

⁹ Another interpretation of 4'33", in keeping with Cage's earlier concerns, is that it thematizes duration, the sole thing shared by both sound and silence. (That is a reasonable interpretation especially given the title of the piece.) On this reading 4'33" would be a work of minimalism in the classical sense, seeking to draw attention to the formal character of its own medium. To some extent however I believe the emphasis on duration must be less than that upon the background and upon the dropping of intention, because, as I will discuss below with regard to *HPSCHD*, Cage's later work, including for example *Williams Mix*, intentionally scrambles the pathways for attention, multiplying them in such a way that multiple possible experiential durations are laid out in a single ambient field. It seems to me that space, specifically the space of the sensory field, gains ascendance here over time, or that a space-time identical with a material distribution of sensate entities—an auditory ambient field—becomes the central concern. In 1955, regarding his earlier emphasis on duration, Cage writes "For, when, after convincing oneself ignorantly that sound has, as its clearly defined opposite, silence, that since duration is the only characteristic of sound that is measurable in terms of silence, therefore any valid structure involving sounds and silences should be based, not as Occidentally traditional, on frequency, but rightly on duration, one enters an anechoic chamber, as silent as technologically possible in 1951, to discover that one hears two sounds of one's own unintentional making (nerve's systematic operation, blood's circulation), the situation one is clearly in is not objective (sound-silence), but rather subjective (sounds only), those intended and those others (so-called silence) not intended. If, at this point, one says, 'Yes! I do not discriminate between intention and non-intention,' the splits, subject-object, art-life, etc., disappear, an identification has been made with the material..." ("Experimental Music: Doctrine," in *Silence*, pp. 13-14) Silence is thus here defined as unintended sound, which is not at all the absence of sound, but sound in its purity. I continue this passage below: "*A sound does not view itself as thought, as ought...*" There is a further way, though, in which Cage's gesture in 4'33" does seek to unveil its own framing conditions, and that is insofar as it draws attention to the very space in which the performance occurs, which typically is the concert hall. This is the reason that I find the more recent performances of 4'33" by Ultra-Red so interesting. The context to which they wish to draw attention is not the performance space as such, but a broader social space acknowledged to be characterized by tension and conflict.

parts... which are not achievable either. Perhaps *4'33"* is a question. It is like La Monte Young's *Composition 1960 #10*: "draw a straight line and follow it." Everybody gets it but nobody can complete it.

And yet on the other hand there is a certain naturalism to Cage, as also to the Zen brand-name with which he was affiliated. While personal habits, particularly those aligned with brainwaves, may be difficult to overcome, there is still, quite clearly and unproblematically, a domain to which eventually to escape. Or rather, even though it is true that typically people do not listen, there is really a field of sound, there are sounds in their purity, to be heard. There does exist an ambient sonic array which is structured in the form of an open field, and there does exist some mode of access to it which is distinct from the typical functional one. It may be the case that all Cage has in mind is a sort of careless circulation about the sonic field, where the listener is pulled now by one, now by another element, such that at the end of the stipulated duration a musical piece of the traditional kind, as an organization of discrete sonic events in time, will have taken place, with the interesting distinction that this particular piece, besides being unrepeatable, was indefinitely multiple in its realization, and had no agent except for the very space and time in which it occurred, or the being together of that space and time with this set of listeners. On the other hand, perhaps it is that the focal-peripheral regime is supposed to fall away, such that something like James' distraction, or what Don Ihde has called "field perception" takes place.¹⁰ In this case also, any organization would have to be traced back to ambience, or to the relational ambient array constituted upon the ears, body and brain of some able participant.

Either way an experience more pure than the typical one is assumed possible. Whatever the details, what the listener hears in *4'33"* is supposed to be primary, basic, natural or real in some deep sense. Even if the purpose is to draw attention to the performance

¹⁰ In *Listening and Voice*.

context, the concert hall, and some “aesthetic” manner of listening taking place within it, such that the hall itself, the social context, would come to be “aestheticized,” still that aestheticization achieves a truer confrontation with the context, because the context is aesthetic or sensate in its own basic nature.¹¹ It would seem to be in keeping with the typical “Zen” manner of speaking—that manner so typical of American artists including Cage, Henry Miller, Cage’s acquaintances Allan Ginsburg and Gary Snyder—even to say that, if what one hears is exactly what one normally hears, in no way distinct, that too is a perfect realization of the piece. Zen is nothing, not a religion, not an interpretation, it is just being with experience (which just is).

The Nature of Sounds Themselves

In his writing, Cage is direct both about the character of this alteration of attentive behavior, this “psychological turn,”¹² and about that to which it facilitates access. He notes in “Memoir,” 1966, that he learned from an Indian composer¹³ the “traditional reason for making a piece of music in India: ‘to quiet the mind thus making it susceptible to divine influences.’ ... What are divine influences?... We learned from Oriental thought that those divine influences

¹¹ I make this qualification in response to a certain line of criticism of the possibility Cage asserts. Frances Dyson, for example, in “The Ear That Would Hear Sounds Themselves” (in *Wireless Imagination*, pp. 373-407) challenges the very possibility (and points out quite rightly that Cage’s sounds in themselves bear a distinct relation to the technology of which he was so fond). I would agree that there is no direct *perception* of “sounds themselves,” independent of memory, signification, etc., because perception is by definition the bringing into conjunction of some positivity with all these systems. This does not mean, however, that there is no such direct sensation, nor does it mean that perception is ubiquitous or uninterrupted (see Massumi’s consideration of the collapse into affect at the end of Ch. 2). Even in Kant, who rigorously denies phenomenological access to it, in principle there must still be such a sensate confrontation. Nor do I wish to defend Cage in the end, except so far as he thematizes this real material conjunction and considers the capacities of a real material structuration of the sonic ambient field to disrupt that normative perception which operates seamlessly with signifying and mnemonic systems (and which excludes all but their most dominant series as well as their horizon of noise). That the idea of a pure experience involves real dangers, meanwhile, I readily acknowledge.

¹² “This turning is psychological and seems at first to be a giving up of everything that belongs to humanity...” in “Experimental Music,” 1957, in *Silence*, p. 8.

¹³ Gann and Dyson identify her as Gita Sarabhai.

are, in fact, the environment in which we are.”¹⁴ The question is entirely one of opening the listener to the world in which he or she lives, by interrupting their attentive habits, and by rupturing their ego. They can no longer “intend” the sounds.

“Intention” in Cage is a term with several meanings. It refers to the practice of the composer, who now is urged to move away from his own intended sounds, in order to receive, through an utter sacrifice, even of “music,” something unintended. In this regard nonintentionality means renouncing an attitude of control: “one may give up the desire to control sound, clear his mind of music, and set about discovering a means to let sounds be themselves rather than vehicles for man-made theories or expressions of human sentiments.”¹⁵ But there is also a direct meaning for the listener not engaged in composition. That listener too must drop intention. First he must do so in terms of his own wish to control, his own functional behavior, which engages with the sensate domain in search of signals, as elements useful in the pursuit of goals; or to be more mundane and more correct, whose key engagement with sensation is as a system of channels for communication within one functional process or another. To drop “intention” here means to let the sensory field be, such that precisely what is not communication, what is officially deemed “noise,” (which on its best functional behavior is silence), comes to the fore, and is witnessed as valuable, alive, even divine—having absolute, not relative value. Lastly, one more technical meaning of letting go of intention, which is the phenomenological sense presented in Husserl. Each “intentional” object, that is, each percept, each perceived thing like a sound, corresponds in Husserl to an “intentional act” on the part of the subject.¹⁶ Perceptions are knit together in a series, are

¹⁴ In *John Cage: An Anthology*, ed. Richard Kostelanetz, p. 77.

¹⁵ *Silence*, p. 10. (From “Experimental Music.”)

¹⁶ Each of these percepts is like the peak of a mountain seen aerially, its base and valley lost in a defocalized mist; that is, each involves its own production of an “objective” clarity on the basis of a graded suppression of the surrounding field (a series of broader and vaguer “horizons,” all the way out to a total absence, what Heidegger would come to call “Being” or that which “Gibt”). For a sharp presentation of these aspects of Husserl’s phenomenology, see Emmanuel Levinas’ study *The Theory of*

formed together into a unitary experience, through the activity of this subjectivity. They have no being of their own; they are always relational. That relationality becomes, at its furthest extreme, an “openness” on the part of humanity, with Heidegger.¹⁷ But still, as I have mentioned, for phenomenology it is humanity where the sound occurs—humanity, Dasein, is the privileged place of the sounding of sound. Dropping intentionality, with Cage, means more radically also relaxing intentional acts. Cage’s assertion, which was that of his teacher, D.T. Suzuki as well, is that the sounds exist, even as perceivable, without the intentional act. An opening out onto a sonic field, then, is not an act at all on the part of the human being, the human ego or the human mind. These never were necessary to give experience its force. Each sound has a force of its own, which includes its perceivability. “Intentionality” is explicitly inverted here, turned inside out. Where for Husserl an intentional act must exist for each intentional object, the two descending upon one another like two wrestlers, or one wrestler in a mirror, grasping himself by the shoulders and drifting in that rigid duality into the deep perspective of the past, for Cage and Suzuki (as for Deleuze later)¹⁸ the sound exudes a vapor of consciousness across its skin, to which the uncontrolling listener is granted access, as to a gift. The knowing or the sensing of the percept is the behavior of the percept itself; its being is self-aware. Being aware of the sound is participating in its self-expression. The sound gives itself in its entirety, it too is selfless. And there is nothing to it, beyond what it gives.

Intuition in Husserl’s Phenomenology, especially “The Phenomenological Theory of Being: The Intentionality of Consciousness,” pp. 37-51. If we follow James’ speculations regarding the sheet of phenomena presented in Ch. 1, such that we conceive the transcendental subject responsible for these intentional productions actually to be an hypothesis generated to account for the topology of phenomena, we can reach the intriguing position that in fact it is the full plane of the afocal or ambient which is actually agent in the production of focality: ambience, the continuity of bodily and environmental energies, moves so as to form certain figures in an apparent relation to a ground, and also so as to produce, as if a certain clear space around the mountain peak, a correlate “awareness.”

¹⁷ (Who famously quipped, referring to D.T. Suzuki, that “If I understand this man correctly, this is what I have been trying to say in all my writings.” Quoted in Robert H. Sharf, “The Zen of Japanese Nationalism,” in *Curators of the Buddha*, ed. Donald S. Lopez, Jr., p. 107.) The nature of Dasein is first elaborated in *Being and Time*, but it is in Heidegger’s later work, for example *What is Thinking?* That its nature as radically opened and its affinity with Zen are presented.

¹⁸ For example in *Difference and Repetition* and in *Anti-Oedipus* with Guattari.

So it is the sounds themselves to which Cage gravitates, or the sounds themselves which break the gravity of the ego, fragmenting it into a wide distribution, a multiplicity of things, just being in their directness. In “no-mind,” everything has mind. Each sensate thing is a Buddha. The psychological turn, which is the turn past psychology, the event of Zen, is the releasing of these sensate positivities back into their own life. The paradoxical beauty of the Zen experience is that, in this releasing, everything is gained. One knows things in their directness, by allowing the things to be. By virtue of this direct access Cage is able to report on the personal life of sounds.

A sound does not view itself as thought, as ought, as needing another sound for its elucidation, as etc.; it has no time for any consideration—it is occupied with the performance of its characteristics: before it has died away it must have made perfectly exact its frequency, its loudness, its length, its overtone structure, the precise morphology of these and of itself.

Urgent, unique, uninformed about history and theory, beyond the imagination, central to a sphere without surface, its becoming is unimpeded, energetically broadcast. There is no escape from its action. It does not exist as one of a series of discrete steps, but as transmission in all directions from the field’s center. It is inextricably synchronous with all other sounds, non-sounds, which latter, received by other sets than the ear, operate in the same manner.

A sound accomplishes nothing; without it life would not last out the instant...it is you yourself in the form you have that instant taken.¹⁹

Now there seem to me to be two distinct things happening in this ethnographical report, which Cage offers upon his return from the land of the sounds themselves. On the one hand, there is an empowerment of the sensate positivity. Each sound now has independent being. Each sound in the domain is its own center, precisely because the domain is not (exhaustively) the subject’s auditory field and is indefinitely open in all directions. (We are talking here about ecological space, or the sonic ambient field.) What the aesthetic viewpoint, which eschews function and “intention,” opens onto is a living reality indifferent toward human design. Each element within it, meanwhile, is equally indifferent towards the others; their relations are accidental or “natural,” not interdependent. No sound needs “another for its

¹⁹ “Experimental Music: Doctrine,” in *Silence*, pp. 14-15. Italics Cage’s.

elucidation.” No system pulls the sounds together, no hierarchy drives them apart. Cage thus posits a utopian anarchism, of a decidedly libertarian persuasion, of the ambient field. “With all those parts and no conductor, you can see that even this populous a society can function without a conductor...”²⁰

This is ecological space, with an emphasis on its own independence, its own vitality. If Gibson introduced this notion, of an ambient space where the real being of entities lies exhaustively in their performance as energy within a structured volume, expressing across a perceptual system, but then was afraid of his own pronouncement, and was too quick to refer that “sheet of phenomena” back to a (hypothetical) abstract space of physical objects radiating light, Cage endorses and completes the notion, without exhibiting any such timidity. But perhaps he too is too quick to insert this intensive, self-balanced space within a shell of abstraction. Here what is abstract is time. Besides the fact that those sole characteristics at the denuding, radiant heart of some individual sound—frequency, amplitude, duration, timbre, morphology—are precisely the names of sound as given to compositional control and analytical, even numerical thought; besides the further fact that sounds continue for Cage to be object-like at least in their discrete individuality—the sounds, note, not just sound (and notice the somewhat forced assertion of the independence of these individuals)—besides this there is a strange, almost clinical hollowness to the field that Cage describes. Certainly he would have us understand that amidst these sounds, in democratic harmony, there are also scents and colors, even cars and televisions, bustling with assured equality. But still there is a hollowness, an absence, precisely, of incommensurability—all the sounds are is these characteristics, which they express without remainder. As Žižek notes regarding Zen, expression without history.²¹ Sounds are “uninformed about history.”

²⁰ Quoted by Kostelanetz in “Environmental Abundance,” in *John Cage: An Anthology*, p. 175.

²¹ See again *For They Know Not What They Do*.

Not only the sounds, though. The release of egoic control is the collapse of perception, of interpretation, and of associational situation. It is no longer the case that the sound is the sound that it is for the perceiver due to its being pre-perceived, substituted for by some mnemonic twin. Each sound is an immaculate flash, *ex nihilo*, like Condillac's first burst of light. Certainly for the perceiver worried by his divorce from exteriority, these are welcome flashes. But where has the perceiver gone? Where is the perceiver's body, as written, trained, habituated? Zen experience is an interruption of habit by environment. It is also, perhaps, an interruption of environment by forgetting: a spread of floating ambience, the new aura. Noise, once released, is all harmony. Within this harmony, everything is equal. No sound is more important than any other. While there is no need for exchange, each moment and sensory distribution being as perfect as any other, exchange is indefinitely possible, as all within experience is equally valid. Every aspect of our shared common, our shared ambient array, is equally conducive to utter freedom. It is always possible to explode the ego. With that total giving over of ourselves, nothing more is required. A mission of gentleness and democracy, accomplished with no blood shed.

The field of sound, for the younger Cage, is nature, and nature pristine and pure. The later Cage, though, smitten with Marshall McLuhan and Buckminster Fuller, comes to the realization that this untouched nature is extremely difficult to locate. Everything, it seems, has been worked over, it is all involved in a net of communications, images, media and electrical power. This does not disturb Cage in the least. Rather he takes it from Fuller that the "global village," just due to its global character, tends essentially toward equality. All that is required is that we pitch in to its design.

I believe, as [McLuhan] says, that... we live as the effect of electronic inventions by means of which our central nervous systems have been exteriorized. This means, for me, that where, formerly, by disciples of yoga, zazen meditation, the arts, and other fully engaging activities, one could make life endurable by changing his mind, now

that change of mind is socialized and is taking place inevitably and can be sped up comprehensively by thinking and designing, as does Buckminster Fuller.²²

The problem, Fuller insists, is technological, specifically, to triple the effectiveness and to implement the distribution of the world's resources so that there will be enough to go around and that it will get around... If we do not destroy ourselves as we continue changing, Fuller prophesies that, by the year 2000, everyone in the world will have what he needs. There will then be no rational reason for war.²³

McLuhan's exteriorized nervous system is not exposed nervature, sensitive or shocked. It is, he says directly, numbed.²⁴ But for the most part what he and Cage mean is just that the globe looks more and more like a brain, which is no problem, because brains are democratic and humane. Cage saw a first glimmer of that democracy of space in the electrical grid, which crossed national boundaries. Like Benjamin, he saw a revolutionary potential in a technological challenge to traditional, centralized structures. Unlike Benjamin, he did not observe its systemic mis-use. Unlike Critical Theory in general, he did not note the perpetual discord between the technologically possible and the practically existent. Nor did he seem to recognize the irrelevance of "rational reason's to war.

This is not to say that Cage was for passivity. He did believe in engagement in the process of design, just as he believed in the non-distinction between art and life. Cage's performances, especially those having the character of "happenings" and involving a large-scale organization of sensory fields, constituted such design. They were instances of being the change that one desires, bypassing politics entirely. One example is Cage's 1969 collaboration with Lejaren Hiller, called *HPSCHD*, at the University of Illinois' Urbana campus. Richard Kostelanetz describes the event as "one of the great artistic environments of the decade":

In the middle of the circular sports arena were suspended several parallel sheets of visquine, each 100 by 40 feet, and from both sides were projected numerous films

²² "McLuhan's Influence," 1967, in *John Cage: An Anthology*, p. 70.

²³ *Ibid.*, p. 171.

²⁴ "The wheel as a counter-irritant to increased burdens, in turn, brings about a new intensity of action by its amplification of a separate or isolated function (the feet in rotation). Such amplification is bearable by the nervous system only through numbness or blocking of perception." *Understanding Media*, p. 64.

and slides whose collaged imagery passed through several sheets. Running around a circular ceiling rim was a continuous 340-foot screen, and, from a hidden point inside, were projected slides with imagery as various as outer-space scenes, pages of Mozart music, computer instructions, and non-representational botches. Beams of light were shrewdly aimed across the interior roof, visually rearticulating the modulated concrete supports. In several upper locations were spinning mirrored balls reflecting dots of light in all directions—a device reminiscent of a discotheque or a planetarium; and the lights shining directly down upon the asphalt floor also changed color from time to time...

The sounds came from fifty-eight amplified channels, each with its own loud-speaker high in the auditorium. Fifty-one channels contained computer-generated music composed in octaves divided at every integer between five and fifty-six tones to the octave (five tones, six, seven, eight, up to fifty-six, except number twelve); and since all these channels were going at once, with each operator of the four assembled tape recorders permitted to adjust their respective volumes, the result was a supremely microtonal chaos in which, as Cage's Illinois colleague Ben Johnston put it, 'It was insured no order can be perceived.'

On top of this mix, one could hear seven amplified harpsichords, for *HPSCHD* is that word reduced to the six characters necessary for computer transmission. Three were playing fixed versions of Mozart's late-eighteenth-century 'Introduction to the Composition of Waltzes by Means of Dice,' in which the performer is allowed to play sections in any order he wishes. With computer assistance, Cage and Hiller realized three different fixed versions of the fragments, two of which incorporated other passages from Mozart. Two more harpsichordists, Nelly Bruce and Yuji Takahashi, played through differing but individually fixed collages of harpsichord music from Mozart to the present, while David Tudor played 'computer print-out for twelve-tone gamut.' The seventh keyboard operator, Philip Corner, had nothing more specific than blanket permission to play any Mozart he wished; and every instrumentalist received this further instruction: 'In addition to playing his own solo, each harpsichordist is free to play any of the others.'²⁵

I have had to include nearly a page of quoted text here just to list the elements entering into this collaboration. *HPSCHD* was a pre-post-modern foreshadowing of our own flattened, teeming milieu. Every effort is made within it to achieve a maximal attentional splay: with such a number of channels of sound, each falls off into the next. "You don't have to choose, really, but, so to speak, experience it," said Cage. "As you go from one point of the hall to another, the experience changes; and here, too, each man determines what he hears... Freedom of movement, you see, is basic to both this art and this society."²⁶ No tonal center, no single organizing scale system, no dominant scheme of octave division (and hence an

²⁵ Richard Kostelanetz, "Environmental Abundance," in *John Cage: An Anthology*.

²⁶ Quoted by Kostelanetz, *Ibid.*

extraordinarily rich density of microtones), an overlap of human and machine performance, an overlap of tradition—Mozart in particular—and new technology, even an ode, in the title, to the reinterpretation of the former by the latter. Kostelanetz writes that Cage was “beaming.”

HPSCHD is an extremely elaborate ambient field, of mixed sensory modality. It is, as Fuller championed, an innovative design of social, ecological space. For that short period, it sustained an ambient structuration of sound and light designed precisely to disallow any unifying structuration. It was a machine for opening the ego, for dropping intention. Except that now the expanse blossoming into its own self-distributive eccentricity was not nature: it was Mozart, the computer, eighty projectors, fifty-two tape recorders, painted slides, 40 films and 5000 slides from NASA—a lot of outer space imagery—“and the Museum of Modern Art extended a print of George Melie’s *Trip to the Moon* (1902).”²⁷ A techno-utopian materiality, a linked joy of multiple institutions, filmic memories, and quite a lot of energy. A manufactured array of this sort works just like any other. It was a structured expanse, facilitating certain traversals, offering certain affordances for pickup. (Also conducting certain shocks, by cut, flicker, etc.—but that is not Cage’s concern). The intentionally political, or anti-political and therefore directly social-ethical character of this particular ambient volume²⁸ is that it was designed to break habits of focus and narrative. Through sheer volume and sheer number, it made encapsulating focus impossible. Cage was beaming because here was a gift to all the attendees, a little glimpse of enlightenment.

In this libertarian-anarchist rejection of politics as a dead end, Cage went straight for the real social nexus, the common ambient field. In producing it, he produced a volume of possible experience. He and his collaborators seized hold of the means of the production of the immediate environment. It is somewhat strange, then, that at the same time he rejected the

²⁷ *Ibid.*, p. 176.

²⁸ “...a political art which is not about politics but political itself.” *Ibid.*, p. 175.

notion of “power.” “I would prefer to drop the question of power, whether black power, flower power, or student power. Only by looking out the back window, as McLuhan says, do we concern ourselves with power. If we look forward, we see cooperation and things being made possible, to make the world work so any kind of living can take place.”²⁹

An Earlier Exploding Ego

Technology, the means of producing ecological space, is progressive, and the progress it enables will be ensured by the basic environmental openness of its practitioners.³⁰ Less ego, less violence, ultimately a just social structure for all. No contradiction exists between science and religion, provided the religion is Zen, between peace and progress, or direct experience and productive life. There is no “alienation” in Cage; and if his liberated space seems to float, well, isn’t being very light?

Given these positions it is interesting to note the history of the doctrine Cage repeats, and which so guided his practice.³¹ He received it, he says, from a few sources, but key among these was his teacher at Columbia, D.T. Suzuki. In fact Suzuki, a tireless apostle of Zen outside of Japan, was the voice by which generations of counter-cultural aesthetes received their introductions to “Eastern” thought, including especially the Beats and the most vigorous American proponent of these truths, Alan Watts.

²⁹ *Ibid.*

³⁰ It is also, supposedly, transparent. Dyson quotes Cage: “It can be put this way too: find ways of using instruments as though they were tools, i.e., so that they leave no traces. That’s precisely what our tape-recorders, amplifiers, microphones, loud-speakers, photo-electric cells, etc., are: things to be used which don’t necessarily determine the nature of what is to be done.” (*Wireless Imagination*, p. 396) The fact that technology, particularly sound and recording technologies, is in no way transparent, will be quite important for the chapters to come. For a summation of the ways in which all the tools listed here operate selectively and always leave a certain trace upon their products, see Rick Altman, “The Material Heterogeneity of Recorded Sound,” in *Sound Theory, Sound Practice*, pp. 15-34.

³¹ “What I do, I do not wish blamed on Zen, though without my engagement with Zen (attendance at lectures by Alan watts and D.T. Suzuki, reading of the literature) I doubt whether I would have done what I have done.” Cage, *Silence*, p. xi.

Most of what I will recount here, quickly since you can read it yourself if you like, comes from Robert H. Sharf's "The Zen of Japanese Nationalism."³² There are three things that Sharf notes that are of particular interest for the present discussion. The first is that the easy linkage of technology with Zen thought is itself an historical artifact. During the Meiji period (1868-1912), according to Sharf, Japan modernized rapidly. Attempting to keep pace with highly-industrialized European nations, Japanese leaders were aggressive in trying to remove what they perceived as hindrances to this advance. Among these hindrances were religious superstitions. A varied attack on Buddhist traditions and temples took place in the late 19th century, including, for a period, the outright censorship of that religion. As a response, a new group of Buddhist leaders emerged who set about demonstrating the commensurability of Buddhist doctrine with modernization, technology and science. By the turn of the century, as Japan defeated China and Russia, and pushed into Korea and Manchuria, they promoted Zen in particular, as a warrior religion. Whatever problems Buddhism had, they argued, was the fault of corrupt institutions, not of the core doctrines. The result of their efforts would be the rise of a new, science- and war-friendly Zen Buddhism, functioning ultimately as a cultural masthead for Japan's colonial endeavors. This was the Zen exported by persons like Suzuki.

Suzuki was a third generation nationalist reformer. His first teacher, Shako Soen, was among other things a chaplain to the army during its Manchurian campaign. Soen arranged in 1897 for Suzuki to travel to La Salle, Illinois, where he would live and work as a translator for Dr. Paul Carus, a German émigré committed to the universality of religions, and to the full commensurability of religious with scientific truth. Suzuki spent 11 years under Carus' tutelage, writing during that time only once about Zen, and in that instance not emphasizing at

³² See Robert Sharf, "The Zen of Japanese Nationalism," in *Curators of the Buddha*, pp. 107-160. Žižek also discusses Suzuki's nationalist history, in *For They Know Not What They Do*, referring primarily to Brian A. Victoria's *Zen at War*.

all the aspect of “direct experience” (Satori) that he would eventually claim as Zen’s essence. He did, however, read William James, both the *Principles of Psychology* and the *Varieties of Religious Experience*.

On his return to Japan he informed his high school friend Nishida Kitaro about James’ work. Nishida was to become an eminent, Heideggerian-Buddhist philosopher. With his student Nishitani Keiji, he would be among the strongest voices in the ultra-nationalist Kyoto School during the second World War. It is Sharf’s opinion that it is actually James’ works from which the idea of “direct experience” comes, or if not from there, from the emphasis on “Erlebnis” in German philosophers like Schleiermacher and Dilthey, the concept being absent from pre-modern Buddhist texts. This is the second point I want to take from Sharf. Nishida developed the idea of Satori, perhaps from James, and Suzuki disseminated it as Japanese, particularly after the war. At any rate it was freshly machined. During the war the idea of direct experience through the dropping away of intention and ego—the very idea that found its way to Cage, the idea of the ego falling away and revealing things in their independent being—would be central to military ideology and particularly central for the kamikaze pilot, who exploded the ego much more vigorously than John Cage would ever have liked, being as he was an advocate of less biased sounds. That is the third point.

What I want to take from this historical excursion is, first of all, the very historicity of the pattern of opening-perception by which an enlightened person gains access to a world of living sensate positivities which are supposed to be “uninformed about history.” They may be so uninformed; the ideological or perceptual technique has itself played a technological role in circumstances that were world-historical. That technique comes, perhaps, from American Transcendentalism. More recently it is military surplus. The other thing I want to point out is the rigorous affirmation, on the part of Nishida, Nishitani, and Suzuki (the Kyoto School on the whole) of the commensurability of Zen ego-loss with technological and indeed military

integration. During the “Overcoming Modernity” conference that Nishitani attended in 1940, where several eminent Japanese scholars debated how to rid themselves of an all-too-European “modernity” while retaining their military and spiritual ascendancy, Nishitani would argue that both national identity and national vigor could be maintained through this Zen renunciation. “‘Self-annihilation’ basically means extinguishing the arbitrary ego or egoistic self. As I shall show, selfless exertion and professional service can thus open up a path to profound religiosity... The demand for mastery is the most realistic and concrete in one’s daily life and involves the most external action, whereas the demand for self-annihilation is the most internal of one’s feelings and soul and involves the most interior aspect of one’s daily life.”³³ Subjective annihilation may indeed be a manner by which to allow environmental, sensate positivities to radiate their own phenomenal being from their own eccentric centers; yet it matters very much just what those positivities are. In the democracy of sounds, a command is still distinct from a song.

The simple point to be taken here is that relaxation of the ego does not by any means guarantee the benevolence of its material circumstance. The ego can die and the body still kill. The ego does die, perhaps, 12 times a second, and that can mean 12 compulsions, 12 commands to kill, per second.³⁴ The integration of individuals with manufactured perceptual

³³ *Overcoming Modernity*, p. 56.

³⁴ Every time the body pulses into contact with its space, it is coerced, shocked, spurred into a series of gestures determining affect, and at the same time into a series of perceptual processes which I will later call “mnemeses,” by which the coercion will be reworked, partly suppressed, and re-asserted as an example of some known category. Even through this suppressive violence done ambience, the ambient field remains perfectly active in its coercion of general affective state, which as Massumi says sustains as the “reality of the situation,” in which this perception unfolds. The “autonomous” ambient, toward which I am gesturing in this whole study, would be one in which this real material activity of the sensate field was met by a productive activity on the part of the body that meets it. Each pulsation would then be an erotic and productive one, in which the moment of conjuncture continued itself outward, as a manner of affirmation. Here I have in mind the original productive relation described in the early Marx (which he never actually abandons in his later work), as well as a certain reading of the conatus and its tendency in Spinoza. The key transition, in both these relations as in Nietzsche, is from passivity (contingent upon an experiential denial of the actual material context, the continuity of body with space and space with further space) to activity. This is also one reason I find Sloterdijk’s work on “thymotics” of value.

interfaces, even ones which, like the mall, rather resemble the splayed multiplicity of *HPSCHD*, pre-determines to some significant degree what will happen in their ambience. The blinking lights on the television may know no history: our own forgetting of history, particularly that which produces our immediate ambience, is meanwhile a real historical achievement. While there is liberty in the aesthetic laying down of habits of focus and attention, while there may even be some enlightenment here with regard to the ontology of the sensate, we should remember that the sensate is organized, by processes of production, in history. Control of those processes is power, the distribution of force to act upon force. Within the ambient field this does not mean that we need to revert to an emphasis upon an abstract, structuring space. Rather it means that we need to see that ecological space also has its own habits.

There is Such a Thing as Power

In *Stockhausen Serves Imperialism*, Cornelius Cardew claims that in his music, as in his writing, Cage presents a “surface dynamism,” but “ignores the underlying tensions and contradictions that produce this surface.” Cage’s focus on the “sounds themselves,” writes Cardew, “reflects the conception of things as being isolated from one another...” according to which conception there is “no point in investigating their interrelations.”³⁵ As a result, like Stockhausen, “Cage serves imperialism.”³⁶ Cardew, who was a student of Stockhausen’s in the late 1960s, and during that same period was much influenced by Cage, by this time in his career (1971-1974) had converted to Marxism and was actively involved in attacking the avant-garde figures with whom he previously associated. His approach throughout *Stockhausen Serves Imperialism* depends largely on Mao Tse-Tung’s *Talks at the Yanan*

³⁵ Cardew, *Stockhausen Serves Imperialism*, p. 43. Also quoted in Kyle Gann, “Making Marx in the Music...”

³⁶ *Ibid.*, p. 45. The full quote reads: “Cage serves imperialism, and will go under with imperialism.”

Forum on Literature in Art, in which Mao reiterates the classical Marxist formulation of ideology. The above quotation thus begins: “Works of art as ideological forms are products of the reflection in the human brain of the life of a given society.” (*Talks*) What aspects of present-day society are reflected in the work of John Cage?” Cardew’s criticism thus assumes that Cage’s products need to be understood in terms of their semantic content, which is supposed to reflect, through the mediator of the “brain,” dominant conditions of production. I have no particular objection to that reading, aside from its substitution of the “brain” for any consideration of the actual manner in which a large-scale social formation could possibly leave a trace on an individual art product.³⁷ Indeed, I have cast the present study as being on the whole an investigation into ideology. However, the treatment is insufficient, as is the grasp of ideology solely as a semantic reflection of conditions. A musical piece, as performed, exceeds whatever meaning it may convey, as in fact does a piece of writing, as printed and distributed. The excess is in the materiality, and this materiality is the reason Marx himself thought ideological production was always necessarily subject to and complicit with larger-scale patterns of production and ownership. The present study is therefore oriented especially towards the production of space by means of aesthetic production. In this respect it is essential to point out not only that the musical product reflects in its semantic structure the overall social conditions of production,³⁸ but that it constitutes a material condition in itself. Aesthetic products, as ambient volumes, are both produced and productive, both superstructural and, in the latter respect, insofar as they take part in the inculcation and calibration of gestures and in an energetic action upon surrounding context, infrastructural. It is therefore necessary to

³⁷ For this problem, see Ch. 5.

³⁸ We will deal with this thesis in depth in Chapter 5, since it is at the center of Adorno’s aesthetic theory. The above question, regarding how practically a whole social formation could leave its pattern on an individual work via individual labor, is central to that chapter, and one key ground on which I justify the shift from an intellectual to a gestural interpretation of Adorno’s theory.

inquire in what way the ambient volume operates in its immediacy, in its tactile conjunction with practicing bodies.

Cardew's criticism is still valid in this respect, but its application has to be reworked. When Cardew says that Cage presents a "surface dynamism" that ignores or obscures the "underlying tensions and contradictions" that produce this surface, he is referring to the prior history of production leading to this product—the acts of labor by which it is constituted, and not Cage's alone—and the conflicted class structure in which that production takes place (in which Cage as an art composer occupies a distinctly bourgeois position). He thus designates a prior historical moment, and the large-scale character of the social structure as that is understood in Marxism (an incomplete, fractured, incommensurate structure, one characterized by "contradictions" and hence prone to revolutionary spasm). The criticism works for the local functioning of Cage's ambient volume as well, without these large-scale references. In this respect the "surface dynamism" refers to the spatio-temporally distributed sounds, and in the case of *HPSCHD*, images. The surface is composed of sensate entities which are "dynamic" insofar as each consists in a spatio-temporal process of self-transmission.³⁹ This surface, however, if it is taken to be exhaustive, hides a certain depth which is the condition of its possibility and the true dynamic, operating in a dimension of tension and conflict, continually producing it. The surface is like a snapshot, excluding spatially everything outside its frame, temporally everything before and after its moment. The same obscuring is achieved through a discursive account seeking to isolate the surface as self-sufficient. The underlying "tensions and contradictions" on this local reading name not the prior processes of production, but the present productive process itself, and not the whole

³⁹ This is one phrasing to which Dyson points to show Cage's dependence on technological metaphor. "Using the being of sound as a metonym for (ideal) being in general, Cage grounds the former in the trope of transmission, where the idea of activity originating in a center and radiating out to interpenetrate other such centers is reminiscent of the radio studio and the animate essence of phenomena alike." "The Ear That Would Hear Sounds in Themselves," p. 384.

social field as striated according to property relations, but the essential disequilibrium of the energetic and institutional processes performing that production.⁴⁰ As for the focus on the “sounds themselves” reflecting the conception of “things being isolated from one another,” that is the way in which Cardew says that life in a society typified by commodity fetish—the perceptual habit of seeing objects as if they bore no connection to the process of their production and distribution (and hence of experiencing the moment of “consumption” as a private affair)—has insinuated itself into Cage’s “brain.” On my more momentary, perception- and ambience-oriented analysis, this separation corresponds again to the character of normative or “orthodox” perception, which produces objects and then allows the objects to cover over the process of their production—a production that was jointly performed by the body and space, in an intimate conjunction effectively a unity prior to the objective distantiation. Perceptual objects, one might say, are fetishized (and the subject supposed to oppose them is dependent on this isolation).

Cage was wrong: there is such a thing as power. An investigation of independent, egalitarian, libertarian sounds, in the real material context of their production, reveals a whole veiled ambience, which is an ambience of power. Take *HPSCHD*, at the sports arena at U of I in Urbana, Illinois, from 7:00 p.m. to midnight, May 16, 1969. The independence of each of the sensate positivities expressing only its own centerless self is immediately belied the moment one points at the electricity necessary to drive this massive affair. The whole sports arena breathed electricity, distributing it in capillary motion to all the fifty-eight amplified channels, the tape players, the projectors. The amplified sound of the harpsichords of course depended also on their players, those bodies, their trained hands, their breath. In addition to

⁴⁰ One key source for this analysis of the perceptual surface and its energetic depth is, again, Deleuze’s *Difference and Repetition*, Ch. V. See the end of Ch. 4 of this study, into Ch. 5, for a fuller presentation. Deleuze calls the depth a differentially-resonating volume of “intensity”; he understands the surface as a “good-sense” and “common-sensical” cancellation of difference or disequilibrium. In this respect Deleuze has placed the Marxist mode of analysis on a sort of micro-scale, as have I.

this energetic network, there was institutional power: ownership and its spatial manifestation as deployment of ambience for bodies. Cage and Hiller's institutional affiliation, like the electricity, expressed itself in the event. No University of Illinois, no sports arena (and the buzzing illumination of the arena as a certain material manifestation of the University of Illinois, moving through its architecture and its student body). Likewise: no NASA, no 40 films and 5,000 slides of outer space (and the glowing hover of those images as a certain gesture of NASA, on the eyes of the *HPSCHD* crowd); no Museum of Modern Art, no *Trip to the Moon* (etc.).

These latter selections, like the selection of Mozart, point also to the historicity of the construction. Why Mozart? Due to the history of Cage, his professional entrenchment in the art music establishment, and also Mozart's own dabbling with chance composition ("Introduction to the Composition of Waltzes by Means of Dice"). Why Cage's focus on chance composition? Due to his discovery of the *I Ching* and his affiliation with D.T. Suzuki. Why Cage and Hiller's computerization of the *I Ching*? Because of the onward march of technology, together with its fetishization... etc. Meanwhile, what of the outer space imagery? It is not only that this performance occurred 3 months after the moon walk, or that it sits dead center in the Cold War. It is also that Cage took part in a certain selection of imagery, in tandem with NASA, asserting the peaceful nature of space exploration and its happy coincidence with technological advancement. But for these points one can easily refer back to the Maoist and Marxist model.

The general point is that ambient production, the production of ambient volumes in their spatial aspect on the one hand, and in their bodily-performative, perceptual aspect on the other, is fully continuous with each and every dimension of power. Ambience is produced, and it is productive. Its positioning in this perpetual procedure—which by the end of this study I will also refer to as a procedure of reiterative, productive "recording," from which

“consumption” ultimately is absent—places it in absolute intimacy with physical energy, institutional controls over spaces and bodies, and at the same time with cultural traditions like the various traditions of music, which must themselves be grasped as practices of spatial and perceptual production, as bound up with discipline and the coercive morphologies of action.

Yet Cage “would prefer to drop the question of power, whether black power, flower power, or student power.” What is the operative effect of this preference? What does it do, at the productive level, within the tissue of “tensions and contradictions” constituting the social-material common? Its effect is that the community of *HPSCHD* with church gatherings, political rallies, dance clubs, disco is obscured.⁴¹ It hides the fact that different projects of the production of bodies and gestures, elicitation and redistributions of bodily energies through the modulation of time and space, are underway at just this time, and very close by. What is actually in part a certain continuation of all the traditions and institutions I have mentioned (and in part an intervention in them), in terms of their ambient power, and in contention with these other ambient strategies, presents itself instead as a celebration of a power-free and unprecedented glimmer of future, technological, ego-dead bliss. Most pragmatically, this denial of power means a refusal to send those bodies who moved through *HPSCHD* out to marshal further spaces, or to link with other practices beyond the ones in which they were already engaged. The ideological denials of power and history operate materially to interrupt a process already intervening in power and history. The ambient power arrests itself, because

⁴¹ For a clear presentation of disco as a spatial-musical machinery involved in the erotic production of gay male bodily gesture, see Walter Hughes’ excellent “In the Empire of the Beat: Discipline and Disco,” in *Microphone Fiends: Youth Music, Youth Culture*. For the tradition in which disco must be comprehended, a tradition still of the usage of space as an aspect of alternative discipline, spanning from gay black clubs in the 1960s up through electronic dance scenes like house in the late 1980s, see Anthony Thomas, “The House the Kids Built: The Gay Black Imprint on American Dance Music,” in *Out/Look* 1989. In the chapters that come, I will move increasingly toward dance music in practical contexts as a way of understanding the relations of music and power. Cardew’s own simple answer was, following Mao, to make music for the people, instead of for the academy. Kyle Gann quotes him, without citation: “I’m convinced that when a group of people get together and sing the Internationale this is a more complex, more subtle, stronger and more musical experience than the whole of the avant-garde put together.” (*Making Marx in the Music: A HyperHistory of New Music and Politics*.)

one of the constituents of the material ambience is just this gesture, or an algorithm of this gesture, an affordance for the performance, of interruption.

Disciple of Sound

If La Monte Young had not existed, it would be necessary to invent him, if only as a counterfoil to John Cage. In Cage's aesthetic, individual musical works are metaphorically excerpts from the cacophonous roar of all sounds heard or imagined. Young's archetype, equally fundamental, attempts to make audible the opposite pole: the basic tone from which all possible sounds emanate as overtones. If Cage stood for Zen, multiplicity, and becoming, Young stands for yoga, singularity, and being. Together they are the Heraclitus and Parmenides of twentieth-century music.⁴²

At one point Cage asks "What nowadays, America mid-twentieth century, is Zen?"⁴³

One answer given the above discussion is: American, as always. Cage's nature is Thoreau's nature is Emerson's nature is James' nature: Nature as an American God, expansive, libertarian, merciless along its periphery.

Another story with a very American feel regards the young La Monte Young in his Idaho cabin, listening to the wind blow in long-drone breaths through the cracks, whistling its overtone series, the same Young pressing his ear to the metal tower carrying the power lines, listening to all those teeming harmonics.⁴⁴ What is American about the story is that it takes place on a frontier, at just that point where national power sparks and freedom breathes, at just that point of least law and most force.

This story of Young's, which is like a logo it is repeated so often, places him at two borders at once. In the countryside, in the wild, on the edge between civilized and not, his mother and he in the cabin, his father in the hills in a teepee, herding sheep. He has already learned to play cowboy songs. That's the first frontier. The second is there between the wind

⁴² Kyle Gann, "The Outer Edge of Consonance," p. 153.

⁴³ *Silence*, p. xi.

⁴⁴ Just as an example, Jerry Grimshaw, in his article "Music of a 'More Exalted Sphere': The Sonic Cosmology of La Monte Young" begins this way. So do many others. Grimshaw's article is an interesting situating of Young's profound religiosity in terms of his Mormon upbringing.

and its whistles, the deeper drones of the power lines and their harmonics. And this is a good, convincing story. It establishes just the pattern for understanding some of Young's work, even if it does not take us quite far enough to recite like the orthodox a communion with the divine.

The problem, I said, with Cage's music is that it floats, it has no weight. Another way to put this is that Cage's concern, for all its egalitarian language regarding the equal rights of sensate, quasi-divine beings, is still an intellectual one. When the ego drops, there exists a distribution of sounds whose complexity is unpredictable and perhaps ungraspable. Such complexity is desirable and natural; and it happens to exceed "new music" along just its own trajectory. Distributions of sonic events in an increasingly complex space and time, in the manner of Boulez,⁴⁵ are achievable also through the utter renunciation of control over the distribution—a release which itself requires sophisticated technique, as expressed for example in the *I Ching*. This utterly- but effortlessly-complicated distribution, then, without either grid or regularity, is a realization, on the order of seconds and minutes, of a structuration desirable also on a longer-term, political scale. But still, it is to be contemplated, and contemplated by a contemplation at liberty, like the hiker enjoying the buzzing of distant bees. Even if in principle, the distribution happens in no-mind, such that no "intentional" mind supposedly exists in transcendent dichotomous relation, still, the minding of each sound of itself, in that effortless way of the being of each, is exhaustive of the phenomena. There is no pressure, just something to think about. And this corresponds to Cage's denial of power.

Young for his part never expresses any interest in modelling a political organization within a field of sound (although Tony Conrad faults him for doing so anyway). Nor does he, for a moment, seriously play with the idea of removing his own ego from the process of composition, even if *Composition 1960 #5* does involve the simple releasing of a butterfly.

⁴⁵ See Boulez's elaborate considerations of how to produce complex distributions in *Boulez on Music Today*.

Young's exploration of sound is much more intense, much more intentional, and much more disciplined than this, even if it is supposed to bring the listener to a space where a real freedom, like that of the butterfly exiting its performance through a window, exists. If Cage is interested in the infinite distributions of elements on the infinite sheets of time and space, Young wants outside time altogether.⁴⁶ What is curious, though, given such a spiritual agenda—about which Young is perfectly forthright⁴⁷—is the intensive materiality by which it is pursued; it is an intensive sonic practice aimed explicitly at spiritual union with God, carried out through a purely material means. I would say, even a tactile means, at least in comparison with Cage, whose music involves sounds sitting happily like birds or lawn ornaments each in its own happy place. *Trio for Strings* begins by gluing itself to your ears, your chest and your eyelids, where it remains fixed. If Cage is ever successful, and his embrace of indeterminacy carries over to the listener, who is briefly liberated from a functional, restrictive organizing of sound, those sounds continue to exist in a free space, equilibrating in itself, expansive. The body of the listener just disappears, in transparent ecstasy, an ecstasy of transparency. The space in *Trio for Strings*, the space that those durations occupy, is the opposite. It has no space that is not full. Every expansion of tone, the very endurance of tone through time, is a push, it involves a force, and what may be heard, even before those Cagean passports, pitch, duration, amplitude, timbre, morphology, is this insistence. Like the press of substance in Spinoza, the very force of existence; this is Young's spiritual conception, derived ultimately from the same ancient sources. Yet, again, the spiritual adventure takes place upon one's skin.

⁴⁶ Gann uses this technical phrase, "outside-time," to describe what it is that Young's music aims at. He takes it from Iannis Xenakis' *Formalized Music: Thought and Mathematics in Music*. See "The Outer Edge of Consonance," p. 153.

⁴⁷ "...it's a way to find union with God... the Anahata Nada is a concept in the mind of God, so when you go out and find that place, you're actually inside the mind of God..." in "La Monte Young and Marian Zazeela at the Dream House: Conversation with Frank J. Oteri."

Trio for Strings, according to Kyle Gann,⁴⁸ who may be Young's favorite interpreter, consists in 29 gestures, separated by spaces of silence lasting between 8 seconds and a minute each. In the entirety of the piece, only 83 notes are sounded, and yet the piece lasts, in the particular recording to which I have been listening, one hour and nine minutes. Its interest is ultimately static sound, or what happens in the interstices of standing sound. There is no melodic motion, no interest in variety, at least on any superficial level. (On another level, that of the ultra-high-frequency harmonics set off by the lower fundamentals, there is indefinite variety. But you have to go through the thick to get to the thin.) And, as Young would clarify for himself at least by the 1970s, in his and Marian Zazeela's very long apprenticeship to the Hindustani singer Pandit Pran Nath, time is not the point either. Time is a veil to be pierced. In fact there are two veils to be gotten through: empty space and time, and then space and time altogether. These I have discussed above, in reference to Benjamin, on the one hand as the space of consciousness, conscious memory and cameras, girded by the optical unconscious (also the space of the body image and of "lived experience"), and on the other hand haptic space, tactile, habitual space, the space of somatic hum and body-ambient continuity. Cage's sounds, like the images from his eighty projectors, sit very easily in an open expanse. Young's sound, becoming immediately tactile, presses at the most vulnerable of the dimensions of perception. Presses and then pierces, letting the soul out "to a higher spiritual state," into "universal structure."⁴⁹

⁴⁸ Gann, "The Outer Edge of Consonance," p. 155.

⁴⁹ A prelude to the question I am driving toward is: is this universal structure also present in that early power line, or in the wind? And if so, is it really in another place; is it really distinguishable from its incomplete realizations? Or is, rather, its independent existence an hypothesis explaining a certain disequilibrium upon the phenomenal sheet by a reference beyond it, to its outside? (And isn't that outside in truth a production upon the sheet of phenomena?)

The first string enters. There is an attack, at the temporal onset of the duration. In many tones in many pieces, in many sounds in everyday space, in most, almost all,⁵⁰ attack is followed by decay. Not so now. There is a bow change, a breakage in the duration as the bow reverses direction, but the art of the player here is to allow the duration to continue through that break, as if it were the mind that stuttered, not the sound. That intensity of the attack, where the force of contact between bow and string is typically most pronounced, is therefore sustained indefinitely. The sound is all attack. The duration is all attack. Which is to say that it is all contact. With the exception of a total of 13 minutes of silence, and two or three out of 29 gestures where a very slow pulse in dynamics is allowed to emote across the sonic mass, the whole piece has this intensity.

Cage was wrong: sounds do not freely radiate. They implode, fragment, growl. There is at the heart of each a schism joined by tactility, between bow and string, into which the sound collapses and out of which it presses, like a magnetic field about an axis. That axis is cleft, without expansion in space or time, a slipping sheet of intersection between fiber and fiber. As in Freud's brain, energy meets energy with resistance; an excess is released; that excess is disequilibrium, a pressure, a tension. That is this first sound.

The sound of course does not exist only on that string, but also upon the ear. Ambient space is a place of places. The event of the sound is membrane and sound, a collapsed relationality between string, bow, and brain. That is how the mysticism works, according to Young. By this means we are entrained.⁵¹ In my listening case (as in so many others), dealing with a recording, there are at least four things, four nominal identities in pulsatile pressure

⁵⁰ (With the very important exception of the very many drones which now surround us—the drones of heating systems, appliances, traffic and so on. This will be a key focus in Chapter 4. For now just bear it in mind: whatever is said of the mystical experience with regard to drone-based music may also be applicable to everyday space.)

⁵¹ “When we listen to music, we listen to vibrations of air molecules come and strike the ear drum and enter transferred through the ear mechanism up through the neurons into the cerebral cortex and to some degree make patterns that are very much similar to the air molecule patterns that are coming against the ear drum.” Young, “La Monte Young and Marian Zazeela at the Dream House...” p. 5.

with one another: bow, string, ear—recording. And then also there is the air, the real medium, the real place, or ecological space, of this conjuncture.

(In what space is the air? We ought not to make the mistake of drawing a little cubic diagram in our equivocating imaginations and let ourselves be satisfied by that. That diagram is in some other space and in some other time. It is past and not present, afterward, in that moment of perpetual perceptual resurrection. What Young's sound is designed to do, like Cage's, but with such a greater force, is to collapse perception into sound. This route to God goes only by sound, not through thought about it. And the sound is in the air. So God is via the air; or vibrating air is the breath of God.)

This particular sound, the peculiar vibrating materiality of the trio of strings, when those instruments are caused to sustain in a disciplined hover,⁵² presses like a touch upon the body. At a higher volume it can be sensed upon the eyelids and the chest, and as actual pressure, actually at the eardrum. It is very precise, localized like a little crystal, a pin-like condensation of force, right there, on the ear. When it relaxes, you can feel it has left an indent upon the recurrent collapsing open. It has, for a moment, marred its shapeless shape.⁵³

⁵² In the case of this particular recording, four instruments. The piece was performed by Charles Curtis, Gascia Ouzounian, Reynard Rott, and Erick Ulman, and recorded by Anthony Burr. Curtis explains the odd usage of four players for a "trio" in a 2005 text titled simply "La Monte Young: *Trio for Strings* (September 9, 1958)." "The decision to perform *Trio for Strings* with four musicians, rather than three, reflects a commitment to the four-note Dream Chords as the source of all pitch material in the piece. Only with four musicians can the Dream Chords be tuned and sustained with the necessary stability. In the original version, the requirement of playing double stops (on one occasion, in artificial harmonics) skews the structural balance and the integrity of the tuning. Four musicians are required to satisfactorily sustain the four-note chords.

The disposition of the pitches, however, requires that violas be used for some pitches, and violins for others; thus I suggested to La Monte that, as in Schoenberg's *Pierrot Lunaire*, one violinist could switch to viola for certain sections, as required. He proposed further that both violinists have both violin and viola available. This unusual solution makes possible a rich and variegated timbral palette spanning various combinations of like and unlike timbres, while preserving the appropriate number of musicians." I will discuss the dream chord below.

⁵³ I should acknowledge that the music, fitting as it does in a tradition of chamber music, is not initially intended to be played loudly. Nor is it composed as a piece for tape. Even so, I believe the qualities I am describing derive primarily from the continuity of tone in the masses of sound, from the linearity of the bow pressure and the frequency.

One note, to begin with, then a second, usually a third, at maximum a fourth. Never more than this. But already at that first note, there is more than a sole fundamental drone present. Partly because this performance utilized just intonation,⁵⁴ the cloud of harmonics set in motion by the fundamentals is particularly rich. Along the taut surface of a single tone, diving below, circling back above, moving in a shimmering electrical web, there is a more rarefied sound, compounded from the faster vibrations, the harmonics ringing with that first note, together with the temporal front edge of the bow's tactile scansion of the string. Already these elements phase and dance together, whistling and setting off a mica light of high-frequency, pure tones, above what is most pronounced, but drawing the attention, also upward. It is this region, of combinant, releasing energy, that will be the most dynamic, changing and shimmering through the duration of the piece.

There is something important here in relation to the body image. It is problematic enough to locate each of these sounds in a standard perceptual space, though we do so. If the performance is to our front, there is the sound; if we are listening on speakers, the sound is in front of us, above or below our heads, stronger to our right or to our left, always occupying a position reiterated mnemonically as conducive to one of our prefabricated actions (which is just to say, with Uexküll, that the sound is positioned at a juncture of auditory and "operational" space). If we listen on headphones, the sound is inside our head, but still right or left, and even—a favorite problem of psychoacoustics—up and down: the high notes up, the

⁵⁴ A tuning also worked out by Curtis. He explains: "Young sees his entire compositional output as a single continuous work. It is interesting to note his ongoing engagement with earlier works as they are updated, reconsidered and re-envisioned. Nothing is ever considered final or closed; the output is a whole, and the whole is continuously evolving and changing. The rather anomalous situation in which a particular just intonation tuning is retroactively applied to *Trio for Strings*, a work which predates Young's familiarity with the system of just intonation by at least four years, is less surprising against this background. And inasmuch as the act of tuning becomes the exclusive focus of his preoccupation with sound and nature as of the early 1960's, the refashioning of *Trio* is that much more logical.

But what is most interesting is to note that, while the correct tuning was by no means obvious, and indeed evaded discovery for many years, once found it proved to require no alteration of the score as it exists, and no significant concessions in the tuning. It is a nearly perfect fit, and reveals a substantive continuity in Young's output which even Young himself might not have suspected." *Ibid.*

low notes down. I am not interested here in offering an account of that perceptual interpretation, except to note that, of course, it is still a mapping in terms of our body image. What is really interesting, rather, is how the fundamental tone first, but more, those ultra-high harmonics, which are the second level of this sound, challenge their own spatial placement. Jens Blauert, in *Spatial Hearing*, notes that experiments show long-duration tones to be less discretely positioned in auditory space than shorter ones. This is more true still for pure, sine tones. On both levels of sound there is then a challenge to the normal distribution we term perception. What is added with those upper harmonics, with their intricate beats, their slow-motion, high-tension waves, is their bleed-off, imperceptibly through the ceiling of sound. Where exactly does the set of heard elements end, and the domain of thought begin? The more intensely we deploy our attention, following those rippling, liquid-mica nets, the less clear this distinction becomes. One has to search for the harmonic one wishes to hear, to some degree through pre-perception, reciting it prayer-like across halves of seconds. This cycle of attentive recitation and sonic resonance is a glimmering knot; the top of the auditory space is the horizon of that twining, a perpetual fold between perception and cognition. And in addition to this, there is that strange, problematic fact that the sound is on one's eyelids and one's chest, that it seems actually to touch the ear. Attentive listening is now engaged with tactility. The assembly of heard elements must involve typically-segregated body locations. The whereness of the sound now forms complex diagrams on an abstracted positional machinery. The body image frames itself upon unfamiliar touch. Even that pressure on the ears causes problems, because there is one alleged space inside the head, or one space between the speakers, where an auditory convergence is perceptually positioned, but there are two ears, and one does not unify a stereo touch into a single perceptual entity. So the space of this sound is unstable, liable to breaking in half or in three; it multiplies. Now we are strained in a mnemonic egoic endeavor to knit a unity across an unfamiliar set of ambient points. We succeed and then we

fail, flickering. If Cage's music tries to elicit a gracious release of the ego, Young's overloads its circuits.

Now this taut space is specific to the music, specific to *Trio for Strings*. It is not a vacuity or a volume pre-existing the sonic duration. The space itself of the force of sound opens up with the initial attack, then drops back to nothing, with the speed of a magnetic field, into complete spatial absence. It opens again with another tone, and is expanded by the knife-like, crystalline harmonics. The next tone dilates it still further. Upon the cessation of one of these long-duration masses, that other space of everyday perception crashes down with a force belying its typical weightlessness. Two spaces, the one submerging the other. *Trio for Strings* emerges and cuts the glassy tissue of hearing's three-dimensional space, in which sounds lie at a distance, bleeding up with a jagged, collapsive space without open, formed of pressed tactility.

The way that first note sits upon the eardrum. What shall we call that? It balances there, like a grain of diamond dust, pricking, pressing. Invariant in time, it therefore varies with time absolutely. Call that intensity: the paradoxical existence of force in a space erasive of force. This is a first touch of Young's "outside" of time. Like Warhol's films, *Sleep, Eat, Kiss*, static films produced after hearing Young's piece, they oscillate between a plenum of presence and a vacuity of meaning; they are incommensurate, but this incommensurability presses.

But this for Young is only the beginning point, because the real intensity of each of these masses is in the intervallic essence of their structuration. Young used very few intervals, but very explicit ones, avoiding all thirds and sixths. In the set of compositions following *Trio for Strings*, as in this particular recording of *Trio*, these intervals are just-intoned,⁵⁵ in whole

⁵⁵ "In the system of just intonation, every frequency is related to every other frequency as the numerator and denominator of a whole number fraction. That is my definition of the system of just intonation." Young, "La Monte Young and Marian Zazeela at the Dream House..." p. 4.

number proportion with the others. Through the duration of a tone and a mass, each player must chase not only the stability of their own tone, but the balanced, perfected relationality to the others (and really their own stability only through that relation). The sound mass makes itself a sensate ideal, and each player has to chase this asymptotic perfection: the whole shimmering, beating drama of harmonics, as the precarious standing waves edge closer and further from the flattened ideal, expresses their attempts.⁵⁶ According to Young, what is so important about just intonation is that, in placing frequencies in whole number proportion, the durational period in which their full commensurability may be expressed is brought to a minimum. We get to hear their real physical synchrony repeated, repeated, until we start, habitually, through the entrainment that sound performs upon the brain and body, to grasp it, which is to be it, which is to feel it. Moving into the mind of God is having rational proportion move into the body via sound, via vibration. That influx of energy, of intensity, is not just one of tactility and sensate positivity in disruptive interference with the space of perception, although it is that; it is also an interruption of the higher-frequency rhythm of the brain, which it tunes. Music brings the existential flicker into harmony with “universal structure;” it tunes the brain to the eternity of perfect proportion. Young and Zazeela’s ongoing experiments, in their own living space and in the Dream Houses via precisely-tunable synthesizers, of more and more rare, higher-numerical proportional relations is an exploration of divine, abstract space, where no person, previous to the invention of these particular technologies, was able to go. By this means, Young opines, we are capable of evolving ourselves, very rapidly and to a high degree.⁵⁷

⁵⁶ Another example of this erotic relation between player and the perfect union with another tone can be heard in Charles Curtis’ performance of Alvin Lucier’s “On the Carpet of Leaves Illuminated by the Moon,” in which cello tones drop like moonlight descending in their decaying duration into synchrony with a slow-sweep sine-wave. Another parable, from Lucier, about control and release.

⁵⁷ “We in our process of evolution have reached a point where we are able to affect our own evolution in our own lifetime. We are at a very evolved point in evolution as humans, and I believe that some of us can actually change ourselves in our own lifetime. What are we doing when we’re learning these

I have not made this final rupture of perceptual space up. It is a real element of Young's thought, something he tells us his music aims at, and it is a real element of the thought of the religious tradition in which he positions himself. "Anahata Nada" is "abstract sound," that also invoked by the chanted "aum." It is purely, for this tradition, vibration, but hyper-audible, infra-audible, perfect vibration, vibration in its relationality, expressing itself outward in amplifying complexity into all the myriad vibrations of the world, which, rather than being simpler than the strict numerical proportions, are actually more and more complicated, existing in higher and higher numerical proportions taking a greater and greater time to complete. All the vibrations constituting all phenomena and its perception are founded on this tonic. The force of those sonic masses, at the beginning of Young's exploration of abstract sound, is due to their real power in relation to the structure of events.

Reciprocal Amplification with Ambience

Young certainly does not, like Cage, make the mistake of denying the existence of power. There is power everywhere in his thought, the power of sound, as in Alain Daniélou's book that Young so likes,⁵⁸ the power of discipline, the power of the composer to bestow upon humanity great gifts,⁵⁹ the power of the guru, but ultimately, grounding each, the power of God. Absolute power.

special intervallic ratios? Well, nobody ever listened to them before. Until I had a Rayna synthesizer I couldn't listen to these intervals. So, I'm affecting my own evolution by learning what these intervals are, by listening to them, by presenting them to people to listen to, we're changing." *Ibid.*, p. 64.

⁵⁸ Alain Daniélou, *Music and the Power of Sound*. Daniélou is the Westerner most credited with the presentation of classical Indian to the West. Young had an interest in his writing on just intonation early on, in the mid 1960s. It is because of that interest that he was eventually, through Ralph Metzner, introduced to the music of Pandit Pran Nath. Daniélou was a convert to Hinduism, to the same Shaivite mysticism that Nath practiced. (Frank J. Oteri, "La Monte Young and Marian Zazeela in the Dream House..." p. 20) I will discuss Daniélou and his book below.

⁵⁹ "John Cage once said, 'Artists are bearing gifts.' They're special emissaries bearing gifts for people, and they have an enormous responsibility to leave something important. It has to be something that's good for the people. And you don't do that by giving people what they want, you do it by giving the people this higher source of information that comes through you that you make manifest in some physical model that actually moves them deeply into the state where they want to have this experience

Young composed *Trio for Strings* while sitting at an organ at UCLA, holding particular intervals for long periods, feeling out what he needed or wanted to hear. The composition process involved a sort of feedback loop between him and the space, between listening and deciding, specifically deciding to sharpen listening. It was power, “Anahata Nada,” that Young says he was always after, and long durations offered him access to its community. You could say that he felt for intensity, the same sort of intensity that I have described as resulting from this listening and compositional labor, as being elicited by the production of some local space by Young’s aesthetic product. The long tones, the long pauses, and the particular chordal massing he eventually selected, all of which revolve about the “dream chord,” contribute to this intensity. These masses in their static sustain took Young, as he says they may take us, “toward a more spiritual path,” as opposed to a more “earthy or earthly” one, which we might achieve by slower rhythms, the sort felt as pulse.⁶⁰

The dream chord, consisting in four tones in the relations 3:2, 9:8, 16:17, 17:18, (and then of course the indefinite number of partial frequencies and sum and difference tones produced through the resonance and interaction of these fundamentals) made its first appearance in *Trio*. All the material in the whole of that piece is one or another aspect of this chord, and the chord itself makes three appearances as a totality, more if you count arpeggiations.⁶¹ The *Four Dreams of China*, which Young composed a few years later, are all different voicings of this same chord,⁶² and it was this piece that was performed by the Theater of Eternal Music during the first period of their work together. What is so interesting is that while the chord is clearly tied to Young’s mystical concern, it is also very closely related,

and go higher into this exalted state.” Young, “La Monte Young and Marian Zazeela in the Dream House...” p. 23.

⁶⁰ Young in Duckworth, *Talking Music*, p. 218.

⁶¹ Charles Curtis, “La Monte Young: *Trio for Strings*...” The chords appear, as Curtis says, at architecturally-important positions within the duration of the piece.

⁶² Personal conversation with Charles Curtis.

according to Young, to “what you can hear in an electrical hum.”⁶³ Thus the extended title, *Second Dream of the High-Tension Line Stepdown Transformer*.

All these pieces are characterized by long tones, the ethereal play of harmonics, the absence of melodic motion. I said earlier that these features render the music particularly active or even destructive with regard to “orthodox,” object-oriented perception, and to the body image, which operates as the spatial matrix according to which perceptual objects and their qualities are normally distributed, and which survives only so long as there are some percepts distributed according to its pattern. Insofar as long tones are less localizable spatially, and sine waves (the form of sum and difference tones) even more so, their very presence in an ambient field challenges the reconstruction of the body image. In the sheer duration of long tones there is an obstacle to object-formation, since objects by definition involve and require delimitation in spatial and temporal dimensions. Another challenge comes through the absence of melodic shape, since this precludes a mnemonic and intellectual reconstructive activity in which “intellectual” objects might take the frontal position of perceptual ones.

I acknowledged above that my own listening to the recording of *Trio* at a greater than quiet volume might run contrary to the spirit of the piece. This is not the case, however, for the *Four Dreams*, which at least as performed by the Theater of Eternal Music, were presented at quite high volume. Amplitude is an aspect of Young’s relationship with sound. In *Talking Music* William Duckworth asks Young, with reference to the Theater of Eternal Music, “Why did it have to be so loud?” Young answered:

Well, you know I wrote in ‘Lecture 1960’ about my interest in getting inside of a sound. I liked to be able to go inside the world of the sound and leave the other physical reality that we normally exist in. Also, when you’re working with tuning—if you’re tuning by beats—when you amplify the tones the beats are amplified. It’s like putting something under a microscope. You can hear the discrepancies in tuning even more. You can have a much finer, more precise degree of intonation because of the fact that you have amplified the frequencies...

⁶³ Young in Duckworth, p. 241.

I will return to tuning in a moment. First I want to repeat that at high amplitudes, sound also becomes tactile. When sound can be felt on various surfaces of the body, and viscerally, not only as an “auditory stream” struggling between objectivity and collapse into the field, but also as pressure on the ears and so on, there is a further set of interferences with the normative operation of the body image and hence with perception and the reiteration of the existence of a distantiated subject. One percept becomes two, or three; and the location of the percept oscillates, between the surface of the body and the projection of a source, and between various aspects of the body. In this muddle, a new, twisted body might be said to be formed; or it may also be the case that the very space of perception collapses: the ego dies; one enters sound. It does not seem too great a leap to suggest that what Young above calls “the other physical reality that we normally exist in” is actually normative perception, and that the world of sound to which he gains entrance therefore need not necessarily be designated as transcendent. It may be instead the actual world of energy, with which the body is always in continuity, but community with which is typically barred by a certain style of perceptual performance involving subjects and objects, focus and periphery. In this manner, the mystical ecstasy, the transport into an intensity beyond the self, can be real.

The hum of the high tension step-down transformer, of the power lines in Idaho, the wind through the chinks in the walls of the cabin, the whirr of the turtle motor to which the Theater of Eternal Music tuned, are not transcendent fields, but real ones, the sort to which for the most part we remain oblivious, which for the most part we are unwilling and unable to enter or engage. “Something that really appealed to me when I was young,” says Young, “was what Debussy said: ‘Listen to the words of no man. Listen only to the sound of the winds and

the waves of the sea.” He mentions that Angus MacLise “felt that rain was the model of his drumming—the rhythms of rain.”⁶⁴

Is it the case again that “divine forces,” as with Cage, and as we will hear one more time from Timothy Leary, in the end designate ambience? This is not how Young typically speaks. In the linked practices of Young’s composition, the system(s) of just intonation, the practice of tuning, the exploration of just relations in the Dream Houses or in Young and Zazeela’s home, there is always supposed to be something truly divine, something like God. One reason for this is that just intonation involves a certain mathematical purity, in its whole number proportional relations of frequencies, that is not to be found in exactitude in any particular performance. Even with the use of synthesizers, technically speaking the perfect proportional relation is never quite achieved. This is particularly clear when one considers the practice of tuning. Tuning to just intonation involves listening to increasingly finer aspects of sound, and indeed also to increasingly high frequencies, since the relations and beating of partial, sum and difference tones offer a much greater affordance for adjustment. The practice involves a heightened attention to these frequencies and their beating, and this is a beating which never truly, totally stops, even though it may slow down past the point where it is perceivable.

Thus it seems that the pure relation which drives the tuning practice and to which the composition points the way does not quite exist here in our material dimension. The tuning process, and the music produced in relation with these listening and compositional practices can thus be thought of as fundamentally oriented toward an “abstract sound” which provides the force of the listening experience, but which is in itself always essentially transcendent, that is to say, absent. Anahata Nada on this interpretation, something like pure proportional

⁶⁴ *Ibid.*, p. 247.

relation, and not so far in this respect from Plato's perfect forms, remains like these forms distinct from all the world, the latter of which is nevertheless completely dependent on it.

In the language Young uses, the power of the ambient fields he builds depends upon this absolute power, ever at a certain distance, and the power of individual listeners or players depends upon the strides they make towards it; even their devotion to it. Nothing is changed though in the practice or in its effect, or even in the intensity, if we reverse the emphasis of the interpretation. That is, we can just as well say, as we have for the past two chapters, that the intensity here is material, and that the allegation "divine" is a manner of accounting for that feature of the phenomenal sheet, which as we all know is supposed to tend toward equilibrium. Perhaps it is the case that the predicate "divine" is a placeholder for intensity, and that divine power is therefore ambient power in a verbal disguise.

None of the sophistication of these practices is lost on this reading. On the contrary, just intonation, for example, becomes a technique of intensity production, a technique of ambient production with the capacity to alter the state of listeners. The exploration that Young and Zazeela carry out would be a sort of affective, intensive experimentation, a finding of new states. After all, as Spinoza famously says, "no one has yet determined what a body can do,"⁶⁵ and consequently we don't what we can feel, or what our powers are. These are practices expanding those powers, based on the phenomenon of resonance.

One other thing that happens in the process of tuning to just relations is that, as the relation begins to take form, as its perfection is approached, each of the tones in relation begin reciprocally to amplify one another. This is one way in which a listener can tell that the relation is being approached. In this system of resonance, the listener is one component, whose activity alters the other components just as those components alter the listener. This is not a one-to-one, subject-object relation. There is rather an alteration of the minutiae, of the grain

⁶⁵ Spinoza, *Ethics* 3P2S, p. 155.

and the frequency of the performance of all the elements involved. Each works upon all the others, and through time, as the capacity of the practitioner grows, each amplifies the other. The listener, the tuner, literally resonates, in a variety of ways, with the system upon which she acts and to which she is increasingly attuned.

The ambient fields to which Young is attuned, taking the predicate “divine” or not, are real fields. His is a practice of resonance with them. And it doesn’t matter whether the dream chord ultimately is the hum of electricity or not. Either way, it is the hum of a nature locked in history and in power; it is this nature, in his loft, with which Young resonates, and together with which he acts. One way or the other he too is locked into power, power in space, a power that touches, singing in bodies and wires. The question is how great this resonance becomes, and whether at some point or other it is interrupted by a contrary technique, one that says: “this power is something other; its action must stop here.”

Material Sources of Mysticism: Daniélou

The manner in which Young grasps his own relation to sound and listening, and the cultivation of that relation by means of specific techniques, depends on the prevalence of certain discourses and certain musics in the serial ambiances he has inhabited. Each of those ambiances was produced, and constantly reproduced, through a large number of overlapping processes, “deterritorializations,” “territorializations,” “reterritorializations,” to use Deleuze and Guattari’s language,⁶⁶ at the actual material level, mingling their effects in the manner of interfering waves. That is to say, all the sensory fields in which Young was and still is submerged are historical artifacts that are at the same time productive forces. They are moments in a pulsatile continuum of ambient productivity, a continuum within which the

⁶⁶ See particularly *A Thousand Plateaus*.

relative powers of ambient producers conflict, combine, cancel. Ambience is produced and it is productive.

It is instructive to trace the way in which certain ambiences have been produced, because such tracing demonstrates the connection between locality and larger-scale processes, and because it shows how dominant formations of production bear upon and limit local production.⁶⁷ Such a tracing may focus on any of a number of elements. We may trace, for example, the production and distribution of certain classically “ideological” elements, like texts regarding Indian music and Hindu spirituality, to see how they came to compose one portion of a lived space and a material for productive activity within it. We have done that to some degree already with the Zen of which Cage made use; we can do it for the Shaivist Hindu strand to which Young gravitated; and we will do it for the Tibetan Buddhist texts that influenced William Burroughs, Timothy Leary, Angus MacLise, Terry Riley, John Lennon and Eliane Radigue. We may also choose to trace the spatial trajectories of recordings, which constitute such a new and interesting force of production of ambience in the twentieth century, with all the varied consequences traced by Benjamin. Both texts and recordings in fact constitute forces of production of further ambience, in clear and direct conjunction with other things that might typically be referred to as “bodily techniques,” things like yoga and meditation, or the listening techniques we have already discussed (as well as the dominant, mass-distributed techniques that were the focus of Chapter 1). In either respect we have to consider not only the point of origin of certain texts, techniques, or mechanisms, but also the manner of their selection. It is central to the Marxist theory of ideology that only a specific set of ideological materials will find broad distribution in any social formation, namely those that augment or at least do not hinder the property and productive relations constitutive of that formation. Materials are distributed so as to construct local ambience in some specific way.

⁶⁷ This will be one significant task accomplished in Chapter 4.

Each ambience is granted the materials to reproduce itself still within some relations of dependency, exploitation, passivity, and so on. The interpretive and technical apparatuses of “musical mysticism” thus are “allowed” either by accident, or because in one way or another they facilitate the diminishment of tension in an ambience, bypassing the disruptive action of that ambience upon its wider context.

I titled the present chapter “Importing Perception,” because it deals with a forming of perception, on the discursive level, the level of bodily practices, and the level of spatial production, that has some strong connection to origins outside the place of their present appearance. Young’s own Shaivist Hindu perspective cannot of course be entirely explained by any one current of import. He grew up, after all, on the West Coast of the United States, where Theosophy and the like had been in place for some time. But one clear route by which he became aware of the concept of Anahata Nada, and of the rasa theory linking specific intervallic relations with specific emotional states, was Alain Daniélou’s book *Music and the Power of Sound*, the first significant book dealing with Indian music theory and its relation to Hinduism to be written for a Western audience. Young cites the book and Daniélou’s other work on various occasions. It was also via this interest in Daniélou that he came into contact with Pandit Pran Nath, the Shaivite singer whose apprentices Young and Zazeela became. Daniélou, it turns out, was also a key importer of “world musics,” perhaps the first such importer on a significant scale, and as such was responsible for some part of the ambient production as a result of which Young could hear Ravi Shankar, pygmy and gagaku music as a young man (“plateau musics,” incidentally, which build to a certain intensity and hold).

Daniélou, like W.Y. Evans-Wentz, whom we will discuss shortly, was a key performer of what I will in the next chapter refer to as the social “aesthetic function,” by which materials from other social/productive formations, or for that matter from “nature” at large, are integrated into a certain dominant formation. Both men operated at the literal

perimeter of the Western colonial world. Both were privileged in various ways; they had money, social connections, a high degree of education, and so on; and both were driven nevertheless for one reason or another out of the comfortable homogeneity in which they were raised to pursue some exotic lure; they followed a sort of erotic attraction to the Other. In both cases they followed the roads, stayed in the houses, rode in the vehicles by which all other physical entities circulated: they too coursed along the veins of Empire, to which they had broad access as a result of their social position. This included access to the technical capacities of individuals organized into the colonial system, like those of translators and teachers.

Daniélou, if also, not surprisingly, a classist and a racist, was really quite a remarkable individual. A dancer who studied with Nijinski's teacher, a musician who played a number of instruments, a painter of landscapes, and finally one of the foremost "Indologists" of the middle twentieth century, translating both Hindu and Sanskrit and interpreting Hindu doctrine in great detail. Driven outward from his home in France by a fundamental dissatisfaction with contemporary Western culture, its sexual Puritanism and homophobia, but also its "bastardization" of cultures and races, he nevertheless circulated through the outer fringe of that world via the highest pathways of its own financial and governmental structure.⁶⁸ And while he was himself very much an exception, artistically and intellectually gifted, and with a sexual preference, clear to himself from his earliest years, at odds with proper social norms, he nevertheless retained a set of social views which confirmed just the network of relations and access to capital that facilitated his ongoing escape from the initial world he found so constraining (which network he inhabited without break). The Hindu religion that he eventually found and whose lessons he announced Westward confirmed his own religious, artistic, and even sensual leanings as valid, but also asserted the desirability of racial and class purity and the existence of a transcendent but grounding "universal structure" upon which any

⁶⁸ For all the details here, see Daniélou's autobiography, *The Way to the Labyrinth*.

legitimate social, ethical, and even musical system must be based, and which, accessed, justifies the separation of one class from another and the like segregation of master and pupil. Moving along the militarized fringe of colonial empire, he unearthed and assimilated ideological products asserting that social hierarchy is a necessary, indispensable aspect of nature.

Daniélou chose religious doctrines, spiritual techniques like meditation and yoga, and musical techniques and understanding, according to his own passion. Extremely mobile and with plenty of time due to his money and connections, he went where and learned what he wanted. And yet, having been pre-constructed himself, according to a set of techniques appropriate to upper-class France, among which techniques I would include the set of his beliefs, for example those regarding the natural character of hierarchy,⁶⁹ and also according to the set of techniques he continued to practice, techniques of social maintenance and financial upkeep, his passions were determinant, in a manner fully related to the social formation whose orbits he spun along.⁷⁰ Those “other” discourses, techniques, practices, spaces, smells, sensations toward which he moved erotically thus stood also in some taut relation to the habit-systems of which he was composed. One might say he resonated with them, or they with him. And this resonance would be one way in which habit-systems can override, overwrite, amplify or cancel one another.

I am not saying this is a perfectly determinant process, but only that it is one with a certain degree of determination, one that is articulated and can be described to some extent. As a gay, intelligent, curious man, Daniélou felt constrained in his initial context. As an

⁶⁹ Here we are in the territory of “dispositions” as those are described for example by Pierre Bourdieu. See e.g. *Toward a Theory of Practice*.

⁷⁰ One might think here of Hegel’s careful presentation of “passion” as the driving mechanism of history, in *The Philosophy of History*: passion constitutes the innermost core of the individual, but is nevertheless historically constructed, and reciprocally constructs history. Passion is the forcible, operative aspect of the “cunning of Reason.” This reference is not so far from the present study, since it is so central for Adorno.

extremely wealthy person, he was capable of fleeing. He went quite far, following his own religious tendency. But his flight returned an echo, throughout his life, first an echo of text, and text easily transformable into practice—here was the *rasa* theory, the lists of correlations between intervals and states, the details of the science of Raga—then an echo of sound, a flow of recordings, the “Unesco Collection” which he was commissioned (due again to certain social contacts) to produce.

There is something interesting in the standards by which Daniélou chose the music he would record. In the case of Hindu musical philosophy, recall, he gravitated toward accounts emphasizing “universal structure,” hierarchy, the segregation of races, the importance of masters and pupils. In the case of sound, he was after “purity.” What this meant practically was that any “world music” already bearing the stamp of colonial interaction, the Spanish guitar, for example, in South American music, was ruled out. The passion for the pure, for the Other in its unadulterated form, as untouched by Empire, seemed to be the greatest sonic lure for the ear of Empire itself, or Daniélou. There was a force to this Other music which might be said to consist precisely in its incommensurability with the dominant forms. This is what gave it intensity (and here I am already leading toward Adorno’s aesthetic theory, to be laid out in Ch. 5), and that intensity itself was felt to be an aesthetic value. Therefore the intensity was appropriated. Does this evaluation conflict with the one just preceding? Can one resonate with the incommensurate? Perhaps only insofar as there is yet something common in the bodies, patterns of movement and feeling and perception, but something which is so far suppressed, non-functionalized. The incommensurate, that is, the intense, might resonate with the incommensurate one oneself is, outside one’s ego.

There are two contrary, interlacing, even oscillating moments, then, to the aesthetic function, which I will discuss in greater detail in Chapter 4. There is one moment in which the outside operates, itself as an aesthetic, intensive, or immanent force, pulling the perceiver

toward it, into it, opening him up in a moment of exotic pleasure and contaminating, territorializing him with itself. And there is another moment in which the perceiver retracts, selecting, reducing, labeling, and then distributing the product of his encounter. Empire in its ambient uptake works like perception, only through a certain exposure that precedes it, upon which it depends, and which it quickly hides. From this point forward the products, the techniques, the new forces of ambient production, are integrated in the formation itself. *Rasa* theory sits on my shelf, an element ready to enter into production.

Is there any way in which the Marxist theory here may be correct? Is it the case that musical mysticism integrates with a certain domination of the locality by large-scale productive relations, holding the locality in some pre-structured passivity? To some extent, yes. Insofar as the intensities one builds, in space, in Young and Zazeela's loft, are understood as having an essentially spiritual or "divine" character, this logic has intervened such that the feeling of the participants in that loft is not to be directed to the material context. They are not to spill into the street. Their resonance is supposed to amplify into a transcendence, not beyond the exact walls corresponding to property and law. And a resonance of intensity into transcendence is indefinitely preferable to one that blocks traffic, or challenges ownership. It is certainly true that Young's practice continues on, developing itself, through the practice of his own disciples. Insofar however as those practices remain contained within certain pre-established institutional contexts, their force is routed to the reproduction of those institutions, as opposed to elsewhere. This is not, incidentally, necessarily the fate of the recordings, especially when they circulate, as they now do, through social space via fiberoptic cables, to a significant degree outside the determinations of property law.

Secondly, there is a real way in which the selections for hierarchy which Daniélou carried out appear again here. While it may seem that master-disciple relations do not bear upon the immediate relation to ambience or upon the relation constituting perception—that

essential, immediate intercourse of body and space—this is in fact not the case. Listening and sound production practices which involve as a key feature the superior knowledge of the teacher necessitate, in the moment, the pacification of the student with regard to the ambient field. That is, the master-disciple relation is an active-passive relation, not only between the two persons, but between the persons and their space. The disciple is not to trust his or her immediate relation to sensation or perception, not to validate her own listening, because by definition it is insufficient.⁷¹ Nor is the disciple to engage in a direct production of ambience, without guidance, because they do not know properly how to produce. Due to the structure of the relation, which is itself a technique, the disciple may not act. So while it may well be the case that the disciple, like the apprentice in a shop, is really technically empowered later through what they learn now, such that their capacities of listening and motion become much more significant than before, it is also, at the same time, the case that they are disempowered in the present. The techniques of listening, singing, playing lead to a greater power and a greater reciprocal amplification with ambience; but the technique of discipleship—and that is one thing Daniélou clearly imports—is instead an algorithm of diminishment.

On the other hand, the capture of the “pure” via recording, as well as the import of listening, compositional, and even disciplinary techniques does still constitute a perpetuation of those techniques, in a perpetually mutating form, from the exteriority through the interior. In this respect the colonized colonizes the colonizer. These new “forces of production” of ambience and of bodies, of the bodily-ambient continuity, are also ways in which those particular manners of formation, manners of expression, manners of the sustaining and development of intensity in passion and in perception continue to live. They are resources with which to build. One must simply evaluate the material reality of their function within some

⁷¹ The critique I offer here, and the point I am making, that a social relationship is itself a concrete technique involved in large-scale social-systemic power, is very similar to the one that Jacques Rancière makes with regard to systems of education in general, in *The Ignorant Schoolmaster* and in *Althusser's Lesson*. His contention, further, is that education does not require it.

particular ambience, through observation and experiment. And then one must practice and build. Insofar as one reiterates some techniques of ambient production, particularly when these techniques put one in explicit conflict with dominant property and productive relations (for example, actually shutting down the street, producing ambient structure beyond property lines, playing illegal music), the classic Marxist thesis regarding the press of “productive forces” toward social alteration may well hold. A certain manner of construction and of practice, a certain body-ambient alliance reiterating productively, will attune other ambient elements to itself: will make certain aspects of the material world resonate, will realign them according to the powers of the practice. In this moment production expands, and is even redefined.

Recording as Plateau

In *Steps to an Ecology of Mind*, Gregory Bateson, who studied Balinese culture, called a space involving high arousal, but not oriented toward climax, a “plateau.” (That is the origin of Deleuze and Guattari’s term.) He also used it to describe the music the Balinese used in their trance-based ritual theater. Supposedly Debussy, at the turn of the century in France, had observed the same character in Gamelan music, moving as a result into a less-developmental classical form. The pygmy and gagaku musics that Young says he favored also have this character, of sustaining an intensive state for a long period, without noticeable large-scale dynamics, as do Young’s own long, continuous-tone pieces, beginning with *Trio for Strings*. To a significant degree it seems that this is what distinguishes Young’s work from Indian music. While he is interested in ragas, which develop, at least in the early 1960s work he preferred to sustain the just interval as a means by which gradually to inhabit structured sound in an increasingly fuller way. This is particularly the case with the Theater of Eternal Music, which pressed such experience to its extreme.

The Theater of Eternal Music still exhibits a tight connection to the Shaivite tradition. Each of their later performances was of the same piece, related to the *Four Dreams of China*, and entitled “The Tortoise, his Dreams and Journeys.” This piece, named after the “turtle motor” in the tank of Young and Zazeela’s pet, which they used to tune, was supposed to extend infinitely; each performance was then just a certain auditory window, a peeling back of a veiling hollowness, onto a timeless river of sound. Such a conception of course reiterates the notion of Anahata Nada. Even some aspects of early 1960s counterculture, like the usage of marijuana, that might seem distinctive really were not. In Daniélou’s India, the hemp beverage “bhang... [was] considered the sacred potion of Shiva,” facilitating “a complete loss of the sense of time, a sharp intensification of all the perceptions, and heightened powers of analysis. If one is listening to music, for instance, it becomes possible to hear the separate parts played by each of the instruments...”⁷² Young has said that the members of the Theater of Eternal Music got high before every performance.

The performances were continuous-tone, justly-tuned, highly-amplified sheets of sound, undoubtedly influential for Cale’s involvement shortly afterward in the Velvet Underground, sustained for several hours. Viola, violin, early on Angus Maclise’s hand-drums, organ and voice, chasing some just interval. No development, except for the development of intensity. During the first ten or twenty minutes people unequal to the immersive task (including perhaps those unavailed of the divine potion) would leave. Those who remained would settle into this intensity. Young and Zazeela’s loft thus became a plateau, a highly-structured (if still not perfectly-rationally-proportional) ambient volume. It teetered on the brink of time; it vibrated like a high-amplitude god, into which each body, vibrating also, was materially subsumed.

⁷² Daniélou, *Way to the Labyrinth*, p. 142-3.

Young became interested in Indian music because of a recording of Ali Akbar Khan, which he listened to in his room over and over. At present, most of us, particularly those born too late, know of the Theater of Eternal Music and that loft only on the same basis, by means of the few recordings that have entered, by one route or another, into social-spatial circulation, the best known of which is “Day of Niagara.” We have heard some relative of that loft-plateau, structuring some other space. On the model I am attempting to develop, and will develop more fully in the second half of this study, this later moment of construction is essentially a way in which the first plateau continues itself through time and space. The plateau is alive, and its essence, as per Spinoza, is to sustain itself in existence and to amplify its effects. In this respect, as also by means of his teaching his compositional and listening techniques to other people, Young’s production eludes the dangers of its mystical interpretation, and continues on to exert a material force on the continuity of ambience.

The passage from source to recording to replay would typically be hypothesized as a deterioration. That is the character ascribed by an information-processing or “communications” model, for which recordings are transcriptions, duplicates or copies. That a new pair of speakers playing “Day of Niagara” constructs a new and potentially intensive sonic field from this perspective is irrelevant. Assuming the normativity of the source, the passage of the signal must be imperfect, and every articulation, every capitulation along the path to replay must enter in noise obscuring clarity, contamination of purity. Yet this is not the only way of conceiving these events. From this one perspective, each collision of “signal” and “resistance” (message and not-message) “reduces the complexity” or the integrity of the original message. This is true however only so long as a message is conceived at all, and a priority hence granted to a temporally prior position, a point by definition outside the phenomenal sheet, absent by definition from any point in the series of “transmissions.” If on the other hand each point of intersection between “signal” and “resistance” is conceived as

itself productive, insofar as it enters in some new complexity to whatever echoes out, the process of entropy is reversed. The heat death of information becomes a radiant heat. Consider then the multiplication of points of intersection with the recording of Young and Zazeela's loft. There is something essential, if timeless and grating, about the juncture of bow and string. That is a point of rasping collision breathing out sound. Now however there is the additional conjugation of air and pick-up, current and wire, current and speaker driver, cone and air, air and microphone membrane, different current in a different wire, current and recording head, head and tape. From 1965 forward there is the tape and the air about it, weathering it, changing the tape and the structured space its playback will produce. Each of these junctions is a surface of tactility, all touch, and whatever emerges from each such surface so as again to collide is equal part one aspect and another. Each more outward stage therefore exhibits a greater complexity. Then, as I said, upon playback, a new array is set into motion. And this array will already be the conjunction of some sounds with all the surfaces in which they hum. Each surface of material transduction is at the very least one-half foreign. The recording itself must be almost entirely so, as the "source" recedes into a pinpoint of abstraction.

Possessed by Ambient Collapse

That there are foreign forces present and active in the "played-back" or newly-constructed field (or at the least that the recording is a recording of a whole system of forces not at all limited to the nominal source "content") may lead one to speak of multiplicity instead of unity, and with that, in the religious vocabulary, of the demonic instead of the divine. If it is granted that such a structuration, traversed, amounts to a certain spiritual state, as Young and Daniélou would have it and as corresponds in a peculiar way with Gibson and with James, one might even use the term "possession." Recall that James did something similar, suggesting that the forces in "religious" experiences swept over consciousness from

out of the felt bodily-ambient. Instead of universal structure, pluralistic agency, anarchic, multiple force.⁷³ Each point of the sonic field its own center, radiating not those conveniently-conceivable parameters of Cage's, amplitude, duration, timbre, dynamics, but rather feeling itself, affective life. Each sound an impulse, each impulse an autonomous being: a sonic-somatic field that penetrates and possesses, luring the ego into a violent but erotic dissolution. This is the discursive rendering Angus MacLise, nodding to Aleister Crowley, seems eventually to have adopted. At the same time it is the sort of contamination he pursued in his own later music.

After leaving the Theater of Eternal Music, then leaving the Velvet Underground, MacLise, like Daniélou and Evans-Wentz and even earlier the Theosophist Madame Blavatsky, began to travel East. He ended up in Kathmandu, Nepal, where he would die of tuberculosis, leaving a son who is now acknowledged the reincarnation of a lama. At some point in these travels MacLise became a Tibetan Buddhist, but he remained interested in Crowley, whose *Diary of a Drug Fiend* he was adapting for the screen when he died. Both Tibetan Buddhism and Crowley's system of Magick assert the existence of demons. The title of MacLise's tape compositions during this time reflect this interest: "6th Face of the Angel," "Beelzebub," "Dracula."

Of course these are only titles, words, and while MacLise also recited his poetry as one aspect of his recordings, a title is certainly distinct from the ambient volume to which it refers. The "truth" of MacLise's musical production cannot be found in the names of pieces. But there is some significance in the interpretation. Just as Young, sensing a certain intensity in certain fields of sound, was led to refer that intensity to the "divine," MacLise, like so many rock bands afterward, was led to the contrary to mention the demonic. Young related the

⁷³ (Recognize here Nietzsche's infinitely-dense wills to power, or Spinoza's worms within blood within worms within blood...)

divine to “universal structure,” a unity composed of stable relations; the demonic, already with Nietzsche, names the opposite, the multiple in flux. Either ascription is possible because both are hypothetical: they render a certain “truth” of the ambient array which is supposed to account for its peculiar force. The field in question is not just any volume of vibrating air, says the interpretation, but a special one, felt in a special way, and one specifically liable to interrupt the intactness of the functional ego. The divine and the demonic are names for this force which posit it as derived from a supplementary space, the persistence of pure relation or the domain of chaotic spirits.

Each interpretive technique has an institutional history. The divine as universal structure is the mantra of a certain hierarchy; the demonic as multiplicitous chaos is preferred by heretics and revolutionaries, who it must be said have a belligerent penchant for verbal reversal. The prototypical anarchist Mikhail Bakunin, thoroughly an atheist with no real use for anything spiritual, nevertheless happily identified himself with Satan,⁷⁴ “the first freethinker and the liberator of worlds,” as did Nietzsche, who called himself the antichrist decades before Crowley in the course of “philosophizing with a hammer.” In both of these cases the heretical religious designation is intended to neutralize the orthodox one, and by that means to liberate something material.

Effectively these interpretations are productive techniques. Just as perfect mathematical proportion can play a powerful role in guiding the production of composition and sound, so can the notion of multiplicitous chaos. Just as the attitude of respect corresponding to an acknowledgment of the divine can yield an enduring concentration, so can the attitude of sacrilege, bent on breaking the grip of names and truth on things, compel an intensification of the relation between body and sound. MacLise adopts this latter strategy. Whereas for a communications engineer, recordings are diminishments of the thing they

⁷⁴ See Mikhail Bakunin, *God and the State*.

record, and noise must be kept to a minimum so as to allow the original to shine through its serial reductions, for MacLise, even more than for musique concrète, the process of recording becomes an enrichment instead. For musique concrète in the 1940s through the 1960s, with Pierre Schaeffer and Pierre Henry, recording offered a wide new range of possible sonic elements: new sounds, but of the rather clinical order of Cage, with no tendency to possession and no essential danger. For MacLise, the splicing and stacking of tapes allowed a buildup of noise, and the production of a sonic field the elements of which slide continually one into the next, whose character is thus properly “ambient” as opposed to an organized series given for serial focus. Rich, incommensurable noise, irreducible to whole number proportion, and supposedly rent through with nonhuman life.

MacLise made field recordings, for example of the Kathmandu markets, then played and recorded drums, then bounced those multiple recordings down to one recording, over which he read his poetry, which had to do with “religious experiences” of the fracture of ego and possession by the vital elements of the sensory field. The composite of arrays produces a new array, felt somehow as more intense than what preceded it. Another way to say that would be that the microphone intersects the Kathmandu market, then collides with MacLise’s apartment. The intensity of the consequent recording correlates with the history of productive collision, through which concrete spaces propagate their own bodily-ambient forces outward. In “shortwave radio” MacLise captured snippets of invisible, typically inaudible atmospheric communication (shortwave transmissions), built up a sonic texture by layering recordings, then cut rapidly from one texture to the next. The result is similar formally to some of Schaeffer’s earlier recordings, which tend to concatenate acousmatic material, but with a taste for noise, blur and overlap that Schaeffer, who had a fetish for Cage’s manipulable

parameters,⁷⁵ would never have conciliated. The recording is always getting away from MacLise, and that is the point. The recording constructs an ambient field with the capacity to fracture the ego, and pull the vital body into an already-living, vital and dangerous space—real material space, produced through this material history, and itself a productive collision, of playback and other events.

MacLise's work enters into a certain lineage, which accompanies but may be differentiated from the lineage of mysticism through minimalism. On the textual, interpretive side, Crowley for example was a member with William Butler Yeats of the turn of the century occultist masonry called "The Order of the Golden Dawn," which focused largely on Eastern "esoterica." He acknowledged specifically the influence of James' *Varieties of Religious Experience*. He included Madame Blavatsky's *Isis Unveiled* as an appendix to some of his own writing. And of course he would come to be cited in the late 1970s and 1980s by a significant number of metal bands. Before that, he was important for avant-garde artists like Kenneth Anger and MacLise.

Crowley's demon-oriented, "Eastern" esoterica would be referenced around this same time also by tape-oriented sound producers including Can, whose *Tago Mago* is named after a set of islands thematized in Crowley's writing, Throbbing Gristle, who would reference Crowley in explaining their own interest in audio recordings of dark voices and events, and then later the descendants of Throbbing Gristle, Psychic TV and Coil. Coil would name an album, "Astral Disaster," in reference both to MacLise and Crowley. In each of these cases a music sharing an orientation toward "plateau" rather than development, often involving a drone, related to trance states and "Eastern" meditation, was distributed with a "demonic" rather than a "divine" interpretive package. Two further characteristics separate this demonic mysticism from Young and Pandit Pran Nath's divine one. These are the usage of tape as

⁷⁵ Which he developed at length in *Traite de Objets Sonores*.

material (and with that a happy allowance of noise of various sorts and emphasis on ambience), and the centrality of percussion.

Material Sources of Mysticism: Evans-Wentz

There is a third key ideological import into the European and American contexts in the early twentieth century tightly related to the Eastern bent of countercultural aesthetic production. The first was D.T. Suzuki's Zen, the second Alain Daniélou's Hinduism and mysticism of sound; the third is Walter Evans-Wentz's Tibetan Buddhism. Evans-Wentz was a traveler similar to Daniélou, and a devoted Theosophist, who was responsible for distributing the first translations of *The Tibetan Book of the Dead*, *Tibetan Yoga and Secret Doctrines*, the biography of Milarepa, who brought Buddhism to Tibet (published as *Tibet's Great Yogi Milarepa*), and later *The Tibetan Book of the Great Liberation*. The first of these in particular had a tremendous influence on 1950s and 1960s American counterculture, from the beats through the hippies, psychedelia and new age. Timothy Leary, Ralph Metzner, and Richard Alpert would base *The Psychedelic Experience* directly on Evans-Wentz's version of that book; the Beatles would base "Tomorrow Never Knows" on the Leary text; other psychedelic bands like Can would reference its conceptions less directly. MacLise, the minimalist electronic composer Eliane Radigue, and Francisco Varela all identified themselves as Tibetan Buddhists and output sonic and textual products explicitly related to Tibetan Buddhism (Varela's flickering brain, MacLise's poetry, Radigue's *Trilogie de la Mort*⁷⁶ and *Songs of Milarepa*.) Early industrial music like Throbbing Gristle and then later electronic dance music like rave (which is connected to Psychic TV) would continue to reference Tibetan Buddhist figures, including for example "aum" symbols at raves in Goa,

⁷⁶ Which includes one piece, "Kyema," based directly on the *Tibetan Book of the Dead*, and another, "Kalisha," named after the Tibetan Buddhists' most sacred mountain.

India (a favorite vacation destination for young Western tourists involved in drug culture and for Israeli soldiers on leave).

Evans-Wentz was a massive importer of sacred texts. While he did not like Daniélou import recordings as well, he does bring together a number of the strands that we have considered in this chapter. Theosophy, with which he never broke ranks, endeavored, like Paul Carus and D.T. Suzuki, to develop a universal religion and one commensurable with ascendent science—a double synthesis that Leary’s text would attempt as well. At the same time that Evans-Wentz was learning Theosophical doctrine at “Loma Land” in Point Loma, California, just north of San Diego, he was spending most of his time at Stanford University, where his two favorite professors were William James and William Butler Yeats. From California he moved to Oxford, where he compiled his first book, *The Faerie Faith in Celtic Countries*, bringing together a large number of local accounts according to an organizational matrix asserting the universality of world beliefs regarding invisible beings (Evans-Wentz mentioned in particular the “elementals” or *muwakkals* produced through sound in Sufism). Evans-Wentz would eventually land like Daniélou outside of Darjeeling, where his “guru” Lama-Kazi Dawa-Samdub translated the *Tibetan Book of the Dead*, and he would buy property in the same area where Daniélou would visit regularly with Nehru’s sister, a place called Almara, also known as “Crank’s Ridge.” This last place would be passed through by traveling beats and hippies through the course of the 1950s and 1960s, including William Burroughs and Allen Ginsburg, marking a popular stopover on the “hippy trail” on the way to Goa. It is close by Rishikesh, where the Beatles would discover the “East” with a number of other Western celebrities inside a gated and fenced ashram from which all locals were disbarred.

Evans-Wentz was born in Trenton, New Jersey, at a time when that was still rather a small town. Like Daniélou, he never quite felt that he belonged where he had been born, and

he gave himself over to religious reveries in the midst of nature but away from other people. The Wentz family (“Evans-Wentz” was a later choice combining his mother’s with his father’s surname) were constantly hoping for an inheritance that never showed up, from this or that distant relation. They were not however without means of their own. Walter’s father had significant real estate holdings in Florida. As a young adult, Walter entered the real estate business and fared quite well at it. Real estate income would sustain him for the rest of his life, and real estate acquisition, particularly of holy sites, would continue as a parallel if understated accompaniment to the acquisition of holy manuscripts. Around 1905, according to his biographer Ken Winkler, Evans-Wentz began selling off his Florida property and investing instead in the area around San Diego. That is where he would spend the last decades of his life, by which time he had acquired significant portions of the sacred Cuchama Mountain, now known as “Mt. Tecate.” While at Oxford in 1913, “a significant event took place that allowed him even more of a gentleman’s existence as well as propelling him closer to the study of the Dharma. His father renegotiated [sic] his son’s leases and his monthly income rose to \$1600, a princely sum in those days. He welcomed such freedom with nary a hint of how it could possibly violate his other precepts.”⁷⁷

Evans-Wentz was thus free from work and free to travel just as was Daniélou, although the source of his money was contemporary rather than accumulated. It was a steady stream of funds from renters in Florida and then in San Diego that facilitated his movement, first through Egypt and then into India. Viewed from a distance, these movements are yet another actualization of possible routes in the colonial infrastructure. Evans-Wentz’s mobility corresponded to his real estate income, but his route again to the byways of the British Empire. Nor was Evans-Wentz poorly positioned socially. His long stay at Jesus College at Oxford had integrated him in a network of important, monied and authoritative individuals. As

⁷⁷ Ken Winkler, *Pilgrim of the Clear Light*, p. 22.

World War I got underway and Egypt became a relatively dangerous place, for example, Evans-Wentz moved off to India with the direct aid of T.E. Lawrence, a former classmate, who wrote “Dear Wentz... there is no difficulty about getting to India. To be on the safe side we have wired to ask if they can allow you to wander about as you please.”⁷⁸

This Evans-Wentz did, as he had already done in Egypt. Wherever he went, he sought out ancient manuscripts. By way of him, thousands of such manuscripts found their way either into local museums or into European and American holdings like those at Stanford. A wake of displaced text followed behind Walter’s movements. While it is likely true that many of these manuscripts would otherwise have been destroyed or lapsed into oblivion, it is also true that by means of his collecting, various cultural products which had not previously been integrated into the coffers or tomes of the West came to be so. By means of Evans-Wentz, the Western colonial social formation absorbed aspects of the colonized. The *Tibetan Book of the Dead*, which Evans-Wentz’s “guru” (he seems actually only to have known him for a few months) translated and Walter annotated extensively, with much reference to theosophy, was only the most famous of these absorbed texts.

One difference between the traveling aristocrat and the traveling *haute-bourgeois* is that while the former has a learned dislike of fixed capital, furniture and suchlike which is such a hindrance to mobility, the latter retains an impulse to accumulate land. This Evans-Wentz did, acquiring in particular properties on or adjacent to regional holy sites. Not only therefore did he incorporate knowledge into the colonial regime, he also transformed places into “property” within this other legal order, and seized hold of the forcible right to determine happenings in those regions of space, just as his ownership in the States determined rent. While it is notable that on his death he transferred his holdings around Cuchama to the Boy Scouts, the YMCA, and the State of California, he did not make that transfer to the

⁷⁸ *Ibid.*, p. 27.

indigeneous peoples themselves. Even as “public,” the land remained alienated by law from its previous usage.

There is a certain irony here, in that as Evans-Wentz carried out his own deeply interested, spiritual and financial appropriations, he asserted all the while that whatever he was acquiring, whether document or dirt, was illusory. This is his understanding of Buddhist doctrine, to which he adhered, and this is the doctrine that he propagated Westward. As the colonial formation continues its outward penetration, it acquires and distributes a certain means of insisting upon the absence of its expansion. Surveying the topos of British dominance in fine detail, Evans-Wentz communicated only the fictitiousness of this and every other concrete domination.

In *Tibet's Great Yogi Milarepa*, Milarepa is portrayed as existing simultaneously in two separate dimensions.

In one, Milarepa is an impoverished beggar living in a cold cave; in the other, he is an enlightened buddha residing in a pure land... in one, Milarepa is a murderer, in the other, he is a buddha. Much of the story is concerned with the failure of those in the first world to perceive the second, and Milarepa's eloquent songs are most often intended to shift his listener's perceptions from one to the other. In this sense, Mila occupies both worlds, intimating, in the end, that the two domains are coterminous.⁷⁹

We might think of Evans-Wentz, a later propagator of Tibetan Buddhism, as similarly occupying two domains. In one, he seeks after truth, in another, he acquires land. In one, he seeks out the world's holy places, in the other, he buys them and donates them to the Boy Scouts. The point of such a story would of course be that these two worlds are one world, and that the clean timelessness accessed either by Milarepa or by privileged tourists and scholars still occurs, actually, within a single endlessly-contaminated history.

Like the collision of air and microphone membrane, the contamination occurs at each point of intersection, which are not so much communicative as they are productive of the

⁷⁹ From Donald S. Lopez, Jr.'s Foreword to *Tibet's Great Yogi Milarepa*, pp. A-B.

items they then distribute. Evans-Wentz encountered something in India called Tibetan Buddhism; he distributed an augmentation and validation of theosophy. And this manner of selection followed upon earlier circumstantial collisions. As a young man, Evans-Wentz read the fundamentals of theosophy, Madame Blavatsky's *Isis Unveiled* and *Secret Doctrines*, which were available in the small town of Trenton and which seem to have influenced him forever after. In these books, Blavatsky holds that she had traveled to Tibet (specifics unspecified), studied with some "masters," and henceforth remained in psychic communication with them. Those masters, she claimed, dictated the contents of these two foundational books by psychic channels. Among the lessons they conveyed were the key points that all religions ultimately express the same spiritual content, even though institutional, orthodox practices may skew it, and that the spiritual powers of yogis, for examples psychic communion and levitation, would eventually be shown real by science. In this way theosophy was tightly tied with the "universal religion" sought after also in Japan and promoted by Paul Carus. Suzuki would marry a theosophist in 1909. In the figure of Annie Besant, Theosophy would wield significant influence over Indian politics as India moved toward independence. Besant was a key organizer of the congress that took power after Gandhi and Nehru's success.

The Bardo Thodol and the Psychedelic Experience

The *Tibetan Book of the Dead*, or *Bardo Thodol*, is a guidebook for the soul through "the after-death plane." Its text is supposed to be whispered by a mouth very close to the ear of the departed; it explains what is happening to the soul as it passes through three "bardos" or "intermediary states," and to remind it what must be done in each in order to attain enlightenment and escape the cycle of birth and death. That is the "exoteric" reading. On an "esoteric" level—the one that Evans-Wentz recommends and that Leary adopts explicitly—the process that the book describes can be conceived to take place in the continual, flickering

oscillation of the ego into and out of its (illusory) perceptual experience, dying in one moment, being reincarnated the next. On all counts death is desirable, as it is the opportunity of the soul to escape illusory embodiment entirely; but escape is typically short-lived because of the karmic load that the soul carries with it, which disposes it to shun the total selflessness and self-destruction required for unification with “reality.”⁸⁰

The *Bardo Thodol* narrates a seven-stage journey through death back to life. These stages are: 1. death itself; 2. the appearance of a bright, primordial light, which is reality; 3. the dawning of a secondary light; 4. a succession of seven appearances of peaceful deities; 5. a succession of seven appearances of wrathful deities; 6. judgment by the lord of death; 7. rebirth. The process of death has three stages, corresponding to three manners of bodily sensation, as the body is left. These are feelings of A. pressure; suffocation or drowning, as earth sinking in water, B. burning, as water sinking in fire; C. explosion outwards, as fire submerging in air. This last explosion concludes the passage into death and positions one for immediate enlightenment, being “set face to face” with the bright white light, amidst the sound of a thousand thunders, “which is the sound of Reality.” Now at each of the stages after death, and before rebirth—those five in between, within the three Bardos or “intermediate states,” including the first and second lights, the peaceful and wrathful deities, and the judgment by the lord of death—there is one simple message which is narrated by the voice at the ear of the departed body: recognize that this is yourself. Identify with, merge with, give over into what is now manifest; melt into the sensory field. In each stage, and in each appearance of peaceful or wrathful deities, there exists both an opportunity for escape from the cycle of birth and death, and another opportunity for further sinking into it. In each stage these are manifested as a powerful, near-total system of light and sound, correspondent to one or another deity, and on the other hand a weak, leftover, dim light and sound. Weakness of one’s

⁸⁰ (It lacks what the kamikaze pilot has.)

own leads one to escape by this latter route, only to confront the same problem again, in another plenum of light and sound. Each deity, whether in the form of pure light, or the manifold patterns of Gods and their entourages, is in reality an emanation of one single, central, unmanifest source, with which in truth the soul itself is unified. Here according to Evans-Wentz is the point of agreement between Tibetan Buddhism and its Hindu source. All emanates from one, which is ubiquitous in relation to all fields of manifest immanence, though never given as ontic within them. The collapse of the soul into its field of perception is necessary for its realization of its already having been collapsed at its core, in a dense void packed with all potential—Anahata Nada.

La Monte Young was friends with Ralph Metzner, who introduced him to Daniélou's key book. Metzner also translated, with Timothy Leary and Richard Alpert, the *Bardo Thodol* into a new language for a new generation of chemical voyagers—they put it in “common, psychedelic English.” Their text, *The Psychedelic Experience*, changed the language and references, but retained all of Evans-Wentz's structure. They requested that the book be taken primarily on the “esoteric” level.⁸¹ What it describes is therefore momentary experience, or the momentary destruction of normal experience by an intervening, liberating element, which could be meditative, or environmental, as in the case of the Dream Machine, but which in its most dependable form is chemical. What this intervention achieves is not a muddling of the perceptual apparatus of the person, a bending of circuits or mixing of signals in an internal perceptual space. Hallucinogens neither disrupt perceptual “processing” nor stimulate a purely neural event. Rather they facilitate the collapse of perception into raw sensation, and of the body into immediate participation with vital, coursing, rhythmic energy.

⁸¹ “The manual should, of course, not be used rigidly, exoterically, but should be taken in its esoteric, allegorical form.” *The Psychedelic Experience*, p. 35.

Leary et. al. recite that formula throughout. The clear light just after the passage into death is “the awareness of energy transformations with no imposition of mental categories.”⁸² This awareness is possible because neurons are directly wired to this process, they are in the process.⁸³ And the collapse happens, very specifically, on both retina and ear, at which locations an erotic intercourse of neural and ambient energies takes place.⁸⁴ The psychedelic experience is direct experience of this intercourse. It continues so long as no habitual egoic mechanisms intervene, attempting to pull these sensate/energetic events back to a mnemonic pattern functioning to recapitulate a delusory subject position, and a delusory body.

Leary et. al, Carus, Suzuki, and Evans-Wentz are concerned to reiterate the total commensurability of psychedelic experience with science. What is experienced on acid is really the physical world, as described by physics, but firsthand. LSD facilitates an introspectionist physics. The name of Einstein is offered up in the same list as Buddha, Muhammed and Jesus, as a reasonable figure to dwell upon for enlightenment.⁸⁵ The very principles that determine even the production of televisions are those now grasped and mingled with first-hand. If for Wiener and Shevelev, the brain is like television hardware, scanning signals then projected as images, for Leary and Metzner, the brain is the image, a million images, and the television as object a falsification of the basically wavelike and fluctuating energetic nature of all reality, of which we are a part.

It comes about this way. The subject’s awareness is suddenly invaded by an outside stimulus. His attention is captured, but his old conceptual mind is not functioning. But other sensitivities are engaged. He experiences direct sensation. The raw ‘is-ness.’ He sees, not objects, but patterns of light waves. He hears, not ‘music’ or ‘meaningful’ sound, but acoustic waves. He is struck with the sudden revelation that all sensation and perception are based on wave vibrations. That the world around

⁸² *Ibid.*, p. 24.

⁸³ “The cosmological awareness—and awareness of every other natural process—is there in the cortex... Your neurons ‘know’ because they are linked directly to the process, are part of it.” *Ibid.*

⁸⁴ “...the retina (that multi-layered swamp of billions of rods and cones, infiltrated, like a Persian rug or a Mayan carving, with countless multi-colored capillaries.)”; “...noises, like the visions, are direct sensations unencumbered by mental concepts.” *Ibid.*, p. 36, 39-40.

⁸⁵ *Ibid.*, p. 30.

him which heretofore had an illusory solidity, is nothing more than a play of physical waves. That he is involved in a cosmic television show which has no more substantiality than the images on his TV picture tube.⁸⁶

Kyema

Eliane Radigue studied and worked with Pierre Henry, preparing and manipulating tape for usage in later musique concrete. But she considered herself closer to the American minimalists like Young. She was turned on to Tibetan Buddhism when Terry Riley invited her to give a talk at Mills College in 1974. Terry Riley's students suggested to her that her *Adnos* work sounded like the material used in Tibetan chant. Radigue investigated, discovered the teacher Pawo Rinpoche, who was in exile from Tibet in Paris, and studied with him intensively for four years. When she returned to composition, she finished *Adnos* and then, on the nearly concurrent deaths of her son and her spiritual teacher, composed *Trilogie de la Mort*. Each piece in both of these trilogies is over an hour long, continuous-tone, and almost exclusively synthetically generated. She has said that "Kyema," the second third of the trilogy, is based on the *Bardo Thodol*.

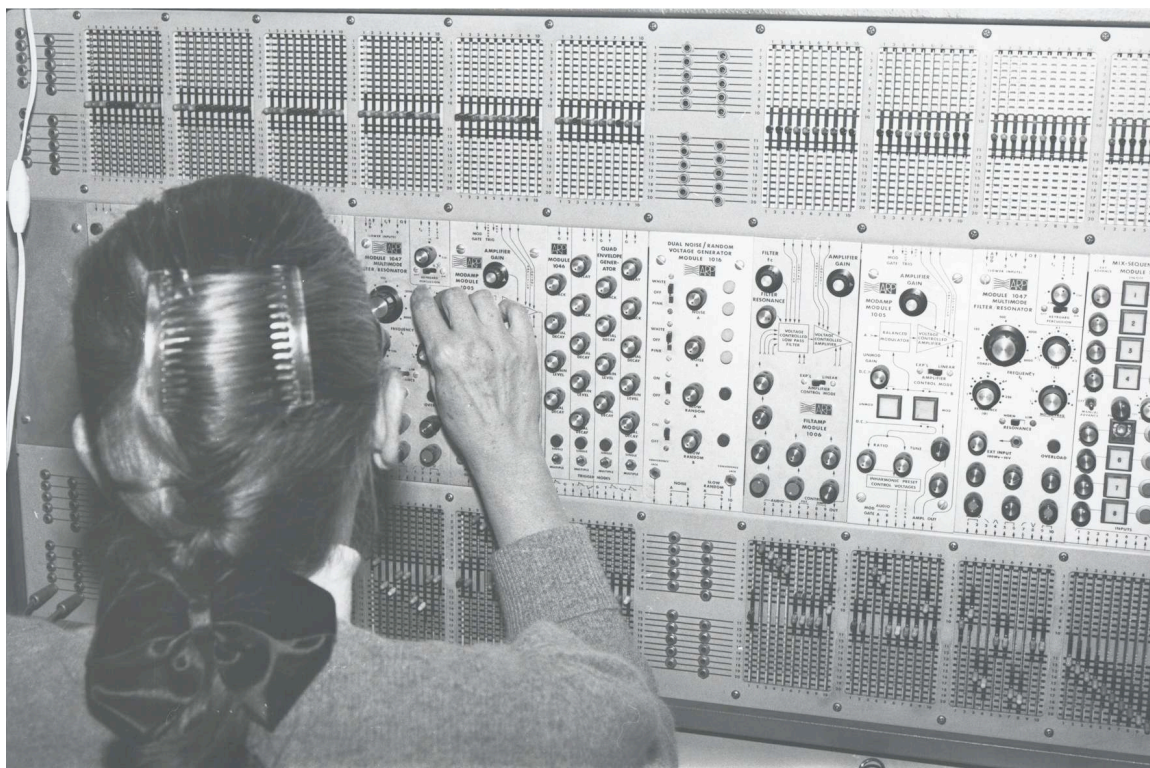
Assuming that *Kyema* is in some fashion really related to the *Bardo Thodol*—a reading which is encouraged by the close match between its structure and the book's—it may be thought of in three ways. As a passage that is taken by a listener, it is an allegorical journey through the three bardos, or through the twice-repeated seven stages of the second bardo, leading back, unfortunately, to rebirth, or else to liberation. What happens at each point in the piece would be somehow related to what happens in the text. Secondly, the piece can be thought of as dictating the essence of the passage to those recently departed. Lastly and most importantly, *Kyema* can be thought of on the immediate level, as a sort of sonic machinery designed to facilitate the very process the *Bardo Thodol*, esoterically, expresses. It, like 4'33''

⁸⁶ *Ibid.*, p.45.

or *Trio for Strings*, would be a sonic assembly designed to facilitate the slippage of the ego, and to allow unity with the perceptual field (hence with the environment).

Nothing precludes our reading the piece in all three ways at once. At least in so far as the basic structuration of the piece involves seven sections, with overlapping transition periods relating them, just as the second Bardo in particular involves seven appearances of deities, and seven of demons, where the wise soul will in every circumstance recognize its unity with the deity, but the fool flee to some lower realm, at the least the pattern of the piece comes from the *Bardo Thodol*. As it was written when it was, after the departure of two deeply loved persons, and given the tenor of the piece, it is in one way or another a work of mourning. But lastly, given the usage of such long tones, and the achievement for the most part of changes which are very difficult to detect, it seems that an interruption of normal perception, through a refusal of its basic articulations, is carried out as well.

Kyema has seven basic segments, formed independently and edited together, with six long transitional periods in which the end of one segment overlaps the beginning of the next. All segments were produced on Radigue's ARP 2500 synthesizer (the same variety that MacLise used in Nepal), at the end of a very long period of experimentation, lasting for all the segments together between one and two years. Situated in front of this large interface, covered with knobs, Radigue's profession consists in a daily exploration of the sounds produceable by this machine, of their emotive reality and their preferences for conjunction. With the exception of one very subtle duration in the course of part 5, around the 30 minute mark, and the sound of tape hiss and tape edits, all the elements in *Kyema* were produced through synthesis and modulation on the ARP.



Radigue at her ARP synthesizer

There are two very basic principles involved in electronic sound synthesis. The first principle is that all the original signals originate with an oscillator. The second is that all further alterations to sound take place by the modulation of one signal by another, or by filtering. An oscillator outputs an electrical signal varying between zero and some amplitude at some particular frequency, via a particular, reiterative pattern—the shape of the “waveform,” which determines timbre. When such a signal has a frequency between 20hz and 20khz, and when it is amplified to a sufficient degree and output to a speaker, it may be heard as a tone. Or, the electrical signal, at whatever frequency and with whatever amplitude, may be used in conjunction with another signal. A modulating signal operating, for example, upon the amplitude of a simple sine signal, can produce either a temporally-even series of silences and waxing/waning sounds, or if sped up, a new composite signal which is carved, bumpy, pulsatile. Now such a composite signal may be ring modulated or frequency modulated, by

bringing a new controlling signal in conjunction with it, operating upon its frequency. The result will be yet another synthesized duration with new characteristics, including a new and very specific distribution of energy across the spectrum of its harmonics. Certain harmonics may be brought out, others suppressed, and additional related frequencies produced as a mathematical consequence of the conjunction of these integrating signals. Then these characteristics may be modulated across time, by other modulating signals, by filters selecting for one or another frequency range, by faders at a mixing console or by other means.⁸⁷ My point here is just that oscillation and modulation of one signal by another oscillating signal are the essence of synthesis, the essence of the ARP, and that they therefore play the initial formative role in *Kyema*. Of course Radigue's hand on the control dials is absolutely important. She is a modulator of modulators.

Each long tone composing *Kyema* is a duration of pulsation produced through a pulsation of duration. As sonic materiality, that is, as sonically-dense time (perhaps, for Young, the breath of God), or as a sonic ambient field, each duration is pulsating duration, and enduring pulsation. Each tone has its origin and its immediate formal being in repetition and modulation.⁸⁸ Because Radigue obviously herself has quite a lot to do with *Kyema*, the ARP being incapable of a sonic reflection on death all by itself, it is obvious that humans too are involved in the modulation of durations. Radigue enacts an ongoing series of enveloping pulsations which act formatively upon her extending sonic materialities. She, fluctuating intently through time, marks a time which is sound. These gestures in the crafting of time are productive because of the material alteration transduced by the recording head on the

⁸⁷ A really complete list of synthesis techniques, and the differences between analog and digital synthesis, would of course take a massive amount of space, and at any rate is beyond my technical expertise. One dependable resource for this purpose is Curtis Roads' *The Computer Music Tutorial*. An older but important source is Allen Strange, *Electronic Music: Systems, Techniques, and Controls*.

⁸⁸ At this point we intriguingly find a total agreement between Timothy Leary (and his simplistic version of Einstein), the doctrine of Anahata Nada, which makes reality vibration, Deleuze, who makes it repetition and difference (and understands contemporary power to involve modulation of these), and the technical structure of sound synthesis.

distribution of magnetized particles on the receptive tape, which constitutes a possibility for similar modulation of the air, in the future. Radigue modulates the ARP, the ARP modulates the tape head, the tape head the tape, and the tape, later, electricity going to speaker drivers modulating air. A machinery for the formation of a body-ambient habit. *Kyema* is a complicated habit.

It is true too that the listener is involved in sonic modulation. Not only are they modulated by sound, via processes of entrainment of all orders, from the moving of the head in pulse with a rhythmic element to the potential synchronization of brain waves with a sustained frequency; they also modulate and are modulated by the standing ambient field just insofar as they listen to it. What *Kyema* is, is an ever-changing array of pulsating tone. Due perhaps to the chronic, periodic incommensurability of the pulsations characterizing each (otherwise-)continuous tone, *Kyema*, as a unique sonic array, has the peculiarity of nearly always disallowing attentive grasp of the full set of currents—even though these are never more than five or six in number. On the one hand, since the stereo output from a pair of speakers playing *Kyema* structures the actual air in the room, pressurizing and depressurizing in a specific latticed geometry, bodily movement through that structured space is necessary in order to discover one or another tone or relation. Not all points in the ambient field are the same. *Kyema* is the indefinite set of such points, generated in actuality jointly through the enduring pulsations of the speaker cones with the reflective and absorptive characteristics of the distinct environment in which the piece is replayed. But on the other hand, even using headphones (which drastically reduces the breadth of *Kyema* because it disallows standing waves of an audible length but also because it cuts out the essential very low frequency elements, which work on the chest, body, and vestibular system more than upon the ear), it is in almost every segment impossible to hear everything that is happening. One has to select where to place one's attention. Having placed it, certain elements, for example the thematic

ascending overtone series, like chimes in a magnetic wind, come into focality; others diminish and are suppressed. But they do not become absent. They continue to operate, such that, certainly, were they removed, the erasure would be immediately noticed, and more, the elements presently occupying focality would change their character utterly. When one focuses on one or another continuous line, one continues to be auditorily conjoined, somehow, with the rest. One modulates the sonic array attentively; but one is also modulated, insofar as the remaining ambient structure determines the manner, scope and character of the focalization that does take place. Recall that Laurel Trainor and Jessica Phillips-Silvers have shown how a rhythmic modulation of the body will cause an unpulsed series to be perceived as pulsed. The ever-changing rhythmic periodicities of the various enduring elements in *Kyema* modulate one another according to physical principles; but they also fully engage the listener in a real, reciprocal modulation. *Kyema* draws the listener in functionally, as one among various pulsatile, enduring, modulating elements, both modulated and modulating. It offers no outside perspective; there exists no outside perspective upon it. It is indefinitely ambient.

The only lesson of the *Bardo Thodol* is to give up egoic distantiation, to desist flight from what is sensed, and to meld with it, into it. In general Radigue has said that she attempts to reduce the distance between listener and sonic field, first of all by disallowing “directionality.” In concert situations where her tape-based pieces are played via loudspeaker, she is careful to arrange the speakers in such a fashion that no sound “source” is given at any discrete spatial position, such that a person could easily place the sound as existent at some relational remove referenced to an aspect of the body image. Perceptual space depends upon discrete perceptual entities, which may be mnemonically constructed, together with the ongoing large volume of bodily sensations, into a field of externality distinguished from because in exact relational distantiation with that sensate “internality.” Radigue doesn’t want

that. She, like Cage and like Young, wants the listener to be with the sound, as an aspect of the sound or of the piece.

The Beat of a Machinic Void

In 1966, the Beatles based their song “Tomorrow Never Knows,” with its seven lines, on the Leary text. One account has it that the song was originally titled “The Void.”

Turn off your mind, relax, and float downstream. It is not dying, it is not dying.
Lay down all thought, surrender to the void. It is shining, it is shining.
That you may see the meaning of within. It is being, it is being.
That love is all and love is everyone. It is knowing, it is knowing.
That ignorance and hate may mourn the dead. It is believing, it is believing.
But listen to the color of your dreams. It is not living, it is not living.
Or play the game existence to the end of the beginning, of the beginning...⁸⁹

Supposedly Lennon went into a book store in search of literature on Zen; he found instead *The Psychedelic Experience*, went home, dropped acid, read it, and wrote the song. By the time he went into the studio, he knew he wanted his voice to sound like the Dalai Lama. This was achieved by doubling and slightly delaying it, and then running it through a rotating Leslie speaker cabinet. Paul McCartney had been listening to Stockhausen and experimenting with tape. Consequently there are tape-loops with tambura segments and a fabricated “sitar” (actually George Harrison’s guitar, manipulated on tape). A drone too: and a single bass tone, a C, droned throughout with the tambura loop over it. The track became one of the favorites of “psychedelia.”

It might easily be argued that the “canned” presence of these “Eastern” elements is typical of popular music. Where Young’s interest in “Anahata Nada” was disciplined, learned, and not oriented toward commercial success, the Beatles pick up the drone, tambura, and transcendence like postcards from a thrift shop, which they simply paste into a pre-fabricated, 4/4 musical structure now wall-papered with a fetishized ethnicity, and hock at a profit. That is

⁸⁹ This is the last track, though the first recorded, on *Revolver*.

an easy critique, and not necessarily false. It would miss the real interest of John Lennon in the ego death we have been pursuing theoretically—an interest potentially just as real as Young’s or Radigue’s, if less serious in its affectation. It might also obscure Young’s own pursuit of cultural as opposed to monetary capital—a pursuit extremely clear from his regular insistence on the significance of his own musical influence. And the argument certainly is complicated by the fact that the Eastern in the West, in the 1950s and 1960s, was a complicated mixture of Eastern interpretations of the West and Western interpretations of the East, aloft on a cultural tide structured by growing industry and World War. That is just to say that it is difficult to designate a fulcrum of “authenticity” from which firmly to shunt off the inauthentic.

Meanwhile Young’s own interest in sonic saturation owed as much to John Coltrane as it did to Raga. He simply emphasized those aspects of jazz that were primarily harmonic over those that were rhythmic.

The main thing the criticism would miss though is that this 4/4 structure, in this articulation, with its taut first two beats, and its quickening 3 and 4, with a snare turnaround like a skipping record, pulsing and very fast by 1960s standards, has the same distinguishing features we noted in Young, but in the horizontal rather than in the vertical dimension. If *Trio for Strings* and then the 2nd *Dream of China* exhibit a patient, contemplative concern with the meeting and departure of frequencies in whole number proportions, a meeting that is asymptotic or unrealizable but which pulls upon the manifest tones with unbroken insistence, the same “abstract” now pulls on the temporal dilation of kick drum, ride cymbal, and snare, which slur against perfect regularity while courting and breathing it. Ringo Star is also a pursuivant of sharpened number. Now Young would acknowledge that even popular music is a manifestation of mathematics; we might push further and suggest that the quickened spirit, the immersion of the psychedelic listener in this two and a half minute song is really equivalent to that of the avant-garde audience six years earlier in New York, differing only in the duration

of his devotion (although he can put the needle back where it began, indefinitely, and certainly on occasion did, like the Theater of Eternal Music, for the duration of whatever drug) and in his being situated geographically somewhere other than a nominal heart of advanced legitimate culture. It is still the same explosion that is sought, of normal perception out of itself into its sensate horizon. It is that same void, or that abstract, that seethes through either ambient field, intensifying it, making it disequilibrium, pulling the body along with dilated pupils, quickened breath and frissoned skin. Continuity of tension, insistence of pulse, and amplitude. But with the beat we may add the machinery of shock, exploding, freeing energy, building a forward-tilted float.

“Tomorrow Never Knows” is a machine that beats, urging its listener, like Radigue or the voice of the living spoken in a dead ear, to give over into its presence. “Relax and float down stream... Lay down all thought, surrender to the void.” Die and be reborn in sensation, in a void of meaning. This mantra repeats, 82 times: kick once on 1, twice on 3, snare once on 2, twice on 4. Repeat. A cycle shorter in duration than the capacity of the phonological loop: a temporal repetition wholly in the singsong hover of the ever-present. The cycle is knit like beads on the thread of droning tambura—a tape loop, a mechanical meditation—and a bass pulsed with intoxicant fingers, released into this thick, ever-releasing perpetuity, pulled forward by the perfect time outside time, quivering reiteratively. Now we pass through brief segments of tape-loop, a chord from a Sibelius symphony, a speed-manipulated clip of Paul McCartney’s voice, turned by this means into a flock of crows lifting upward, then reversed guitar. The whole thing is patched out in metric regularity, like a car passing regular telephone poles, now one bardo, now the next. Enter, give over, pass, repeat: die, be born, die. On the grain of the sub-second, in the horizon of the phonological loop, of reiterable present-tense memory, like a jubilation passing through an electrical cable, an ecstasis of information

fleeing content. As one keeps pace with its edge, meaning escapes into energy in the voice of an obviously-faux, electrically-rotating Dalai-Lama, deity in a multiplexed, humming frontier.

It may be that a reading like this will be rejected in certain quarters. The parallel of high and low, of “serious” and “entertainment” music is frowned upon. Perhaps I have mistaken liking for truth; the approval is that of a consumer, not a disciple of sound. But what exactly is the objection? There are a few basic elements. One is dogmatic: music made for profit is not music. This is a position developed thoroughly if grumpily by Adorno, who we will confront soon enough. Yet even Adorno acknowledges that music passes into commodity form, like everything else in capitalism, in every case. Intended or not, all music in the age of mechanical reproduction moves through these distributional circuits, even that of La Monte Young, to whom I listen on these self-same speakers. A more formal objection from this angle would be that the music lacks significant structure; but this just repeats the objection in new words. No duration of sound is without structure; the question is what constitutes significance. That is a question for Chapter 5. It seems then that two linked objections remain. The first is that the tambura, like the Sibelius excerpt, is not played. It is rendered by machine. In fact the whole system is machine-like. How can human transcendence be achieved by something as mindless as a tape reel? There must be some confusion. The second is that this machine character, particularly apparent in the drum phrase, which repeats like the drum-machine patterns historically to follow it, is oriented primarily toward body, not to mind. Perhaps it is not to be “listened” to, but moved to, mindlessly, like Adorno’s notorious jazz. And if I have rendered an “analysis” of the piece with such obvious approval, my body must have seeped through to my fingers, and they must be masquerading as my mind.

Aumgn

In this chapter we have been investigating the post-war period and its strange fascination with the East, by means of whose religious formulas it sought to erase its own death-inducing ego. What became, though, of the war? By 1948 it has vanished. There is no war in Cage. Talking about power, remember, is retrospective, reactive. Instead put in place an optimistic freedom of mind, and the design of a democratic space, to be achieved in the aesthetic ambient field particularly by the retraction of all regular grids. No regularized rhythm. No war, and no beat. No war in Young, and no weight given to the hierarchical history of the hierarchies of sound. The power of the humming electrical lines is the same as that of Pythagoras; we skip right over the power plant, right out of time. No war in Radigue, only the conflict of ancient deities, known to be metaphorical and illusory. With MacLise though, a hint of something darker, an identification, if still metaphorical, of real material radiations as dangerous.

The German psychedelic rock group Can released an album in 1971 called *Tago Mago*. Like MacLise they were referencing Aleister Crowley, in whose writing “Tago Mago” designates a set of magical islands. They referenced him also in the long track “Aumgn,” which was for the magician Crowley the most powerful of magic words, a sort of diabolical version of “amen” and a perversion of “aum.” One contemporary magician named Asmodeus, who can be hired via the internet to cast spells (and whose word I would take to be completely undependable), describes “Augmn” this way: “the Magical Formula of the Universe as a reverbatory engine for the extension of nothingness through the device of equilibrated opposites.” “Aumgn,” put simply, is the sound of the universe as if that sound were dangerous, undependable, potentially thoroughly false. “Equilibrated opposites” means systematically falsified assertions. A dark magician, according to Crowley, must be careful

always to unsay whatever he says. He resides at the cusp of pronouncement. Whatever he takes seriously he also mocks; whatever is sacred he presents as profane.

The tracks on *Tago Mago* flow together. The two preceding “Aumgn” are “Mushroom” and “Oh Yeah.” The title “Mushroom” refers to a nuclear explosion as much as it does to the popular psychedelic. The repeated chorus is: “when I saw mushroomhead, I was born, and I was dead.” If the reference isn’t clear enough there, the presence of a tremendous explosion between “Mushroomhead” and “Oh Yeah” is. From that explosion, which is either a sample or a vast swell of low-frequency synthesizer, emerges Jaki Liebezeit’s machine-like drumming, fading up for a long while, paired with a pedaling bass. Backwards vocals float sharply over the large space, to end temporarily in another explosion. Then the song moves again, with forwards vocals. This is the track that dives into the 17-minute “Aumgn.”

The simplest reading is that this series forms a statement. We are in 1970s Germany; our parents lived through the war. Unlike the British and American victors, we remember the war. Particularly we remember the dark power wielded equally by the British and Americans as by our own Nazis. Czukay was born in Danzig, Liebezeit near Dresden. Kenji “Damo” Suzuki’s parents lived through the war in Japan. So we remember, clearly, the actual use of nuclear weapons. Tremendous force and tremendous danger. But out of this emerges a machinic beat that is as connected with James Brown as with anything else.⁹⁰ Crisp, and cold, but funky. A groove emerges from Hiroshima. The same groove continues through Nagasaki. It is this uncomfortable pairing, between absolute, dangerous power wielded by unremarkable minds, and bodily delight, this merging of force with force, the force of death with the force of sex—libido with two faces, Shiva as destroyer and creator, mathematics as weapon and groove—that is here stated quite directly. No sophisticated semantics, just boom and beat, and

⁹⁰ “Repetition is like a machine, and of course we like machines. If you can become aware of the life of a machine, then you are definitely a master.” Holger Czukay, quoted in *The Can Book*, p. 70.

a voice denuded of meaning, speaking backwards. The victors are cycling their alpha wave resurrection with machines that chant transcendence; the defeated are doing the same; both are turning their voices into post-semiotic hieroglyphs on ribboned magnetic tombs, prone to resurrect.

Then “Aumgn,” 11 minutes of delayed, reverberated, spatial-dissonant effects, out of which emerges, for another 6 minutes, Jaki Liebezeit’s drums. Jaki time-lover, pursuing erotically that sexy abstract time outside of time, in a 1970s psychedelic tribalism⁹¹ asserting once more the empirical linkage of dance and death, of sensual, somatic-ambient motion with an echo of recent destruction. Nearly the whole of “Aumgn” consists of a tissue of delaying guitar, strings, found sounds, the repeating past overwhelming all new additions. Just tape delay with the decay turned up, ringing in an industrial reverb. But again the message, if one were to read what is far more feeling than meaning as message, is simple: the past fills the whole of space; still a primitive beat pulses up, pushing us forward, “a reverbatory engine for the extension of nothingness,” which feels... delicious.

The Contaminant Ambient

“In an all-out nuclear war,” said Jimmy Carter, “more destructive power than in all of World War Two would be unleashed every second during the long afternoon it would take for all the missiles and bombs to fall. *A World War Two every second*—more people killed in the first few hours than in all the wars of history put together.”⁹² If that power is possible every second, materially possible, may we not materially feel the power of the possibility? Or is this pulsing almost-boom an echo of the war? Or is all this, perhaps, the same long afternoon?

⁹¹ Klaus Dinger, of early Kraftwerk and Neu, would refer to his “motorik” beat (see the interesting parallel with Adorno’s critique in Chapter 5) also as the “Apache beat”.

⁹² (Quoted in Paul Virilio, *War and Cinema*, p. 7.)

Can began their life as a band in 1968. They were lucky to know a rich person who owned a castle, Schloss Nörvenich in Saarbrücken. At their first performance in this historical setting, which was shortly afterward to become the studio in which they regularly worked, Holger Czukay brought a tape of renaissance choral music, while David Johnson brought a tape of the riots in Paris two months before. They played back and modulated these recordings as aspects of the performance.⁹³ It seems to me there is something particularly useful in this conjunction, of this musical “anarchist community” whose name Can keyboardist Irmin Schmidt once claimed stood for “Communism, Anarchism, Nihilism,”⁹⁴ inside the walls of this enduring stronghold of wealth, playing together with the intermeshed sounds of an ambient field proper to the aesthetic techniques of the medieval church and those of rioting students and Situationists just two months before and a few hours away, echoing in the Paris streets amidst the whiz of flying paving stones. It provides a concrete image of the reality of every ambience, and of what ambient production always is when its ideological cloak is lifted, that is, when its false vacuity runs with force.

Ambient production recurs as it were in pulses, just like the production of perception. In one moment, it opens out. Drawn erotically and forcibly into touch with singular surrounding, it draws into productive synthesis. Thus the variety of tapes, thus the meeting of castle and commune. The elements brought together collide amongst themselves, rendering a configuration, developing a tendency. They make a plateau, a singular body, insofar, as Spinoza says, as together they produce one effect.⁹⁵ The point is the act, the thought that passes into gesture: “the prolongation of thought into gesture.”⁹⁶ Along the line of that

⁹³ Pascal Bussy and Andy Hall, *The Can Book*, p. 66.

⁹⁴ *Ibid.*, p. 68: “A few years later [after this performance], Irmin Schmidt will take delight in declaring to a few journalists that the real meaning of the three letters of Can is: Communism, Anarchism, Nihilism... In the same vein, he said the the German magazine *Tip*, for a retrospective article in 1984, ‘We were never a normal rock group. Can was an anarchist community.’”

⁹⁵ *Ethics*, 2D7, p. 116.

⁹⁶ Tiqqun, *Introduction to Civil War*, p. 146.

causation, the intensity of the plateau grows, and so does its trajectory into the arms and the lure and the threat of the further surrounding.

Open, close, open close. Flicker. Repeat. Beat.

In Chapter 5 we will encounter the Critical Theory version of critique, which consists in the destructive or liberatory juxtaposition of the materially possible with the ideologically “real.” On Adorno’s account, this junction is supposed to be intellectual, a matter of the meeting of representations, or of cognitive negativity with the false totality, in thought. I will oppose that reading, while attempting to retain the formula; I will attempt to make critique a bodily process, and, with Adorno, aesthetic production one version of it.

When the body image collapses and the ego dies into ambience, there is ecstasy. This is what the mystical tradition is about, and that tradition is one of the producers of the Deleuzian theory I draw on so heavily in this study. There are two reasons for the ecstasy, one a subset of the other. The first is that the ego or the body image always presents far less sensory positivity “to consciousness” than is actually taking place. This I showed with James in Chapter 1. The remainder of sensate positivity, that whole set of bodily-ambient hums, aches and urges, has in the moment of perception to lie latent, overlooked, just to exist as a certain compelling dis-ease. In the development Benjamin and Massumi give this theory in Chapter 2, we saw that very dis-ease, in its subliminal reassertion, met with an increasing inundation of consciousness and perception, a pulsed, hegemonic anti-cathexis. Each throb spurs another suppression. That throb is material power, linked in a system of perceptual techniques conspiring to hide it. But the body image always breaks down, and in certain cases, given certain sensory fields or LSD (field and chemical, space and process, political machines) it stays broken for some period; the twitches of the ego never quite mustering a total domination. In this case, as in the pulse which otherwise dependably yields denial, there is feeling. There is first of all the feeling of the whole body, since, as James says, affect is

nothing but the feeling of what our bodies are actually doing, their self-sentience, the vapor of their passage, in whatever habit-systems and in their collisions with other repetitions. But second, in this moment of collapse, the individual body does not exist. Its continual collisional unity with all the local ambience, which itself is continuous with each ambient field beyond, no matter what walls are in place (the wall is ambience), therefore must be felt as well. The ecstasy, then, literally, the being-outside-oneself, is the feeling, the living being, of a continuum that exceeds us indefinitely. That is the force in mysticism as in fascism; the same force as in disco and in house. In James Brown and the Coup. Power and resistance.

The *tendency* of the ecstasy, for life or for death, depends upon the material reality of the locality opened on to. That locality is some ambient syndicate ravelling out into a continuum. The continuum is not an egalitarian transparency populated by wandering, self-satisfied sensate units. Nor is it “universal structure,” commensurate proportional relation, a single resounding “aum.” Nor is it even a darkened “augmn,” a growl of demons, though this last in certain respects comes closest since it prepares us in some fashion for danger. No, that continuum seathes with oxygen, carbon dioxide, radioactive iodine. In that continuum, in that real “material possibility” that critique must confront, and that I am suggesting we can feel, that we cannot avoid feeling simply because it is real and there is no such thing as an isolated subject, a “kingdom within a kingdom,” there is all the weaponry, all the bombs, all the reactors, all the waste, all the toxicity, all brimming with their own intensity, pressing into productive collision.

The beat of the kickdrum, like the concussion in the trench, constitutes a direct contact between body and space, this space which is ever reproduced, which we are reproducing, and which is reproducing us. Like long duration, like high amplitude, it troubles proper perception. The brief ensuing collapse is terrifying and delightful at the same time. It is a sort of pleasure inverse the pleasure principle: a development of intensity. The question is in what

conjunctions we combine with the force thus lived as our own. Do we join with space and bodies so as actively to produce, to counter-produce, to explore techniques, imported or invented, of breath and music, or do we twitch and swallow the transcendent placebo, and pretend it never happened? Do we follow the dim light into perpetual resurrection into ego-games, now as “consumers” of information, waiting to be nudged into fear, ready again to deny it?

Spray-painted on the wall in Paris, May 1968:

Meanwhile everyone wants to breathe and nobody can
and many say, “We will breathe later.”
And most of them don’t die because they are already dead.⁹⁷

⁹⁷ Ken Knabb, ed., *Situationist International Anthology*, p. 445.

PART II

CHAPTER 4: THE PRODUCTION OF THE AMBIENT

I have tried to present two ways in which perception is socially produced. On the one hand, perception is produced discursively, in the form of theories purporting to convey the “truth” of perception in one or another context. On the other, it is produced materially, in the form of habituated patterns of tactile conjunction between bodies and physical surfaces, and on that basis in the form of habituated patterns of percept-distribution, paired with noetic points knit into a synthetic subjectivity. This is achievable by means of the production of interfaces, which establish a “frame” upon which perceptual space is stretched. In the first type of product, I mean to include aesthetic theories; in the second, “works of art”, provided at least that these retain the character of immediately presentational sensory ambient arrays (which would therefore include, for example, installation art, but exclude purely conceptual works). I have further tried to show how the tactile basis of perceptual construction, like the institutional base of discursive production, is systematically obscured by its products. The correlate of that veiling is that the productive moment comes to constitute a hidden or unconscious dimension, running along invisibly and inaudibly while continuing to produce the form, content and tenor of the sphere of perception.

To this point I have not dealt significantly with the nature of discursive production. What I have tried to show is that the dominance of one or another theory of perception should not be traced simply to certain “discoveries” within one or another pertinent science. The rise of the information-processing model corresponds both with the development of communications technologies, and with the massive implementation of such technologies in military and industrial circumstances. The technologies, once implemented on such a large scale, require a discursive interrogation of the interrelation between themselves and their users. The brain as a processor of signals is the consequence of this need to make technology

and person commensurable, for the purposes of design and dependable function. This is not to say that such discourse is false. Rather it is to say that its truth emerges from a highly determinate selection. The opposing claim, that perception is not information processing but an invariant coupling of bodily and field motions, emerges from a similar selective process, and it is not false either. This apparent violation of the principle of non-contradiction is permissible from a pragmatic perspective, when we consider the discursive apparatus as one aspect of a human-machine, or more generally a human-ambience integration. In one interfacing circumstance, information is processed; in another, motions are choreographed. The discursive truth is a means of synthesizing discrete elements into common processes, facilitating productive throughput. Its initial appearance, and its distribution through social space, depends on its utility in this regard, as perceived by managerial and financial intelligence.

The discourse attending aesthetic production, meanwhile, seems at least in the 1950s and 1960s, in the United States, to have been different in kind. Put simply, a religious interpretation stands here opposed to the scientific one. It is worth remembering that this classical opposition was already present in 1890, even in the work of one writer like William James. That it is present still some decades later should probably not be surprising.

Perhaps it is a question of the division of discursive labor. According to the dominant accounts (for example, for Kant or on Adorno's account, the latter of which we will present at length in the next chapter), the "aesthetic" by its nature is supposed to be distinguished from the functional. Aesthetic products are those which serve no function; likewise aesthetic experiences, which are supposed to be for themselves. If information processing, for example, is a useful model for understanding the integration of human experience in a functional social circuitry, because it both explains and enables an equivalent exchange across hardware and wetware, it is for this very reason objectionable when trying to comprehend experience all by

itself. When a person sits at a computer to do a job we may say that they intake and output information. In another circumstance, we could say that they grasp certain affordances and move accordingly. In either case they have been discursively pre-positioned as participant within a single, functional system. The aesthetic question, regarding the nature of aesthetic objects and aesthetic perception, begins with the opposing pre-position; it assumes dislocation from the functional plane, and that such dislocation is possible because that plane has an outside. The religious models of perception which we have considered both codify the nature of that externality (as abstract, immaterial, and without history), and vigorously insist upon techniques by which to approach it—in these particular cases, “ego-death.” There is a discursive division of labor here just insofar as one social region produces the truth of perception at work, the other that of perception outside of work. To put it another way, one sector produces perception as equivalent and as exchanger of equivalents; the other perception as heteronomous and functionally aloof. There is a perception for the public sphere, and a different one for the private. While the former perception is scientifically more “true,” the latter is somehow more “deep.” What is important in terms of ideology is that both types of theory deny social history, their own character as products, and their own operation in terms of real power. They obscure power, placing an abstract and equilibrious “nature” in its stead.

A similar functional-disfunctional distinction may be made between the interface proper and the work of art. In the case of the control panel or the cockpit, a spatial-material distribution of privileged nodes, and an implicit functional rhythm linking those nodes in one or another (but not just any or all) serial procession, determines the frame upon which a regularity of perception may take place. An interface is the skeleton of a body image. Now this observation may be extended, I think, without too much problem, to account also for a painting, a film, or a piece of music, especially when the last of these, like the first two, is firmly established in its metrics by a process of productive recording. (A performed piece will

vary more than a recorded one, although the principle in either case remains the same). With the control panel, temporal progression is somewhat implicit; the spatial distribution of the elements upon the panel are in themselves temporally invariant. To some degree this obscures the nature of the panel's functioning, which involves change both at these localities and in the operator, but we may leave that objection aside. The constructed arrays constituting flight simulators or video games already have a temporal axis. Still, in presenting only certain events, only certain motions, and not others, they constitute both the general possibility of experience with regard to them, and also the invariants of such experience. When they are engaged with for long periods, they produce habits of motion and habits of perception. At this level it is a small step from video game to movie or musical recording. While the latter do not offer the same variety of "interactivity," still they consist entirely in distributions of elements for perception. They even include, as for example in Radigue's "Kyema," multiple possibilities for attentional motion, which are nonetheless by no means random. All this is just to say that both art products and control panels, etc., are physical arrays built to correlate with perception, and to modulate it.

The apparent distinction to be made here is thus not that paintings or music are somehow of a different ontological order than functional arrays, but precisely that they are not functional. In the case of Young's *Trio for Strings* and the Beatles' "Tomorrow Never Knows," I have tried to cast this disfunctionality as an "intensity" having a value in itself rather than because of the actions it facilitates. Certainly there are regions of intensification in a fighter-plane's cockpit, such as the central dot in a cross-hair. Such regions draw attention, hold it, and in this holding modulate the behavior of the rest of the pilot's body about the region as about an organizational axis. But the contents of the crosshairs are intensified in order to kill them. The organization of the cockpit as a multi-sensory array is functionally-oriented. Intensity spills out into a commanded behavior, which itself integrates into a battle

and a war. A parallel analysis could easily be given of the role of any meter on a control panel in a nuclear power plant. In each case there is intensification, but intensification invokes and distributes the operator's energy through a functional matrix beyond her. The supposed difference in *Trio for Strings* or "Tomorrow Never Knows" is that the intensification exists for itself.

This distinction encounters trouble the moment a work of art enters into some social ritual, where it plays a role. The most dominant of our contemporary rituals of course is commodity exchange, and we know that aesthetic products may both be bought and sold, and play a role in intensifying buying and selling. As an album in a record shop, or as advertising, or as muzak, the intensities constituting an aesthetic product, which are just the material aspect of an aesthetic or non-functional, autonomous experience, are turned to functional account. The easiest thing to say here is that a betrayal has taken place. That is a key part of Adorno's critique, which we will encounter in detail in the next chapter. For now it is enough to point out that the betrayal is systemic; betrayal is the functional reality of the aesthetic.

The purpose of the second half of this study is to investigate the production of social ambience, including but not limited to the integration of "works of art" into its expanses, with special emphasis on the auditory ambient field and its production(s). The present chapter, after presenting the contemporary character of that field, focuses on the social appropriation of materials entering into ambient production via recording. What I will at the end of this chapter refer to as the "aesthetic function" is the intake of certain positivities, external in origin to the functional system, into a coded memory, via a stepped process that can be called "mnemonic." This social function parallels the passage of externality into memory via perception; it is similarly transformative, and similarly based upon habitual motor routines themselves not apparent in their products. The next chapter begins with the distribution of such socialized percepts across a social space. The emphasis there is on the continued if hidden presence of an

habitual-motor dimension to the “externality” so acquired.¹ That dimension constitutes a continued “tautness” to the distributed percept or aesthetic element. The sixth chapter and conclusion investigate how this tautness or intensity, without being dispelled, still operates in social-ambient functions, for example in mustering arousal.

Throughout this half of the study, the emphasis is on the ambient field and its structuration, rather than on the connection between the individual body and the field, which I have already presented. In considering the large-scale production of ambience we are also considering the production of a choreography of individuals or, really, a system with both material and spiritual, as well as noematic and noetic aspects, that exceeds the individual. The concluding concept of “ambient power” denotes the continuity of energy through both of these nominally-opposed aspects, and across individual bodies and local spaces. The opposition of the aesthetic and the functional, I finally suggest, is actually one between autonomy and heteronomy. In this respect “ambient power” designates the production of the material ambient field as basic either to controlling (indeed, torturous) or autonomous social organization.

Listening to the Ambient

Many of the problems we have been considering have already been addressed by the membership of the “World Soundscape Project” (the WSP), beginning with Murray Schafer in the early 1970s, when he wrote his seminal book *The Soundscape: Our Sonic Environment and the Tuning of the World*, through Barry Truax and his important book *Acoustic Communication*, up to the “soundwalks” and field recording-based compositions of Hildegard

¹ This dimension is the “formal reality” of the recording and its playback, as opposed to the “objective reality” or the recording’s (representational) content. These are Cartesian terms used more importantly in Spinoza, both in the “Treatise on the Emendation of the Intellect,” and in the *Ethics*.

Westerkamp, which continue to the present.² Each of these individuals studied, worked, and produced “soundscape compositions” at Simon Fraser University in Vancouver, British Columbia; Truax was a student of Schafer’s, Westerkamp of both Schafer and Truax. The group continues to exist, producing at the beginning of the last decade (around 2000) a series of issues of a journal called *Soundscape*, under the editorship of Westerkamp.

I should be more clear, perhaps, when I say that this group has addressed many of the problems of the present study. Schafer dealt explicitly with the sonic environment, in its immediate construction, and in its historical permutations up to the present. He did so in rather grim protest, mostly against noise. Truax formalized much of Schafer’s work in a communications language, seeking by that means explicitly to relate individual perception and even individual somatic process with the regular structuration of physical ambience. The communications banner under which he did this places him in some relation to the likes of Broadbent, but also in connection with anthropological concerns with ecology, particularly as those have been formulated by Gregory Bateson (in *Steps to an Ecology of Mind*) and Margaret Mead.³ Schafer, Truax and Westerkamp are even explicit in their acknowledgement of the industrial and historical forces expressed via ambient noise. And yet they, like many of the other writers we have considered, tend to sanitize whatever “nature” lies behind the masking sound, as a sort of purity which needs simply to be uncovered, and which, uncovered, “communicates” with us. Of this, again, we will have to be critical, and in particular we will need to ask just what ideal community the group’s sonic activism gestures towards.

Before that, though, there is much of use to get at. Let’s begin with listening. The WSP codified their concerns in terms of the connection that listening facilitated with the environment, and the first problem they addressed was noise, understood as interruption or

² To this list we might add the work of Max Neuhaus and Janet Cardiff, although they were not affiliated with the WSP, and that of John Oswald, who was like Westerkamp a student of Truax.

³ A contemporary account close to this perspective is offered in Tim Ingold’s *The Perception of the Environment*.

corruption of that connection. “Listening is the key issue in communication via sound because it is the primary interface between the individual and the environment. It is a path of information exchange... Listening habits create a *relationship* between the individual and the environment, whether interactive and open-ended, or oppressive and alienating.”⁴ Ambient noise, like that of humming traffic or passing aircraft, air-conditioning units or fluorescent lights, reduces the bandwidth of person-environment signal exchange. The passage from a quieter to a more noise-polluted ambient array is simultaneously passage from community to isolation.⁵ This perceptual isolation seems to have been developed and even designed to a high degree in our present circumstance.

Listening is a deployment of attention in the sonic domain. On the WSP model, it is one of three elements composing the “soundscape,” which is in this manner to be distinguished either from sonic space in general, or from the ambient field as we have been using that term, to denote a purely material structuration. The soundscape is explicitly a communications system,⁶ involving listener, sound, and environment, where environment denotes the set of communicating sources, including quite importantly non-human ones like animals, wind and water. Listening may be of one of four sorts: “listening-in-search,” “listening-in-readiness,” “background listening,” and the latter’s corrupt variant “distracted

⁴ Barry Truax, *Acoustic Communication*, p. xviii.

⁵ “If less information becomes available to the listener, through lack of variety or loss of definition, the traditional sense of community involvement is weakened and probably replaced by other ties, mainly via the media.” *Ibid.*, p. 96; “the soundscape that was information rich becomes information poor, and the mediated relationship that was interactive and integrative becomes habitually withdrawn, alienated, and even pathological,” p. 97.

⁶ “According to the gestalt psychologists, who introduced the distinction, figure is the focus of interest and ground is the setting or context. To this was later added a third term, *field*, meaning the place where the observation takes place. It was the phenomenological psychologists who pointed out that what is perceived as figure or ground is mostly determined by the field and the subject’s relationship to the field.

The general relationship between these three terms and a set I have been employing in this book is now obvious: the figure corresponds to the signal or the soundmark, the ground to the ambient sounds around it—which may often be keynote sounds—and the field to the place where all the sounds occur, the soundscape.” Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World*, p. 152. Note that the “soundscape” here, a communications system, the field, stands just where one might expect to find air, flesh, physical energy...

listening.”⁷ The first two of these varieties denote attention in its most recognizable shape, as a heightening of sensitivity toward the sensate. In the first case it is a function of a process of pattern recognition (one is listening for x, trying to find it, as in James’ “pre-perception”), in the second a general receptivity to any signal. The third variety corresponds to the subliminal awareness James discusses. It denotes a non-focal awareness of some sound, which while not being directly scrutinized, would be missed were it to fall silent, and which, given some specific behavior, may at any point become focal.⁸ It also therefore names our everyday relation to most of the sonic ambient field, and particularly to drones, hums, and other regular sounds that tend by their very form to remain ground rather than figure. All of these, notice, square perfectly with the tradition of James. The last of the listening forms, “distracted listening,” is easily related to Walter Benjamin.⁹ Distracted listening is a reception in distraction of an auditory pattern. The WSP in general use it to designate the relationship that one has to a radio or a television or muzak running in our ambience. We hear it, but we don’t hear it, and yet it is communicating, and we are receiving. This is the back channel by which advertising typically reaches us.¹⁰ Schafer and Truax think that we utilize radio and television in order either to carve out our own sonic hollow in a world that is always humming ominously (and stupidly), or to fill in psychological vacuities left by the absence of real, social

⁷ The first three of these are discussed in *Acoustic Communication*, pp. 19-22. The last appears later, on p. 169.

⁸ “...familiar or redundant sounds are ‘recognized’ and ignored with minimal attention being paid until the moment these sounds are deemed to have some significance (or, more dramatically, when they suddenly change or stop, thereby drawing attention to themselves.)” *Acoustic Communication*, p. 22.

⁹ See “The Work of Art in the Age of Mechanical Reproduction,” and the long discussion in Ch. 2 above.

¹⁰ “...once background listening becomes a habit, it is ready for exploitation by the media. The power of long-term subconscious association can be tapped for commercial ends through frequent keynote-like repetition... bypassing the more analytical listening modes associated with rational argument.” *Acoustic Communication*, p. 27. This background current is carefully designed; Truax and Schafer focus particularly on the “rhythmic structure” (*Acoustic Communication*, p. 183) of radio, which is composed differently depending on the channel’s type, but which always stars the most highly-designed elements which are the advertisements, in which all programming climaxes and cadences. Radio rhythm modulates background attention with the purpose of constructing mnemonic association and hence future buying activity.

or environmental communication. That a gesture of perceptual self-defense puts us at the mercy of a commodity system is typical of the contemporary soundscape.

Hi-Fi and Lo-Fi Soundscape

From the beginning the WSP asserts a highly communicative, broadband environment, with little interference, to be optimal. They call it “hi-fidelity.” The very nature of the human being is to exist in such communication; when the communication is present, the individual is healthy; when it is absent, they are not. Loud noise on the scale characterizing most urban situations is probably even responsible for a variety of physical maladies,¹¹ not to mention the psychological ones and the urban tendency to basic withdrawal that Simmel already noted.¹² Further, when such communication occurs, a community really exists—communication is that community, or the community is just that communication. Of course there is no circumstance in which ambient sound is utterly absent; thus there is some variety of community present in any case, some “common,” as I have called it. There is always a material positivity spread spatially in relation to which scores of individuals exist perceptually.¹³ And yet when the soundscape is “low-fidelity,” involving few communicators and little acoustic space in which for actual, small-scale, local signaling to happen, that

¹¹ “...sound is first and foremost a *physical* vibration that affects the whole body. For instance, the body contains many enclosed spaces or cavities that can resonate sympathetically to vibration, each at its own frequency. In addition, and more importantly, the body reacts to noise as it does to any stressor, an age-old reaction that associates loud noise with potential danger. The result is tension, which manifests itself as a constriction of the blood vessels (vasoconstriction). This form of reaction deprives the extremities of nutrients (including the hair cells in the inner ear itself) and increases blood pressure. Changes in breathing rate, muscle tension, and skin resistance also occur. What the mind may rationalize or deny, the body expresses.” *Ibid.*, p. 98; “Even though keynote sounds may not always be heard consciously, the fact that they are ubiquitously there suggests the possibility of a deep and pervasive influence on our behavior and moods.” *Soundscape*, p. 9.

¹² Again, see Ch. 2, above.

¹³ Actually this spatial distribution is quite discrete, and can be mapped. Schafer and Truax do just that, delineating the perimeters of certain sonic fields, in villages and cities, characterized by their signature and background sounds. These perimeters must remain in general within a certain size limited by the amplitude of the sounds, but in detail by the geographical and architectural structurations of their resonating environment. Ambient, sonic community is thus built materially, by time or by craft.

community is increasingly abstract, and composed of isolated units connected to one another, as in Guy DeBord's society of the spectacle,¹⁴ only mediately.¹⁵ The primary contact of each is the mass media. They tend not to speak to one another. So as ambience becomes low-fidelity, so does social connection.

The soundscape has a general history that moves in parallel with the industrial developments of interest to Marx and other economists. At some point, European villages were characterized sonically by the clack of horse-hooves on paving stones, the cries of vendors in markets. Eventually, social time was marked by a bell.

It was during the fourteenth century that the church bell was wedded to a technical invention of great significance for European civilization: the mechanical clock. Together they became the most inescapable signals of the soundscape, for like the church bell, and with even more merciless punctuality, the clock measures the passing of time audibly. In this way it differs from all previous means of telling time—water clocks, sand clocks and sundials—which were silent.¹⁶

Space started ticking. Then, unfortunately for sensate community, began industrialization.

The lo-fi soundscape originates with sound congestion. The Industrial Revolution introduced a multitude of new sounds with unhappy consequences for many of the natural and human sounds which they tended to obscure; and this development was extended into a second phase when the Electric Revolution added new effects of its own and introduced devices for packaging and transmitting them schizophonicly across time and space to live amplified or multiplied existences.¹⁷

Then the machines sped up.

The flat line in sound emerges as a result of an increased desire for speed. Rhythmic impulse plus speed equals pitch. Whenever impulses are speeded up beyond 20 occurrences or cycles per second, they are fused together and are perceived as a continuous contour. Increased efficiency in manufacturing, transportation and communication systems fused the impulses of older sounds into new sound energies of flat-line pitched noise. Man's foot sped up to produce the automobile drone;

¹⁴ See Guy DeBord, *The Society of the Spectacle*.

¹⁵ "The presence of a steady level of sound reduces what we may call the 'acoustic horizon' of an environment, that is, the farthest distance from which sound may be heard. The steady sound masks low-level sounds thereby producing a reduced sense of space. In the most extreme case, each individual is surrounded in a cocoon of sound with no aural contact with others." *Acoustic Communication*, p. 26.

¹⁶ *The Soundscape*, p. 55.

¹⁷ *Ibid.*, p. 71. I will discuss "schizophonia" in a moment.

horses' hooves sped up to produce the railway and aircraft whine; the quill pen sped up to produce the radio carrier wave, and the abacus sped up to produce the whirr of computer peripherals.¹⁸

At this point the hum of the power lines and the drone of motors constitutes the “keynote”—the distinguishing feature—of our increasingly-generic soundscapes. Every city sounds like this. Schafer, like Young, etc., notes the likely influence of such drones upon behavior and moods,¹⁹ and he specifically identifies the hum of power as the tonic for all contemporary urban life. Our lives are like meditative chants upon a 60 Hz drone.²⁰

It is... only in the electronic age that international tonal centers have been achieved; in countries operating on an alternating current of 60 cycles, it is this sound which now provides the resonant frequency, for it will be heard (together with its harmonics) in the operation of all electrical devices from lights and amplifiers to generators. Where C is tuned to 256 cycles, this resonant frequency is B natural. In ear training exercises I have discovered that students find B natural much the easiest pitch to retain and recall spontaneously. Also during meditation exercises, after the whole body has been relaxed and students are asked to sing the tone of ‘prime unity’—the tone which seems to arise naturally from the center of their being—B natural is more frequent than any other. I have also experimented with this in Europe where the resonant electrical frequency of 50 cycles is approximately G sharp. At the Stuttgart Music High School I led a group of students in a series of relaxation exercises and then asked them to hum the tone of ‘prime unity.’ They centered on G sharp.²¹

This then is the character of our sonic ambience. Because the WSP orient themselves in terms of “communication,” this ambience is a system of noise, across which tendrils of signal still pass, and within which smaller regions of hi-fidelity float like islands or are pocketed like nests. Each of these smaller communications systems is connected to the whole as each house is connected to the power and tele-communications grid. There is passage among them, but greatly limited in type and volume, and always mediated by this infrastructure, which for the

¹⁸ *Ibid.*, p. 79. Note the direct relation between this “keynote” hum and the continuous tone musics we considered in the last chapter. Schafer would argue that the latter stems from the former—he gives a like analysis for a series of composers, whose pet effects, he thinks, are direct transductions from the regularities of their sonic environments.

¹⁹ *Ibid.*, p. 9.

²⁰ “The function of the drone has long been known in music. It is an anti-intellectual narcotic. It is also a point of focus for meditation, particularly in the East. Man listens differently in the presence of drones, and the importance of this change in perception is becoming evident in the West.” *Ibid.*, p. 79.

²¹ *Ibid.*, p. 99.

most part distributes to rather than from the locality (consider the ratio of data uploaded and downloaded to a home computer via the internet), and which distributes from a distant hub, and not from what is physically present immediately outside the home.

Noise and Sacred Noise

It is worth detailing just what is meant by noise. Truax and Schafer identify three types of definition. The least useful definition of noise is that sometimes employed in anti-noise legislation, where noise is taken to be sound exceeding some certain decibel threshold. Even at this extremely practical level, where noise is named functionally for the sake of its management, absolute amplitude is insufficient to grasp what is disruptive about certain sounds, which has to do with their relations to the whole local field in which they emerge, and with their own dynamic and even signifying characteristics. The second definition, from Helmholtz, is that noise is non-periodic sound. This would allow that many of the ambient hums and drones characterizing urban and domestic space are not noise, but musical elements—a possibility which Schafer and Truax dismiss. The third definition, as we have said, is that given first by Claude Shannon and now axiomatic for communications theory: noise denotes anything interfering with a communicating signal.

I mention these definitions mostly in order to get to a dependent point. Schafer observes that historically the loudest sounds in a community have corresponded to the most powerful entities or social forces within it. At some hypothetical point in the distant historical past, thunder would have been the most powerful of sounds. Thus for example in the *Bardo Thodol* the very sound of reality is characterized as thunder. Especially in an age when a bad storm could flatten a village or destroy a season's food supply, the response of listeners positioned in relation to a soundscape in which thunder peels would be powerful also: adrenaline rush, fear, flight... intense respect.

The cathedrals built in the middle ages were resonators of sound. At this point the chanted voice, the echoing voice of the priest from his elevated pulpit, and then later the thunderous voice of the organ, as played by Bach, had supplanted thunder. Bach was given the social right to be as loud as nature, and the community of listeners was with that change also glued to a new axis of sonic power. The church takes over the power of nature. When industry appeared in the 18th and 19th centuries, the voice of the machine substituted for that of the organ and the later symphony. Again a shift, not only in the keynote of the soundscape, but also in the position of its greatest force; and again, with that, a shift in the social channel for awe. Then the advent of sonic amplification and the loudspeaker. The power of a particular speaker's voice, and the power of whatever music is allowed amplification, now rivals and overcomes the urban hum. With the distribution of radios, this power enters every home; there could have been no Nazi success, according to Goebbels, without the radio; and this is not only because of the ubiquity of informational distribution, but also because of the power of the voice via that powered membrane to cut through and override whatever else is present in the local auditory ambient field. Of course that force is multiplied with television. And now another shift in the most powerful of auditory keynotes, with the widespread social distribution of headphones attached first to Walkmans and then to Ipods.²² The ears of each individual may now be wired directly to pre-recorded sound. Especially younger males play music by this channel at very high levels. Thus the sound drowns out everything else, with the exception, importantly, of the tactile vibrations still passed through the ambient field into the body.²³

²² Michael Bull discusses these at length in his books *Sounding Out the City* and *Sound Moves...*

²³ Schafer also notes the potentially-democratic shift on which Benjamin placed his hopes: "Now, we will recall that the vibratory effects of high-intensity, low-frequency noise, which have the power to 'touch' listeners, had first been experienced with thunder, then in the church, where the bombardment of the organ had made the pews wobble under the Christians, and finally had been transferred to the cacophonies of the eighteenth-century factory. Thus, the 'good vibes' of the sixties, which promised an alternative life style, traveled a well-known road, which finally led from Leeds to Liverpool; for what

Schafer refers to this shifting axis as “sacred noise,”²⁴ that sound which, by social agreement, acts most powerfully upon the individual, both upon the arousal system and, by its role as spatial frame and mask, upon the flow and system of significations. Schafer gives it this title because its existence reflects an allowance on the part of the social body. The loudest current of sound is what is permitted to be the loudest. Were it not given that right, it would be silenced. Thus the positioning of sacred noise reflects a value system, and it constitutes a way in which the value system, composed of signifying variables, opens onto and varies with a physiological system that exceeds signification. The significant opens a window to the haptic, and the haptic then enforces the significant. We have here not only a “master signifier” in the post-structuralist sense, but actually the physical force that Žižek thinks constitutes the materiality of its mastery.²⁵

Our current situation, as I have just noted in passing, is an interesting one in which sacred noise is doubly positioned. On the one hand, the power grid, the rumble of machinery and most importantly of traffic, which inundates the majority of spaces in a city, constitutes both the keynote and the “sacred noise.” It is that ground against which all other sound figures are heard, that which typically sings the loudest, and whose noise is allowed to continue socially because of an unspoken consensus about its foundational necessity. But then there are all these bubbles, the interior of the home, the interior of the car, and the interior space of the headphones, which suppress that background hum within a certain large swath of the audible

was happening was that the new counterculture, typified by Beatlemania, was actually stealing the Sacred Noise from the camp of the industrialists and setting it up in the hearts and communes of the hippies.” *Ibid.*, p. 115; “Electroacoustic power represents the ultimate democratization of acoustic power—anyone can compete on the decibel scale.” p. 127.

²⁴ *Ibid.*, p. 76. There is also a connection here to Jacques Attali’s conception of “noise,” as he presents that in the well-known book of the same title (*Noise: The Political Economy of Music*). Attali writes that “noise is violence: it disturbs,” and then immediately that “music is a channelization of noise.” (p. 26) More is asserted here than on Schafer’s treatment, and it stands somewhat outside of the present discussion. At any rate, to some significant degree I believe Attali’s work must be seen as a certain interpretation of Adorno’s, which we will consider in depth in the next chapter.

²⁵ See *The Sublime Object of Ideology*.

spectrum, and then sound more loudly over it. A communal and a private sacred noise. In physical truth, the two continue to function together. The lowest rumblings of traffic rest below the range of headphones, which with their small speakers produce sound beginning significantly above the lowest audible frequencies; and these broader ambient rumblings continue through to those very low frequencies which are not at all audible, but are certainly tangible, and which continue to modulate the resonant body itself (and perhaps also brain waves, etc.). This is to say that a person plugged into the sound system in their car or on their waistband is also, still, plugged into the surrounding ambient field. (To be perfectly specific, these are simply two elements of the ambient array persisting upon the person's sensory surfaces).

With the WSP we rule out noise as absolute amplitude, or noise as nonperiodic sound, in favor of a conception of noise as interruption of signal. The identification, then, of a "sacred noise" is the identification of a dominant non-communicating force operating specially in the framing conditions of a communications system, either in brief expressions, as with thunder or the church organ, or as an ongoing keynote sound, as with our traffic. In either case, even if the sacred noise can be thought of as communicating something, its essence as sacred noise, that is, as socially allowed raw force in the form of amplitude, exceeds communication just insofar as it taps into the energetic resources of the individual—just insofar as it inspires awe or fear. Sacred noise is still noise, but it is noise that acts. While Bach's organ pieces may convey many things, for example the beauty of mathematics, the order of the universe, the glory of God, etc., the amplitude of that music in the church does something in addition to communicate: it awes. This is the action of the sacred noise: through high energetics, it elicits energy in the individual. The dimension of sacred noise, which is the forcible dimension of the communications system, bridges energy to energy; it short-circuits the communications system, but it is just this short circuit which constitutes the determinacy

of the system, and its social historicity. The identity of sacred noise is one perceptual marker of the stage of social-economic development. That the WSP, ultimately, would like to do away with all noise, including perhaps the sacred, reflects a wish also to escape social and energetic power. The optimal communications situation, the “hi-fidelity” soundscape, is just such an abstracted socius. Whether we are still to allow thunder, as a more “natural” power, is open for the moment to question.

Schizophonia

Above I offered a quotation that used the technical term “schizophonia.” Schafer coined this term, basing it roughly on Gregory Bateson’s “schismogenesis.”²⁶ If the latter designates the splitting apart of elements within a previously-intact social nexus, the former denotes the result of such a process specifically with regard to the soundscape. In fact there are two key problems for the WSP, two key maladies of the contemporary urban soundscape. These are noise, which we have just discussed, and schizophonia, which we have mentioned at several points without naming it. Schizophonia is the condition inaugurated by audio recording and telecommunication of audio signals. It necessarily has analogs in other sensory modalities—perhaps we could call the most common of these schizovisuality.

If we consider again what the soundscape has been historically, we must recognize a tremendous shift in its character with the radio and the phonograph. What these allow is a production of common auditory ambience on the basis of some of the patterns characterizing some other, distant ambience (distant in time, distant in space)—or just on the basis of the work of sonic engineers, who produce an ambience never “naturally” experienced. A contemporary auditory ambient array may itself now be manufactured just by pressing the “on” button on a radio, television, or computer, or pressing “play” on a stereo. Suddenly the

²⁶ See *Steps to an Ecology of Mind*.

whole home, the whole interior of the car, or the whole interior of the headphone-gripped head, are typified by a complex arrangement of sounds, spatially-distributed, etc., which are products of industry. One soundscape is now nested within another, or the existent soundscape is now multi-dimensional in a way that previously it was not. All the things that we have noted about the connection between ambient sound and physiology and psychology are now functionally integrated with an ambient productive process. Ambience is doubly produced, by all the vibrating background elements entering a local volume of air, and by the extremely articulate systems of vibration recapitulated or repatterned into that air on the basis of recordings or communicated signals; thus the listener too is produced as being in a certain state, especially by music—and most notably by loud music, which is a form of appearance of the sacred within sensorial ambience. The WSP concern about this circumstance, as we have noted, is that it interrupts actual environmental communication, or to put that otherwise, it constitutes an ambient environment that is not conducive to communication with other persons, living beings, or surrounding nature. It substitutes for all of these and erases them from practical perception. What the WSP do not emphasize, but which we might as well add, is that while it erases the immediate world, it integrates with more distant nodes in a network—spatially distant in a telecommunications network, temporally distant in a production-distribution-consumption network—and very importantly, through arousal of physiology and of attention, it pulls individual energy into the flux of such networks.

In the terms I offered at the beginning of this chapter, we see here the large-scale deployment of “aesthetic” arrays, in the form of recordings or broadcasts, all across the face of social ambience. Each car contains an array of music; within the car music unfolds. But it is augmented music, with a new basso continuo or cantus firmus played by the automobile itself, the engine and the wheels on the pavement, telegraphed through the skeleton and skull to the ear, and also bypassing the ear, traveling straight into posture and muscular tension by the

avenue of the vestibular system. Each head, attached to its Ipod, is a concert hall, but in this concert the freeway still plays, accompanied by a visual lurch of city and function.²⁷ Each living room, likewise, is a movie cathedral in which the linked aesthetic arrays of film unfold. But in fact the sound and image of that art meander through a larger multi-modal ambient array, in which sits light sculpted by furniture, windows and incandescent fixtures, in which sound floats sculpted by spigots, neighboring dogs, and of course traffic.

What we have in these observations is the beginning of a materialist description of social perceptual reality, based on the production of common ambience. It already raises several key questions, the most immediate of which regards the inter-relations of different sensory modalities, and more complexly, the variety of interaction to be posited between ambient fields of different modality—how does auditory space interleaf with visual space, etc. Before addressing those questions, though, there is more to be considered with the WSP, which will at any rate lead us back to these same concerns.

Memory of Balance

Recall that the WSP posed these two basic problems, of noise and of schizophonia, with the hope of a practical solution. Aside from writing books, they engaged in “soundwalks,” “ear cleaning,” the production of electroacoustic, “soundscape” compositions which were supposed somehow to facilitate better acoustic communities, and even activism in anti-noise campaigns. All of these activities generally were to fall under a principle of “design.” Schafer in particular was deeply influenced by Bauhaus; his complaint was that principles of ergonomic and functional design had not reached so far as the soundscape we all occupy—or rather that to the degree that they have, the principles implemented in the course

²⁷ Michael Bull has investigated these three sonic innovations: Walkman, Ipod, and automobile, in various articles and books, starting with *Sounding Out the City*.

of such design are those desirable from the perspective of the sellers of commodities, but not of individuals engaged in the course of everyday life. Design, such as it is (and traffic noise, for example, has really not been designed at all), has resulted in the roaring, humming schizophonia we have just described. It is the design of isolation, where common ambient sound masks all communicators, and where sound is used individually to stake out a lonesome territory, establishing a set of sonic walls pressing back against peripheral noise.

So the WSP, and later the “World Forum for Acoustic Ecology” explicitly poses the goal of designing acoustic ambience better, through anti-noise legislation, reduction of automobiles (and introduction of better and quieter transportation), construction of acoustically-intentional parks using earthwork to preserve stillness. Like the APU or J.J. Gibson, or indeed the later John Cage, Truax linked perceptual analysis with the necessity of the construction of a perceptual positivity with which the individual could be better integrated. The general language he used for characterizing this goal was an “ideal” acoustic community, one that “fosters balance.” “The wisdom of an ‘acoustic ecology’,” he writes, “is to integrate the listener within the soundscape. Just as we are not separate from nature, we are not isolated from the soundscape ‘out there.’ Its design is of our own doing, and therefore it is our responsibility.”²⁸

The balance or optimal integration identified here can be understood in two ways. From a strictly quantitative or engineering perspective, it refers to an acoustical communications system in which each communicator has a bandwidth clear for signaling, such that no signal cancels another. If there are more communicators than receivable bandwidths, then signals should be distributed across time. Good acoustic design in this regard is the same whether we are talking about a movie soundtrack, a sales conference or a swamp. It consists in carving out a particular frequency range, depth, etc., for each element, such that

²⁸ *Acoustic Communication*, p. xxii.

each may express without interfering with the others. But, while Schafer thinks of both the recording and the swamp with fondness, he has no love for the conference, because the conference takes place typically in a closed space, filled with masking hums, involving amplification, and exhibiting no concern with the natural world outside its confines.

The second way in which to understand the balance he is looking for is by the set of references he regularly makes. These are of two key sorts: he references the “natural” soundscape, for example that of the Vancouver wilderness, or he references rural villages. In the first case, recordings produced by the WSP, as well as by fellow-traveler Bernard Krause,²⁹ demonstrate a surprising degree of balance between different animal voices. Presumably this good equalization is a result of an evolutionary process in which each species had to communicate in non-noisy harmony with other species. It is typical of the WSP to look at the natural soundscape as itself being a sort of musical composition, existing at different spatial and temporal scales. For example, frogs sound through the night, stopping abruptly at the first sound of certain birds; meanwhile through the year, the voices of wolves rise up in the winter, dying down in the summer. The whole living soundscape exhibits a complex interweaving of sounds, each of which signals meaningfully to other living communicators, but none of which masks out the others.

Some remnant of this organic clarity, rhythmicity and perpetuity remains, on Schafer’s account, within the rural village.³⁰ In this case the elements are different, of course, but they are still varied in kind. We have the natural sounds, the sounds of streams, for example, then agricultural or work sounds, especially the singing of workers. Then there is the

²⁹ See Krause, *Wild Soundscapes*.

³⁰ “Circadian and seasonal rhythms are observable in human settlements also, but they are strongest in small towns and villages where life is more apt to be regulated by common activities.” *Ibid.*, p. 231.

town bell (there is always a bell in Schafer's village).³¹ Each of these elements sounds in calm harmony with the rest, and ongoing, keynote sounds like the stream or the wind do not significantly mask auditory space.

Now the wilderness and the rural village still exist, but they are increasingly difficult to find, and their calm balance is increasingly scarred with the flight of passing airplanes. All of the WSP are painfully aware of this fact; in this regard they have the same experience as any other environmental group. What it is that they love, what they think is desirable, necessary, healthy, human—even more important than anything else—is being killed, submerged. The sonic environment is vanishing beneath a veil of hum.

The field recordings which constitute the majority of practical work done by the WSP are memories of these vanishing voices, memories of decaying balance. They are also studies, models for better sonic design in the future. And they are material for soundscape composition. We will discuss Westerkamp's compositions shortly.

One thing worth noting first is that while Truax's and Westerkamp's work is chiefly electroacoustic, based on the manipulation of field recordings, Schafer's was by and large acoustic and non-tape-based, if otherwise unconventional. The large, 12-piece series for which Schafer is chiefly known, the *Patria* series, is entirely about the pursuit of a balance or a union, an "integration," as he says above, that indefinitely recedes. *Patria* traces the attempts of a couple in love to achieve union with one another, through a series of incarnations and a series of names, and through a series of mythical configurations ranging from Native American myth, to ancient Egyptian, to Hindu and ancient Chinese. In two of the works the chief characters are intensively alienated and suicidal. In later works, as resolution approaches, they become more harmonious. In every case the work is site-specific, and often outdoors,

³¹ Alain Corbin has produced an extended historical study on the significance of bells in French localities, from the French Revolution forward, in *Village Bells: Sound and Meaning in the 19th-Century French Countryside*.

engaged with nature and its cycles. They occur at dawn, or at dusk through till dawn, by a lake or in a wood or in a garden. Always the surrounding ecology is supposed to play a large role in the piece itself. Schafer recommends that all soundscape composition have the explicit intent of re-uniting the perceiver with the natural soundscape.

The conjunction of a sought-after integration with a long-lost harmony is perhaps inescapable. A decided nostalgia is already present in the more “scientific” investigations of nature and the rural. To find the right rural, long trips into the mountains must be taken; it is not sufficient to go to the Canadian Midwest, where grain silos, combines, tractors and semi-trucks hum all day long. It is a lost social community, and a receding nature, that serves as the ideal template for the present. Acoustic design, aiming at future harmony, wishes upon the past.

Nor is present success likely. Schafer notes that “composers are not yet ready to assume the leadership role in reorchestrating the world environment.”³² What is really achievable must be limited to exercises in classrooms to train the ear, soundwalks to pique it, and mostly compositions from ambient acoustic materials, somehow designed to heighten listening and to remind it of the lost connection.

Ambience of Conjunctions

A particular composition can be called a “soundscape” composition, in distinction for example from “musique concrète,” which we will mention again in chapter 6, on two key bases: it should not simply extract sonic elements from an everyday circumstance, and then refine those elements to the point where they are unrecognizable, to be entered into a composition whose concerns are still those of traditional composition—rather it should retain at least the sense of the place from which its materials were taken; and it should have as one of

³² *Ibid.*, p. 206.

its goals the heightening of listening, and specifically the heightening of the lust of acoustic attention for connection with its real, immediate environment, as distinguished from the schizophrenic one, and as hidden beneath the veil of noise.³³ The first rule is intended in the service of the second; and in the second there is certainly a tension, insofar as the composition which is to turn attention and hence immediate sensorial connection away from schizophrenic assemblages is itself a schizophrenic machine. We need among other things to ask how this is supposed to work.

Orientation and respect toward the “natural” auditory ambience is constitutive of the composition as “soundscape.” Yet there is another set of criteria offered by both Schafer and Truax, and emphasized in Westerkamp’s compositions. This is that a soundscape piece, in deciding tempo, rhythm, even pitch and interval, should base those elements upon the native cycles of the human body, focusing particularly upon heartbeat, breath, rhythms of walking, and the upper frequencies generated by the nervous system.³⁴ By this means the listening body, we could say, is entrained so as to be in an optimal, relaxed listening attitude. The patchwork of manipulated elements is then laid upon a composed metric derived in some respect from these axiomatic periods. The body frames the environment, just as the (produced) environment frames the lived and sensing body.

³³ Truax in *Acoustic Communication*: “The essential difference between an electroacoustic composition that uses prerecorded environmental sound as its source material, and a work that can be called a soundscape composition, is that in the former, the sound loses all or most of its environmental context. In fact, even its original identity is frequently lost through the extensive manipulation it has undergone, and the listener may not recognize the source unless so informed by the composer. In the soundscape composition, on the other hand, it is precisely the *environmental context* that is preserved, enhanced, and exploited by the composer. The listener’s past experience, associations, and patterns of soundscape perception are called upon by the composer and thereby integrated within the compositional strategy. Part of the composer’s intent may also be to enhance the listener’s awareness of environmental sound. Whereas the use of *concrète* sources leaves the environment the same and merely extracts its elements, the successful soundscape composition has the effect of changing the listener’s awareness and attitudes toward the soundscape, and thereby changing the listener’s relationship to it. The aim of the composition is therefore social and political, as well as artistic.” (p. 237)

³⁴ “Within the framework of our experience, the audible metric divisions of heart, breath and foot, as well as the conservational actions of the nervous system, must be our guide against which we arrange all the other fortuitous rhythms of the environment around us.” *Ibid.*, p. 228.

What we are now dealing with is in effect a long and complicated series of conjunctions. In Westerkamp's "Kits Beach" (1981) a certain subset of these conjunctions is presented. "Kits Beach" is a prototypical soundscape composition, derived from a soundwalk. The recording originated on a beach close by Vancouver. In it elements of nature, city, and listener are all present. Westerkamp begins with a description of the environment in which she is recording, verbally conveying ambient elements given only to the eye and not to the ear. We learn of the calmness of the day, the appearance of the surface of the water, the presence of ducks. Next a reflective explication with regard to the parallel processes of recording and listening is rendered by means of later studio alteration. Westerkamp draws attention now to one, now to another element of the soundscape, emphasizing particularly the keynote background hum against which all these other sonic figures sit as upon a ground. As she designates different aspects of the sonic field, she brings the level of that aspect up by means of a post-equalized fader in the studio. We then have a pantomime, on the recording, of what attention naturally does on its own, suppressing or augmenting various elements of a sensory array, depending on interest and the ways in which the environment pulls upon it. All this by way of preface. We enter the most produced dimension of the piece eventually by separating out the "natural" sound of the lapping of water against barnacles from the background hum, by means of bandpass filters and equalizers.³⁵ If there is already one conjunction between the sonic field and attention, insofar as each varies just in relation to the other in a sort of push and pull involving desire, aversion, task, and signal (a relation that we have already investigated in depth), there is a more primary one at the origin of any single stream of sound.

The tiny clicking sounds that you hear are the meeting of the water and the barnacles. It trickles, and clicks, and sucks, and...³⁶

³⁵ It is worth noting, of course, how much artifice is necessary to get at this nature!

³⁶ Hildegard Westerkamp, "Kits Beach" (1981).

The meeting of the water and the barnacles is the event producing this particular stream of sound, with which Westerkamp works throughout the rest of the piece. The water, moving with an inherited energy distributed broadly through the wave dynamics of the ocean, laps across the resonant, cupping apertures of the barnacles, who lick at the water to pull food from it. It is this ongoing push and pull, of a system of energy against a set of structures (as Freud would say, a system of bound energy), that releases energy as sound. The patterning of the auditory ambient array, which is a physical structuration, remember, of the air in patterns of higher- and lower-amplitude oscillations of pressure around the atmospheric mean, occurs as a continuation of the conjunction of water and barnacle. It might be easiest to call this particular conjunction one of body with body, and to say simply that sound is the result of the frictive, conjunctive slide between physical objects. But this loses something of the truth, since very often one or both of the elements so conjoined are not objective bodies at all, but spatially-labile volumes of matter, like water or wind. It is more generally correct then, to refer to this conjunction at the origin of some sound as one between specific systems of energies.

Technically speaking, at this primary conjunction there is as yet no “soundscape,” since this latter is defined as a communications system involving a listener. The soundscape occurs, pops into being, can be spoken of, once the sound hits the ear. It is worth emphasizing even now that what occurs here actually exceeds the notion of signal, used by Schafer or Truax or for that matter Gregory Bateson. From a communications perspective—and this is the one, remember, preferred on contemporary hegemonic accounts, for example in the work of Albert S. Bregman or Stephen McAdams³⁷—the sound “communicates” the event that I have just described. It telegraphs in explicit pattern the spatiotemporal contours of that event,

³⁷ See Bregman, *Auditory Scene Analysis: The Perceptual Organization of Sound*, and McAdams, “Spectral Fusion, Spectral Parsing, and the Formation of Auditory Images.”

through the air, to the ear, into the brain, finally to appear before the little man who lives in there as a meaning, which, with his native intelligence, he deciphers to refer³⁸ ultimately back to that event, of the intercourse of sea and barnacle. The usability of communications theory confirms that this is not nonsense. One thing happening can very well be the communication of event to neural homunculus (leaving aside the fact that such a character is a fiction). But that does not exhaust the phenomenon; it obscures whatever else is happening. I can designate this additional x, which on some accounts becomes downright mythical,³⁹ simply by pointing out that the motion of air is equally as energetic a phenomenon as that of the caressing of water against barnacle. No transduction has taken place within the auditory ambient field, at least until the impact with the ear. The motion of air molecules elastically in precise amplitude, period and spatial distribution is still the real manifestation of energy, and still in a conjunctive space, since the motion occurs always against a resistance determined by the material character of the present medium, varying with weather, season, time of day.

This leads us to the second conjunction, about which we will have more to say shortly. This is the conjunction of an ambient volume of air with the ear drum, air playing upon that surface in such a fashion as to set it vibrating in synchrony, or just the same the membrane of a microphone, likewise cast into patterned motion. In fact the energetic intercourse of water and barnacle spreads horizontally into the intercourse of air and listening membrane. The term “ambient array” when used in reference to sonic vibration designates the absolutely proximate reality of that energetic event.

If we broaden this conjunction for the moment, promising to return to it in specificity later, we can name it the basic conjunction of listener and ambience. When Schafer suggests that soundscape composition ought to determine its metrics by reference to bodily rhythms, he

³⁸ Here I mean to invoke the term “referent” in the technical semiotic sense, as distinguished from signifier and signified.

³⁹ For example, this x is a member of the set “The Real,” for the Lacanian camp.

designates this conjunction as primary. For the purposes of a clear analysis, we can break it at this broader level into two sorts of conjunction, distinct in name if ultimately ontologically intertwined. On the one hand Schafer recommends the compositional conjunction of internal sounds with external ones. The sound of breathing and of the heartbeat are concurrent with whatever is heard without. Schafer's recommendation that compositions be designed so as to harmonize this conjunction, to make it natural and smooth, reflects his general desire for integration and "balance" between individual and environment. A second conjunction is also indicated here, insofar as many of the rhythms of the body are not properly heard, but are rather "propriocepted," or sensed in an internal tactile fashion. This dimension of the conjunction of body and environment is significant given our previous discussions about body image. According to Head or Schilder the body image is a recurrent, periodic distribution of sensate positivities, especially propriocepted ones. I tried to show that the recurrent distribution of propriocepted positivities also determines the spatial emplacement of "external" percepts, just in relation to them, such that what I now hear, I hear as being at some distance from the right side of my body, etc. If we press again as far as we did previously, we could suggest that the very distinction between the immediate bodily "me" that is propriocepted and the "that" which is perceived is generated through the regularities of this distribution (and perhaps also through a "higher-level" distinction regarding modality). Bodily sensation and external sensation have a common origin. They both happen exactly at the surface of the body, whether folded upon itself in the viscera or folded with the air on the ear. The intensity of Schafer's insistence is clearer given this observation. It is his communications framework which prevents him from going as far as he might like. We will attempt presently to exceed him.

In "A Walk Through the City," in which Westerkamp uses Norbert Ruesaat's poetry together with her sound, a similar concern with the bodily conjunction of individual and

environment is expressed, and in terms strikingly similar to those employed by Schilder or by Freud. This might be quickly conveyed just with the concluding line of that poem: “the city borders the skin.” In a simple way this recapitulates the basic circumstance: sensation, perception, the spatial-material reality of experience occurs in the manifold draping of ambience upon bodily tissue. Actually the situation is not simple, for many reasons, and particularly because of a further set of conjunctions, firstly that between sensory modalities, ambient arrays of distinct modality, image and visual array, then ultimately between past and future, in startling parallel with that between image and array. Ruebsaat’s poem reflects that complication, the conflict and imbalance involved in it. What runs up to the end of the poem is this:

the whole city staked out
with eyes
like a giant crystal

catching the angles of light

the city borders the skin⁴⁰

When Westerkamp contextualizes this spoken poetry within a soundscape composition constructed from recordings of a walk through a low-income neighborhood in Vancouver, she indicates the tension between the visual and the auditory, but also that between elements of the social body, some of whom are watched by others. Ruebsaat’s poem points toward an element of control, of social control mediated by technology, regulating the bodily concourse of urban life. Recall Simmel’s passengers on the train, in a silent, heightened anxiety brought on in large part by the unremitting insistence of sight. On the train we face one another, but we do not speak. We learn to divert our eyes, but we feel all the others still upon us, and as we move through the space of the train or that of the station, or that of the street, we move as if through another ambient field, not only that of light, described by J.J.

⁴⁰ Norbert Ruebsaat, “A Walk Through the City.”

Gibson in his happy world of natural vision produced for the use of the Air Force, but also of sight.⁴¹ Foucault has described this circumstance as “panoptic” culture.⁴²

The eyes with which the city is “staked out” must, like the ears which capture the soundscape, be both wet and hard, biological and technological. We are watched by persons from windows and also by cameras on walls. Ruebsaat verbally envisions the whole of the city therefore as a “crystal,” a multi-nodal geometrical configuration “catching the angles of light.” On the one hand this is social space as a massive, architectural-visual ambient field, to which we listen, as it were, with our eyes, drinking the light. On the other hand, it is the eyes, and not the ambient field which are “like a giant crystal;” it is they which radiate and they which conjoin. It is this double geometry of inhaling light and exhaling gaze which borders the skin, lays upon it, presses on the individual perceiver: “in the instant of the newsflash, in the terror of the merchant, in the gleam of the coin, the child’s eye.”⁴³ To put it another way, two astute insinuations are made here. One, that the city is a perceptual construction. That the city borders the skin means also that without the skin, without the eye or the ear to catch it, interrupt it, turn it into a moment of conjunction to be assembled, there is no city. That seers are also seen, as Merleau-Ponty never got tired of saying,⁴⁴ means that while on the one hand perception is the momentary foundation of the socius, the city resting upon eyes like light upon junctures in crystal, on the other the whole of that web turns continually inside-out, turning eyes into images. Continual vision, continual surveillance. The question that Westerkamp’s piece then raises is how sound and listening sit against this flashing, implosive net.

⁴¹ Lacanians like Kaja Silverman and Judith Butler refer to this field as the gaze.

⁴² See Michel Foucault, *Discipline and Punish*, particularly part 2, ch. 3, “Panopticism.”

⁴³ *Ibid.*

⁴⁴ See particularly his notion of the “flesh” in *The Visible and the Invisible*.

Acoustic and Visual Space

One thing that I have sought to make clear is the fact that any question about perception or about that which is perceived will be entirely recalibrated, and in effect answered or at least quarantined, depending upon the initial axioms accepted. If we begin with a communications or information-processing model, the question about the interlacing of vision and hearing immediately becomes a “binding problem.” We assume that perception is interior, the assemblage of certain data from different origins into a percept-composite which is officially “in the mind,” if projectively “external.” The binding problem I have identified is the question by what mechanism nervous signals from the auditory and the visual cortex are assembled such that they become features of some single object or event which is cognized as a unity.

I said that theoretical presuppositions “quarantine” theoretical answers. This particular model quarantines the problem of modal inter-relation within the head. This it does quite intentionally, in order to leave room for a physical reality ontologically unrelated to the senses. What occurs in what we have been calling the “ambient field” is uniformly quantity and force, motion and energetic distribution, where all of these basic terms have a mathematical and therefore cognitive essence, not a sensate one.⁴⁵ Sensation denotes the moment in which physical energy is “transduced,” a la Uexküll, into a sign, which flows into a river of information then to undergo calculation and lastly decoding. Outside, force and energy, inside, information and then meaning. If there is a question of “modal” synthesis it is

⁴⁵ To look forward to Deleuze’s *Difference and Repetition*, what is foundational in this cognition is not exactly its mathematical character, but more specifically its being a matheme—a reiteratively employed, pre-known grid—legislating and reducing to equivalence. Cognition is reduction of motion to cross-cancelling, balanced equality. It is, among other things, therewith a producer of images and other masks of death.

ultimately a civil dispute, a question of the structural integration of distinct bureaucracies within a single state.⁴⁶

Even this model, at any rate, can be complicated with a reference to Uexküll and Noë. Uexküll noted, recall,⁴⁷ the asymmetry between the spaces in which percepts of different modality are distributed. We are not dealing then only with modally different objects—a visual percept vs. an auditory one—but also with modalities of space. Tactility, for example, lacks the expansiveness either of a Cartesian volume or of a Gibsonian ambient sphere. As for vision, Uexküll allows that it occurs in a three-dimensional space—although Gibson at least to begin with does not. We think of vision as perception at a distance, such that what we see, some quality or thing, is over there, away from us. That light sits on the eye or that there exists a retinal image is inconsequential, since on this model we assume the whole of the perceptual space to be a fabrication. Meanwhile we also hear things at a distance, but somehow to a lesser degree. Their position more easily eludes us; sounds sometimes arrive alone, without source, which must then be sought.

This is the set of problems we have if we begin with assumptions about interiority, exteriority, and communication. We get different ones if we begin, like Gibson, with an assumption about the immediate conjunction of perceiver with environment, and if we deny the basic internality of perception—if we assert that perception is a behavior, dependent upon learned regularities of conjunction between musculature and physical positivity of a sensible character. Now the question about the intersection of modalities is no longer one regarding what the brain does. Still we have roughly distinct “perceptual systems”—Gibson himself was

⁴⁶ This of course is the legacy of Descartes and Locke, who intentionally segregated sensation and physical reality so as to make the latter calculable. That the essence of exteriority is thereby produced as perfectly commensurate with the essence of interiority as what comes to be “processing” (in Descartes, recall, this dubious symmetry required both the existence and benevolence of God; in Locke it was acknowledged a “mystery”), is overlooked, for the simple reason of this method’s undeniable results. The geometrical crystallization of externality gives us first the clock and then the bomb: what greater truths could we desire?

⁴⁷ In *A Stroll Through the Worlds of Animals and Men*. See Ch. 1 above.

not, like Noë, interested in challenging basic modal distinctions—but now the ambience in which each performs its perceptual dance exists in one spread plenum. The ambient field is multi-modal, or pre-modal, or amodal. If the visual ambient field is the structured system of light existing in a certain reverberant volume, where each point may be conceived as an intersection of an infinite number of rays, which may be traced in the reverse direction back toward certain surfaces, altogether arranged around this point in the shape of a conically-sectored sphere (the “array”), that field is what we might call a concrete abstraction. It is not the kind of abstraction that passes from the thing to the generic representation of the thing (or at least it intends not to be); but it is a cutting-down of the physical structuration of both volume and point. This is clear if we ask where the auditory ambient field is. It is in just the same volume. If we ask what it is we will have a parallel answer: this array denotes the structured system of oscillation of air molecules according to waves of pressure. Any point in the array will find a conjunction of vibrations hearkening back to the kind of conjunctive physical event we described above. Seen from the perspective of the point, each of those events are arrayed at some distance.

But sound in the ambient array makes apparent the character of the array, which was veiled with light by its speed. A number of facts emerge. First, while it is easy enough to conceive the optical array as a system of static points of light (though I noted before that actually that light is purely eventful), that is not possible with sound. Positioning of the ear at some location is offering it to rhythmic palpation—if above 20hz, resulting in pitch, if below, in rhythm or touch. This shows that, second, the tactile array and the auditory array overlap in the medium of structured air. Thirdly, we may have a sense that we immediately see objects at a distance—that the structured light at a given point in the array is directly conjoined with the surfaces that point knits together. In the case of sound however, which moves more slowly and also through walls, it is clear that the originating event is deduced, hypothesized, even

constructed. The usage of sound in movies or in soundscape composition demonstrates this. I tried to say the same thing also about vision, where the point required argument. Here it does not. Sensation denotes what lays upon the body where it is: the “environment” that produces that present configuration is hypothesized on its basis; it is extrapolated. What on a causal modeling is foundation, on an empirical modeling is superstructure.

Light is faster than sound, which may explain the ease that we have in believing we see “things.” On the other hand we are often not positive what we have heard, though we do not doubt the sensing of sound. Now a whole power structure amongst modalities appears: we will verify the source of a sound with a turn of the eyes, and when we achieve conjunction hypothetically between a sound and a visual percept, we will figure that we have answered our perceptual question. We do not however engage in the reverse procedure—we don’t verify vision with listening. Vision is an epistemologically privileged modality, and that epistemological privilege is performed at a bodily level, through procedures of perception. The kind of experiments that Blauert cites,⁴⁸ or again, that cinema endlessly reiterates, show that we can dependably be tricked to believe a sound to be at some particular location on the basis of the distribution of images.

The ambient field now appears as nothing more than the material existence of the locality, taken on a momentary scale, and oriented toward the possibility of sensational traversal rather than instrumental calculation. If there are modalities within this volume, their borders are nondistinct. What is touched and what is heard are the same; air bends light and colors sound, hindering or hastening according to its moods, moisture and dryness, seasons, time of day. On the broadest view, the ambient field is a tissue in which all sensation hovers as real, material repetition of relatively regular pattern. That despite the amodality of the ambient material (which is not to say its quantic being), we still have no difficulty in distinguishing

⁴⁸ See Blauert, *Spatial Hearing*, p. 93 and pp. 193-196.

seeing and hearing, or hearing and touch, is due to the fact that these are our own performances.

The Elephant in the Ambience

Another approach to the question of modal interaction in relation to the general social structuration of the ambient array might be made by considering film. In this case things are somewhat simpler, as we already know that certain elements are strictly visual, and others part of the soundtrack. Both are fabricated in specific ways, and everybody knows their difference. On the other hand the interaction is more problematic as well, for these very reasons. Cinema is an artifact, a traditional mode of construction, which does not necessarily bear any resemblance to the perceptual reality in which it nests. It might reflect that greater expanse and also nurture or train it; yet the manner in which it does either is not clear. Second, as with any recording, the arrays constituting a movie are pre-fabricated. This is to say that, offered up for a present conjunction, they result from a previous conjunction. This history itself requires a formal analysis. Thirdly there is the notable and striking fact that what is offered in a movie visually is not exactly the same as a visual ambient array—the visual aspect is only a segment of such an array, girded crisply by a frame—whereas the soundtrack is just as encompassing as normal sound. We might denote that clipped square of light as “image,” as opposed to array. That is dangerous, of course, since the word “image” has a complex history, and also because it might lead us to posit that the visual ambient array is composed of images, which is false. I use it anyway because the particular films that I want to consider make an explicit critique precisely of image, through the usage of image posed in problematic conjunction with the viewer and with sound.

The relations exhibited between sound and image in a film, which Michel Chion, Don Ihde and Kaja Silverman have all investigated,⁴⁹ are in no way “natural.” The image as constructed, the sound as constructed, and their relations according to convention in narrative are thoroughly historical. What may be manifested therefore by means of an analysis of film is not the natural relations between different modalities (which may well not in nature be distinct at all) but some performative mechanism of modal relation, or indeed a performance constructing modality in its course, a performance materially causative of such segregation. The “image,” as objective for a subject and also as lure to identification, like the “soundtrack,” as accompanying dramatization of the centrality of the image,⁵⁰ are products of this spatially widespread perceptual performance, not elements preceding it. They are what we do in experiencing the film, rather than what the film is as an ambient light- and sound- positivity (although as such a positivity it certainly is structured, and in accordance with just this function). They characterize both film itself as a perceptual machine, distributed in huge number across social space and operating in local volumes in this particular machinic manner, and the habits of the practitioners of these machines, the viewers and listeners, who in truth constitute fully one half of the machine’s materiality, complete with detailed mechanisms and history. The image, the supporting sound, the identification with characters, the experiential synthesis of narrative, are all the perceptual products, the culturally-distributed performance according to which ambience is knit into a common perception. Analysis of film has value for the present study because it demonstrates this transformation, of light into “image,” of sound, often, into thought or passion, and of image and sound into clearly segregated, distinct percept-trains.

⁴⁹ See Chion, *Audio-Vision*, Ihde, *Listening and Voice*, Silverman, *The Acoustic Mirror*. Also see James Lastra, *Sound Technology and the American Cinema*, and Rick Altman, *Sound Theory, Sound Practice*.

⁵⁰ A role which Adorno criticized with Hanns Eisler in *Composing for the Films*.

The movies I want to consider in this regard, which both draw attention to and criticize the dominant performed relations of sound and image in film, are Gus Van Sant's *Elephant* and *Last Days*, the second and third movies in another "trilogy of death." These are relevant here because each utilizes one of Hildegard Westerkamp's soundscape pieces as an element in its soundtrack. The sound designer for the films, Leslie Shatz, in both cases placed Westerkamp's compositions at the darkest point of the narrative arc, in the tightest relation with death. This seems to show both a respect for the emotional force of Westerkamp's work, and an implicit critique of the optimism of the WSP. (It also says something important about the relation of image and sound within the filmic machinery.) Recall that soundscape compositions are supposed to foster a greater attentiveness to one's living ambience. Yet in their positioning in these films, each piece reinforces a system of alienation tightly involved with the social dominance of the image and media technology. Sound here coincides with a space in excess of an image which by its nature is alienated and alienating, but still a space that is empty, or that is perpetually hollowed by the scanning blink of a separating, schizoid vision.

Both of these movies involve extremely long shots of figures. The large majority of screen time involves one variety of portraiture or another. The bulk of the action is walking. In *Elephant*, it is the walking of various characters in a school that is to become the scene of a school shooting modeled on the one at Columbine in 1989. In *Last Days*, it is a character based on Kurt Cobain, moving through the last stupefied hours before his presumed suicide. *Elephant* is based on a 1989 Alan Clarke movie similarly filled with long tracking shots ending in murders, and also named *Elephant*. Set in Northern Ireland in the time of "the troubles," the elephant in the room is the huge fact of violence and murder overlooked. Similarly Van Sant's movie designates a social fact dismissed as accidental. That fact is in interesting relation to the project of the WSP, especially since Van Sant asserts directly the

connection between media culture—video games, television, and propaganda—and the hollowness of a character which can perpetrate such acts without any feeling. On the one hand, Schafer's indictment of contemporary society as mechanically productive of alienation, just through the material construction of its social common, its humming and schizophrenic ambient array, is verified by such facts. On the other, his hopeful aim at a nature which, were we simply to quiet things down, would reach back and embrace us in a system of communicative balance somehow akin to an Alpine village, is denied. Whatever is amiss in the ambient field continues through to nature. That "Beneath the Forest Floor," the Westerkamp piece that Shatz uses in *Elephant*, is first heard in the darkened horizon of the image of a burning hallway, beneath a burning floor, and that in its course several shootings happen, whispers the complicity of utopian desire with absolute violence.

I said that I think these films offer a critique of the image. Consider the presentation of extremely long shots in which the center of the frame is filled with the back of a walking head. The focal point of vision is empty, dark. The image is ultimately empty; rather than represent, it obscures. Its sharp rectangular glow continues to pull the eye, only to deflect it with absence. A different means with a similar effect works in the portrait shots so typical of both films—almost never frontal portraits; quite a few profiles. Again the tension arises through the length and immobility of the shot. We are staring at a person, very closely, for a much greater length of time than would ever be socially acceptable. Our own gaze becomes transgressive. It is erotic, or it is violent, but it is not conventionally sociable. We feel a wish to avert it, and in its course in fact we do so repeatedly. There is a game here with that fickleness of attention Helmholtz had already observed: if the object of attention remains invariant for too long, it disappears. Visual focus requires motion and palpation. In the everyday optical array we do this through saccade. In film, the motion of the array on the screen does it for us. But here it does not happen. What is left is to search the character, his neck, his ear, his shoulders, his

earring, his gait, with something like a wrong eye. A system of social prohibitions is placed in conjunction with physiological facts to produce a continual bounce of the glance off the screen into one or another darkness.

The walking character with his back to us is the star of the first-person “shooter” video game—a fact which is not accidental in *Elephant*. In one scene one of the boys who will perform the shootings plays such a game, operating a shooter in a desert, alone but for targets. That same coldness, detachment, is brought into the real social space of the school, from the video game. We become so familiar with the positioning of the character in front of us that we almost, but not quite, see from that character’s perspective. In both movies there is a scene in which we are watching television with the characters. Nothing happens on screen except for the television. But there is sound, and the sound positions us where the other characters are. Their voices emerge next to us as if we too were sitting there on the suburban couch blandly watching Hitler on the History channel. Then a gun is delivered to the door.

It is not quite that we become either victims or shooters, although we come closer to the latter in that as time goes on we want more and more for the shooting to begin. Rather it is the incompleteness of the identification with the figure in the image that makes the mechanism. Psychoanalytic film theory, from Laura Mulvey through Christian Metz, has explained the process of identification which draws us so seamlessly and delightfully into filmic diegesis.⁵¹ With some automatism we settle ourselves, ghostlike in some character, thinking or feeling then from their perspective. The pleasure of their successes as equally of their transgressions is explicable as are those actions of the characters in our dreams. They become wish fulfillments, achieved by us through the portal of the mirror. Lacan’s famous mirror accounts for the development of unitary character, of the body image, speaking

⁵¹ See Laura Mulvey, “Visual Pleasure and Narrative Cinema,” and Christian Metz, *Film Language: A Semiotics of Cinema*.

identity, and narrates the implantation of lack in ourselves. What is interesting about Van Sant's image is that he manages to capture this optic stumble⁵² in the course of its duration, prior to its completion. We are in the first-person perspective, but due to the duration of the shot, and the social and attentional problems in integrating fully with it as a perceiver, we are not in that position. This is also true just because of the placement of the figure, almost coinciding with ourselves, were we walking, but separated from us and hence also present as a shape blocking our vision. We are looking at what the character is looking at, and then we are looking at the character; we want what the character wants, and then we do not want it. There is no first-person perspective, but rather a first-person displacement. The mirror procedure is not completed; it continues to reflect; the mirror is centrifugal. What is so dark is that in this stutter of the image, between collapse into subjectivity and escape into objectivity, the possibility of a stable perspective from which to view the image is foreclosed. Because what is there is not fully there, what is here is not fully here. The image moves through the space of this interim. The image erases the space of the sound, which is also the space of the viewer and the shared space of thought, of viewer and character, because it has no internality. There is no internality because there is no "here."

According to one dominant convention, the space of sound is the space of thought. Sound space and thought space are the same space in relation to the image. But in this critical example the image erases this space.

Plenty of the easy and tried devices of film sound are still here. Sound establishes anxiety; it establishes intent of character, the presence of danger, the rise and fall of tension, etc. But particularly when Westerkamp's "Beneath the Forest Floor" occurs in *Elephant*, sound also, tragically operates as unachievable. The sounds of birds and of feet on leaves are entirely ominous in juxtaposition with a character's movement toward pointless death. On the

⁵² (What Althusser would call "interpellation." See "Ideology and State Apparatuses.")

one hand this is just a rhetoric—irony or pathos. But there is something beyond signification happening in terms of the spatial intersection of the faux volume on the screen and the reverberating space of the sound. Most of *Elephant* takes place in the school, unfolding that architecture's space by endless passage through its hallways. The school is always perspectival, geometrically voluminous. There is its inside and its outside. Now if the sound resonates in a volume perceptually beyond that of the image, the pretension of the image to voluminous depth seems to pursue that audial volume, dragging vision behind it. The image pursues the fuller volume, attempting and always failing to perform it, but succeeds in distracting from it. The image never ceases to be two-dimensional, or at least less than three; yet it is glued on to the surface of the sound, chasing it, burying it.⁵³ As in Marcuse's *One-Dimensional Man*, here the regime of visuality forecloses the dimension of sound, without for that matter silencing it. Then the possibility of escape, the sound of birds and nature, becomes the soundtrack of calm murder.

The image, recall, is not at all the same as the optical ambient array or even of stable invariance within it; it requires further the separation out of some aspect of that field from the rest, and the constitution of that framed brightness as objective. Van Sant emphasizes the separation that this culturally-widespread perceptual reconstitution achieves. The image is the block between subject and ambience (as also, we might say, is the word, since it too segregates out an object-like mechanism denying its own milieu). The persistence of the image, and lockage within it, lockage within a frame, occurs again and again in *Last Days*. In one scene Blake, the Cobain character, plays guitar in one of the rooms in his mansion. As always the scene is long and the shot and framing invariant. The camera is outside the house, at a good distance, and we can only see, very small, the character move back and forth across

⁵³ Roger Caillois, in "Mimicry and Legendary Psychasthenia": "the invariable response of schizophrenics to the question: where are you? *I know where I am, but I do not feel as though I'm at the spot where I find myself.* To these dispossessed souls, space seems to be a devouring force. Space pursues them, encircles them, digests them in a gigantic phagocytosis. It ends by replacing them." p. 30.

the room, with his guitar, through two windows. The upper two thirds of the screen are filled with the stone house, the green grass and trees to its sides. Blake is playing amplified guitar alone with a looping processor. He plays one line on the guitar, and it repeats. He plays another over, that repeats. Now both are playing together. He adds a scream. That repeats, with the two guitar lines. The texture of the cycling grows continually more dense. More guitar, more voice, drums. Feedback over this loop. It evolves in its own dimension, building upon its past while obscuring it.

The sound is nominally in the room, but really it cycles around it, around us, with us, here outside the image. It cycles around the repetition of the image, or if in fact the image is static, the repetition of our attentional pulsation in regard to it, which makes it disappear and reappear, with different weightings and centricities but uniform composition. It repeats with rage the individual locked within the frame within the frame, who is, we all know, moving intentionally towards his own death. In both *Last Days* and *Elephant*, it is the ones closest to death, the killers and the suicide, who have art. Alex, one of the two shooters, has sketches all over his walls, plays the piano with feeling. There is passion, connected with sound, but hollowness in the image, and the image dominates, and the centerpiece of the image, like the dark spot in the back of the head in those endless tracking shots, is death. Again, what acknowledgment of this death calls for is the death of the perceptual paradigm upholding it, which death might allow sound to slip back into mingling with light and image to fall back into its own constitutive ambience.

Present as Congealed Past

Machines like the movie deeply pattern the social ambient field. If it is a schizophonic field, it is also schizovisual, etc. Bubbles of perception of all modalities are nested serially across its folding skin, and these bubbles perform the distinctions between them. Each movie

theater, each living room, each Ipod, even with old-world charm each magazine and book, is a hollow in the shared nature we perceive, which is produced and which is machine. Perception is a traversal of some such complexity, according to the field's own contours. The difficulties one encounters in inquiring about the relation between sensory modalities, as a binding problem, or as a problem of super-positioned arrays, or even as a problem in film or television, in the end shows the total integration of perception with space. The analysis that I have just offered for the operation of the image in relation to the sound in Van Sant draws this out. It is not "objectively" the case that the image cycles through the sound, or even that the sound envelops the image. The first seems at some level metaphorical; the second is falsified with the realization that any viewer in a movie theater is positioned at some point in an optical as well as an acoustic array,⁵⁴ a distribution of light in depth, structured and present at their bodies just like sound. So to say that the image erases the sound space, or collapses it, or to assert imperiously that sound and thought space are the same, is not to offer an assertion verifiable by instrument. Rather it is to offer something like a post-phenomenological description of a socially-produced perception. The fluctuation of the image is melded with the fluctuation of attention; the positive or negative magnetism of the image is an enactment of social codes for vision, as a dimension of habit in the present. The placement of "thought," by which I actually mean some "internality," chiefly discursive, in a space that is, like those elements of the soundtrack not coincident with on-screen events, outside the image, reflects a similar habit of experiential distribution. This last juxtaposition, of thought and "I" in relation to sensed and "it," begins to detail the end product of a series of syntheses according to which experience is materially performed and produced.

⁵⁴ Paul Virilio comments in *War and Cinema* that one of the major achievements of film was the production of an optical array that is basically and functionally identical across a volume of points, such that every viewer in a theater sees an oncoming train coming straight at them. Cinema is the homogeneous crystallization of light.

The relations of sound and image, of the visual and the auditory, are performed at the locality by habituated perception, their spatiotemporally-splayed matter formed or produced by practices of production. Each of these dimensions corresponds to the other. A person from one or two hundred years ago would not know how to operate the cinematographic array,⁵⁵ and they might arguably not have “seen” what takes place for example in an action thriller. Perception would just not work, and there would be none of the identification, fluctuation, dense experiential complication that I have described. Perception executes the patterns given as potential in the produced material field, according to its own habituated skills. It has to have been trained beforehand. Meanwhile the field is constructed as a continual enhancement, alteration, advancement or perversion of those practices, pulling more and more past materiality into tight machinic assembly distributed in the momentary volumes of concrete space and time, with the result that more and more the present is built of the worked-over past, and an always finer grain of living time is drafted in to operate it. For Marx this was true of architecture, roads and machinery, to the last of which the worker was coercively conjoined. Today it is true of the structure of light and air, and perception itself is a form of productive labor. Production of social reality continues to be historical and material, but its speed has increased, and its products now include the very material of experience.

Habit and Percept

William James and Henri Bergson were both fascinated with the dual manner in which time is preserved or memory produced. On the one hand there are those memories which are object- or image-like, and which we can recall and view as we would pictures. On

⁵⁵ In *Motion Studies* (also titled *River of Shadows*), which I will return to below, Rebecca Solnit recounts the maiming and death of a man run over by a train while stretching his legs at a station. This was the late 1800s, the man was a significant political figure, and the approaching train that he was too slow to avoid was moving at less than 30 miles per hour. Perception in 1880 was not fast enough to avoid an object at that velocity.

the social level these correspond to the artifacts of various media, the photographs that we can look at, the recordings to which we can listen, the films which we can view. On this social level, at least, and especially in the case of recordings and film, it is clear that some work must take place, some peripheral process be performed, in order for the mnemonic material to make an appearance. For Alan Baddeley, etc.,⁵⁶ this is actually true of psychological memory as well, which requires the short-term performance of the “visual sketch pad” or “phonological loop,” and thus involves a real consumption of energy on the part of the brain. There must be a player—a record player or tape deck or cd player, or vhs player, or dvd player—the player must be powered and functioning properly. It must re-enact just those physical gestures and energetic distributions corresponding to the medium and to its own material construction, which altogether result in the projection of energy via speakers or screens into an ambience caressing us, a projection which we experience, for example, as music or movie.

Thus on the technological level most obviously, but also on the level of the material perceiver, the frontal, simple, object- and image-like mnemonic entity is the result of a performance; it is dependent upon that performance, and even if its material potentiality, the physical structuring of the surface of the record or the dvd, is in principle independent, that potentiality can never be actualized without this attendant performance, which nevertheless always remains horizontal and obscured. Like Heidegger’s hammer, it appears only when it fails; when it works, it is hidden by its own product.⁵⁷

But this performative dimension, which corresponds to habit as opposed to imagistic memory, is also mnemonic, insofar as it is an iterating consequent of prior productive time. One’s habits, like the unthinking quickness of typing, or of particular saccades of the eyes while driving (which never existed before the automobile), or the quick stab of the button of a

⁵⁶ See ch. 1, above.

⁵⁷ (A famous example of the operation of the background in Heidegger’s *Being and Time*.)

remote control, are produced by prior performance. They continue that past as peripheral reiteration in circumstances of some particular type. They are conjoined with those circumstances, in a bodily-ambient hum always at the fringe of focality. Obviously the record or the dvd player did not blink into existence by accident or of their own accord either. They are the result of singular, concrete productive series, through the course of which a density of regimes of habit in the forms of productive machines—themselves coalescences of prior productive time—work each with their own personal peculiarities upon the form of the thing they produce—a form now habitually productive of a patterning of the ambient array for perception—an array which is itself productive.

We are really in the domain of Marx with these observations. Marx advanced a conception of the material world under the banner of “historical materialism” which cast each functional element within it in the manner that I have just described. Every product with which we are surrounded is not just the result but the congelation of prior productive time. The particular process having this result is technically called “objectification,”⁵⁸ to denote the strange coming to a stop of human activity, as energetic, form-inscribing time, in the thing so formed. As duration the time is gone, but the formal alterations articulated concretely by it remain. What is valuable in some particular product is just the consequence of this concatenated system of gestures. The “use-value” of specific produced things is the imprint of specific living labor. (On the social scale, the fluctuating “exchange value” is rooted in the average amount of time presently required for such a type of production—money at its base measures productive time.) In fact the whole productive system is a complex, temporally-pulsing distribution and re-distribution of materials increasingly worked-over. Every productive process begins with some “raw materials” which are the product of a prior process,

⁵⁸ This is the language Marx used in his earlier writing, in *The German Ideology* and *Economic and Philosophical Manuscripts*.

even if that process involves only the reaching out and seizing of those materials from whatever is outside the social formation. Not only the raw materials, but also the tools and machines, the “fixed capital,” have their origin in prior time. All of them together constitute “forces of production,” which is to say that prior time, as patterned imprint of materiality, is also a capacity for present production. Particularly capital must be defined in this fashion, as a power to produce the future. Production is thus complex conjunctive synthesis of prior living time with present living time resulting in future productive capacity. Time piles upon time in nodes to form future time.

What I have recited so far is only complex insofar as it reflects the complexity of a real social productive system. The process of “objectification” is always simple once again when we return to some single strand of laboring formation. There does however seem to be a greater basic complexity when we turn to the production of ambience, just insofar as at least those aesthetic products collaged across social space⁵⁹ are not only the congelation of prior labor time, but also often mnemonic in the more familiar sense, containing a focal memory of the past. Particularly in the case of soundscape composition, *musique concrète*, or sampling, where recordings constitute the raw material for recordings, the folding of past into present is multiple. We need to inquire whether this complexity is in reality reducible or not.

We can do this by looking at the key moments in the production of ambience on the basis of recordings, on the local and the socially distributed scales. The first key moment is what in the broader economy is called “resource extraction.” We should ask how the content of recording in general, and then of any particular recording, is ushered first into the recording, thus into a social productive constellation and then into local ambience. That is the task for the remainder of this chapter. If that process involves complexity, that is due primarily

⁵⁹ Which, please note, do not exhaust that surface, vast regions of which still vibrate with machines or echo with fluorescence, uncultivated and asignifying, but energetic and real.

to the extremely tight connection between the particular process of recording and the process of individual perception. The task of the next chapter is to investigate the manner of operation of the past assembly so captured and redistributed, in the operative moment of its integration in the experience of some perceiver.

Social History and Social Function of Recording

When the WSP turned on their recorders, they did so with a wishful, or erotic, or inquisitive orientation toward a hidden and receding “nature.” They could hear that nature to some degree already, in the calls of birds and insects and the lap of water. But its breadth, they thought, was masked by the bridling swath of urban hum. The recording and subsequent reworking of recorded materials into compositions was a manner of separating purity from chaff, as a preliminary gesture hopefully to be followed by a more thorough erasure of noise.

In this basic orientation of recording to the recovery of a lost, natural and local nature, they were by no means original. In *Motion Studies*, Rebecca Solnit details how recording technologies conjoined with techniques of mass production were, from very early on, used to fulfill a general social desire for such a ground. She notes the near-obsessive incantation of the phrase “the annihilation of space and time” within writing from William James onward, as an expression of the deep truth of communications and transportation technologies. As urban ambience became more and more regularized, leading up to our contemporary suburban architectural echolalia, and as the passing of both bodies and signals across space became more and more rapid, the sense of here as opposed to there diminished. Both the lust and the phobia of late 19th and early 20th century Western culture, and especially of American culture, which in its rapid expanse effectively fractured the history of North America, was for this erasure of spatiotemporal limitation. The spread of the railroad, that steel wavefront of the frontier, and the jabber of the telegraph across continents, were progress. But progress meant

the expiration of tradition, and the conflicted love of both sought solace in new media, which combined them, the past speaking in the mechanical tongue of the present.

Some of the most beloved media content of the turn of the century was not really traditional at all, but it did fulfill exactly this need for a lost nature, which culturally came to be located at that ebbing cusp of the frontier. Frontier life was supposed to be more grounded than that in the cities, and if also more dangerous and hard, it was at least a reality in terms of which the bubbled, floating bourgeoisie could identify themselves, by plastering it on their walls and thus patterning their own perception with its signs and images. Perhaps it was also danger, the sense of the friction against otherness, predator and enemy, which Americans back East were lacking, because a large industry arose depicting the “Wild West” and either the noble or the savage Indian. Among these depictions were Eadward Muybridge’s photographs of the Modoc War. Pressing Westward with locomotive, cavalry and settler, American society recoiled East in a particle wind of images, simultaneously invigorating and nostalgic, militant and penitent. In these images were depicted the nobility of the savage and the heroism of the American soldier: the former in the past tense and the latter in the present.

Solnit focuses her study particularly on the photograph and the cinema, as did Walter Benjamin. But the phonograph was bound up in this expanse as well, if the distribution of its products was far more specific. In 1890, the same year that James published the *Principles of Psychology*, the anthropologist Jesse Walter Fewkes conducted an expedition to the Zuni people in New Mexico, armed with such a recording device. In *A Spiral Way*, Erika Brady notes the reticence of ethnologists to acknowledge their usage of this device for the first few decades (it didn’t seem professional to have the native speak for himself), but shows that it did in fact form a regular part of the workings of ethnological study.⁶⁰ The voices and songs of Native Americans were captured on wax cylinders, many of which came eventually to be

⁶⁰ Erika Brady, *A Spiral Way*.

stored in the Smithsonian's archives in Washington, D.C. This was scientific study carried out in the interests of understanding foreign cultures and foreign tongues. But the culture was always codified as primitive, such that the knowledge gathered in this fashion was really understood as knowledge about our own past—what, though we have forgotten it, we used to be: tribal, backwards, simple. Further, there was already a very real sense among both the early ethnologists implementing this machine and the native people they interviewed that one had better preserve the culture, the language and the songs in wax, because soon those speakers and singers would be gone. A science thus tied directly with genocidal expansion, taking its samples on the cutting edge of the frontier, and passing those back to the nerve center of the state assemblage, played the double role of scientific investigation and ritual entombment. Those voices and songs are still in the archives in Washington, where Erika Brady worked when she wrote her book. They are highly valued particularly by the small communities of Native Americans who survive. They are a material memory of the frictive conjunction of two social bodies; and they now serve both to reiterate that conjunction and to mourn what it erased. They are truth, trophy, and tomb. If Westward expansion threw back a reflection of the murdered other in the form of a million images, it threw back an echo of that other's voice straight into a special little resonating chamber, where it still speaks a language that is increasingly incomprehensible. Walter Benjamin noted the sterile accumulation of numerically indexed memories via photographic and filmic appropriation, themselves erasing the process of their production. Here we have that again, but in the modality of sound: a lurching noise of trains and rifle produces a tinny voice singing a funny little song, of which we soon tire, label and deposit in a drawer.

Brady points out that the technology that achieved this seemed magical primarily to Americans, and not so much to the ethnographical characters themselves, who often thought it ridiculous. The Hopi who Fewkes visited just prior to his Zuni expedition

represented the machine in an irreverent send-up of Fewkes and his fieldwork procedure in the course of ritual clowning in celebration of the Basket Dance. A stovepipe representing the horn was placed on a table covered with a blanket, underneath which a clown was concealed. Another clown yelled into the pipe, and the hidden man responded with nonsense, while a third clown dressed as an “American” stood by and frantically scribbled on a piece of paper. The performance was a great hit (Fewkes 1899:87). In contrast, it was participants in American mainstream culture who maintained an attitude of mythically charged wonder, albeit somewhat posed and affected, toward the phonograph and its inventor.⁶¹

The mockery was however short-lived. A Pawnee priest by the name of Ki-ri-ki’-ri-su re-ka’-wa-ri, or Running Scout, put it this way:

I seem to stand on the edge of a high place, where everything is behind me, and there is no place to stand or walk in the future. My heart is very heavy, I cannot help but weep...⁶²

He proceeded to recount the details of a sacred ceremony into the horn of the phonograph. He had received what he believed to be a divine sign encouraging him to do so, in order to allow “something holy to live on.”⁶³

⁶¹ Erika Brady, *A Spiral Way*, p. 31.

⁶² *Ibid.*, p. 116. Note the strange parallel here with Benjamin’s famous angel of history, at whose feet piles catastrophe.

⁶³ *Ibid.*



Frances Densmore and Blackfoot singer Mountain Chief.

The Production of Military and Social Reality

In *War and Cinema*, Paul Virilio locates the origin of cinema not with Muybridge's famous studies of moving bodies, but with the production of serial photography for reconnaissance purposes, first in the American Civil War, and then with reconnaissance aircraft in World War I.

...the strategic and tactical necessities of cartography were known long ago, and in the line from the emergence of military photography in the American Civil War to today's video surveillance of the battlefield, the intensive use of film sequences in aerial reconnaissance was already developing during the First World War. The general staffs had no other means of regularly updating their picture of reality, as artillery constantly turned the terrain upside down and removed the topographical references crucial to the organization of battle.⁶⁴

⁶⁴ Paul Virilio, *War and Cinema*, p. 1.

Every day photographs had to be made of the battle in order to construct its reality within the confines of some specialized tent designated for this purpose.⁶⁵

This function of reality construction can be generalized to the wider social formation. Political realities, realities in foreign places, for example where our wars take place, and indeed our own reality as a nation, all exceed any perceptual grasp. The perceptions therefore have to be produced, and media are the machinery of that production. Dziga Vertov already assigned this function to the cinema, in 1925. The reality he wished to depict was a communist and historical-materialist one. Though the entirety of any economic formation exceeds any single glance, he reasoned, it could be assembled such that each of the individuals acting within that social network could be given a real and scientific representation of their own material realities. Film thus had the task, just as it did for the World War I commander, of knitting together a representation of a very large material reality.⁶⁶ Vertov envisioned, with completely immoderate jubilation, the machinic passage of cameras through social spaces, leaving contrails of image to be laid back to back in realistic depiction of that productive process in which materials undergo a serial, formative touch.

I trust that the fact that our own social distribution of images does not achieve this goal does not need to be argued. The depiction of objective reality, foreign reality, national reality etc. is of great interest to any and all powers, which insofar as they are powers, have some ability to act upon the processes by which such a depiction can be rendered. Nor is it

⁶⁵ “‘image departments’” sprung up “to take charge of all tactical and strategic representations of warfare for the soldier.” *Ibid.*, p. 2.

⁶⁶ “Our basic, programmatic objective is to aid each oppressed individual and the proletariat as a whole in their effort to understand the phenomena of life around them.” Dziga Vertov, *Kino-Eye: The Writings of Dziga Vertov*,; “The method of radio-broadcasting images, just recently invented, can bring us still closer to our cherished basic goal—to unite all the workers scattered over the earth through a single consciousness, a single bond, a single collective will in the battle for communism... The decoding of life as it is. Using facts to influence the workers’ consciousness.” p. 49; “by the recording of life we all understand the recording of the historical process... base our observation on society’s economic structure... based on the platform of the communist decoding of our world—that is our objective.” p. 50.

victory to be real; there is another dimension which is formative of this “reality,” racing ahead of the tomb of the image and depositing its victims there. Virilio notes that in contemporary war, where imaging technologies are ubiquitously active, extremely high-resolution, and automated, victory has to do in very large part with the capacity of one player to remain invisible while forcing the other into visibility. To become visible is the result of an effective strategic maneuver; that which is visible is already dead.⁶⁷

Contemporary war thus occurs on the cusp of visibility and invisibility. Virilio is a critic of visuality in particular, but for present purposes we could without falsification note that here “visibility” really refers to perceptual presence of any modality. Contemporary spy technologies are aural, infra-red, radio, radar, sonar, etc. The point is that a tremendous negotiation, a struggle, and the employment of very large if unseen force occurs at this frontier between what is rendered into the representation of reality, and what is kept out of it. If on the domestic front identity politics for example had thought it desirable to be registered on this spectrum, the immediate market codification of minority groups shows that here too there are targets.

There is a strong analogy between this process of social reality construction, via the production and distribution of certain percepts and systems of percept, and the pulsatile construction and reconstruction of the body image. Just as for the latter, various positivities, proprioceptive, sensate, external and internal, are registered and organized in an habitual distribution by which process they only retroactively receive these titles as to their origin and ontology, so too either the military or social production of the “reality” of a battle, a war, or a nation and its others, happens first by the local production of individual percepts, then by their synthesis in some repetitive pattern, such that first of all certain elements are included or

⁶⁷ “...W.J. Perry, a former US Undersecretary of State for Defense[:] ‘I’d put it like this: once you can see the target, you can expect to destroy it.’ This quotation perfectly expresses the new geostrategic situation and partially explains the current round of disarmament. If *what is perceived is already lost*, it becomes necessary to invest in concealment...” *War and Cinema*, p. 5.

excluded, but secondly what is included gains a status as us, them, trivia, truth, threat, farce, etc.

That skin that Ruebsaat described, bordering the city, is this distribution at a middle scale. The city is a distribution of light, of image and sound, in intercourse with performers capable of those images' and sounds' enactment; meanwhile the net of that distribution is always flipping inside and out, rendering what perceives perceived, etc., thus codifying the reality of localities; and this flipping, coincident with a breathing, a respirating of whatever is previously outside the pattern, is pulsatile. Ego and state, war and perception, operate according to such a pulse. And just as the body image is an habitual distribution perhaps resting upon habitually non-presented ambient integrations, so too is the social reality habitual and historical, expressive and suppressive. That final victory of the United States Army in the Modoc war still recurs, as a vague idea of the West and the frontier, in the vast expanse of immediate social-ambient distribution; the deportation of the Modoc, via train, to the Great Plains to die, appears less frequently; but it may be that it recurs too, like that voice speaking an unknown language in its indexed tomb, exerting an inchoate pressure which we feel and perhaps which we flee. Here as in individual memory, there is on one hand what we can recall, and on the other what we feel repeat itself through us, like an unwelcome stranger by whose very silence we are indicted; for which reason we speak.

Recording of Collision

Friedrich Kittler, who wrote one of the better-known and most-cited books on the history of recording and its cultural significance, *Gramophone, Film, Typewriter*, rhetorically aligned each of these three media technologies with one of the Lacanian dimensions of experience. Film corresponds to the imaginary; the typewriter to the symbolic; the gramophone to the Real. Now this is striking because while the imaginary and the symbolic

are elements of experience which could be observed and traced in a phenomenological framework—they are noematic positivities of two different sorts, the one immediate and typically visual (the imaginary), perceived without intuition of its framing conditions, the other semiotic and linguistic, and hence operating by serial lateral referral of signs—the Real for Lacan and also for his interpreter Žižek, while denoting energetic, forceful materiality in both its exterior and its interior manifestations (as compulsion or a sort of oozing Sartrean existence-itself, and the driving force of desire), is experientially inaccessible.

We can explain this flight of the Real perfectly well on the basis of our previous discussions about the relation between sensation and perception. Sensation denotes either the moment of intersection between body and ambience—the conception I have been developing—or at the least the set of positivities resulting from such intercourse, prior to the organization of those positivities into a pattern or a function of a subject. Perception comes after sensation; it organizes sensation, suppressing or augmenting. It operates chiefly with the focal apparatus called attention, and through the portal of attention it produces (focal) memory. By the time we have an experience, selection has already taken place, organization of sensations into qualities, qualities into objects (e.g. images and sounds), objects into correlates of noetic acts and nets of mnemonic association, have all already occurred. The Lacanian problem is just the Kantian one again: we cannot perceive things in themselves because we only perceive what is already fabricated for perception (by our bodies or brains, prior to our conscious experience). We see as we see, not as things are. Similarly for desire, which manifests also, even on the earlier Freudian account, via and within an interpretive system, or within the confines of the ego, such that what any desire is at its base, whether it is an instinct, or a neurotic construction, or a masked desire of another sort, is systematically occluded. Material, energetic reality, which despite all these veils is happening without any doubt, is experientially inaccessible because of this perpetual interpretive forming, which as

we have noted, is itself based on habits and socially-distributed codices. Even the interpretive forming is real, but it is a real performance still hiding reality.

Kittler identifies audio recording with the Real because he figures that the recording apparatus is blissfully, machinically oblivious to any regime of attentive selection, and specifically to the systemic prioritization of signals and possible signals, targets and desirable partial objects, that are always seizing the center stage of focus in a human. “The phonograph does not hear as do ears that have been trained immediately to filter voices, words, and sounds out of noise; it registers acoustic events as such. Articulateness becomes a second-order exception in a spectrum of noise.”⁶⁸ It is just this capture of noise, this sampling of a certain precise sector of the ambient array, as it is objectively and physically, prior to perceptual parsing, which constitutes the recording’s privileged connection to materiality.

But it is not really the case that the recording is a passive register of what is there materially in the vibrating air, and nothing else. Rather the event that produces the recording is already a conjunction of two systems of energy and movement, one being the movement of the air, the other being the system of the recorder, including all its material elements and their specific behavior in regard to ambient vibration. Take those early wax cylinder phonographs, for example. They were hand-cranked, such that the speed of the hand and its variation establish the temporal frame, the temporal axis of the recording. In principle nothing changes qualitatively in this regard with a motor-driven phonograph (which appeared in the early 1900s), or a tape machine, whose variations of speed are still episodically perceivable, or even with a digital recorder, the temporal axis of which corresponds to a “sample rate” enacted by a still-variant but sub-perceptible electrical current. The temporal form of the recording does not therefore stem from sonic events alone. What those events are, as a recording, is equally

⁶⁸ Friedrich Kittler, *Gramophone, Film, Typewriter*, p. 23.

determined by the eventful behavior of the machine. At the vibrating membrane, or that early stylus meeting a surface of inscription, what is recorded is the conjunction of two behaviors.

This observation may be extended. Not only the temporal axis, but also any further number of the characteristics of the “recorded” product have to be traced back to the structure of the recorder taken in relation to certain ambient vibration. The apparent “depth” of the sound, for example, depends on the detail with which it is allowed to inscribe some recording surface. On the wax cylinder, sounds are tinny and thin just because of the “primitive” character of the stylus and its medium. Once recording began to use microphones, the frequency response curves of those microphones determined by their own structure what was passed to a recording stylus or magnetic recording head. Then the character of that head, the way in which it drew power, and finally the physical characteristics of particular tape sizes and stocks, with their “singular” tendencies toward saturation and again their differing susceptibilities to frequency, all entered into what was recorded. I am trying to say that it is not “sounds” that are recorded; there are no more sounds than there are images in the material ambience. It is the collision of the recorder with the sonic vibration that produces the iterable artifact. In a sense that collision is captured; on the other hand the collision is productive of its own “capture.” It is motion sliding into stasis, motive actuality falling into poised, frozen potentiality—a determinate potentiality correspondent to formed structure; what Aristotle called in *De Anima* a “first” as opposed to a “second,” enacting actuality.⁶⁹ Like energy conjoins to breathe sound, sound conjoins to breathe recording.

There is a surface of conjunction at which this event takes place, which in audio recording these days is the microphone diaphragm. Really the event takes place across the ambient array and across the wires and rolling medium of the recorder, finding no barrier naturally limiting analysis. The event is indefinitely expansive through technological and

⁶⁹ Aristotle, *De Anima*, in *Introductory Readings*, p. 82.

ambient systems. But the contact that is of interest right now is that membrane, because it is there that we would typically divide the receptive and the active, the internal and the external, what captures and what is captured. Now that membrane, exactly as the eardrum or the basilar membrane, is spatially extended. It occupies a volume within the ambient array, and it behaves in strict conjunction with the material behavior of the air in that small volume (which of course moves in total synchrony with its own surrounding volume). It is not exactly that the membrane falls into perfect identity, such that it becomes indistinguishable from what surrounds it. Even were there no such thing as sight to lead us into an easy distinction about the two different realities here, still there would be a different regularity of motion coextensive with that microphone surface. A tight synchrony does take place, but strictly in accord with the physical structure of the membrane, its stiffness, its diameter, its material, the manner of its anchoring at its circumference. The same was true, we should recall, of the vibrating volume of air, which varies with temperature, with moisture, with pressure, etc., not to mention the sprawling complication of its ever-changing structuration (“sound”). There are here two abstractly discrete physical systems engaged in a vibratory contagion. On the one hand, the microphone is thrust into the air, rather as the frontier thrust itself through the West; on the other hand the air courts the microphone, and it does the pressing, after all, on the device. There is power on both sides, and the moment of conjunction is their bridging into one productive process. Long before the now-popular fluid dynamics, Spinoza identified a single “body” as that which produces a unitary effect.⁷⁰ Insofar as this sector of the ambient volume and this recording device act together to produce this aspect of a material potentiality for future vibration of a particular sort—future production of the ambient field in a particular way—hence a modest piece of fixed capital—they are by this definition unified. The moment of engagement of microphone, or ear, with air, is a moment of real conjunction determinative

⁷⁰ See the *Ethics*, Book 2D7.

of future distributions of energy. The ear and the air, the recorder and the air, enact real material power, producing real social-ambient power.

If we take a step further back we can see that the physical characters of the machine and of its ambience are by no means the only determinative factors in the recording. Somebody put the great horn in the Hopi's or the Zuni's face. Somebody asked them specific questions. Somebody started cranking at one point, and stopped at another. These were early ethnologists, working mostly for what became the Bureau of Indian Affairs. That is to say that they were functionaries of an institution, which itself was one detail of the contemporary division of labor in a social machinery that was erasing the West. Meanwhile within the Zuni community various negotiations pushed one or another singer to the horn. Each recording was thus a brief moment, a brief time and a small, cubic foot portion of the differential frontier, the pushing, sucking frontier which at once displaced and captured. The cranking of the ethnologist's hand to drive the rotation of the cylinder produced one half of the Indian's song, which hung for seconds in a descending, conical volume of air to a stylus point: the very space and time composing the frontier were thus powered by real energies, were thus produced as form as they disappeared as life.

Marx thought that the whole productive apparatus typifying an historical and geographical locale was in some fashion telegraphed into the form of each product. This is true to some degree insofar as products have always passed through many stages of activity before they assume their final shape. The epoch is expressed in any commodity in the selection of materials, the manner of shaping, the techniques of finish, the simple determination of what merits production in the first place. But Marx meant more than that; he meant that the total productive machinery operates structurally at each locality of production. Perhaps the whole of the American productive apparatus (if by 1900 national boundaries were still productively real) was written also on these recordings, which express a selection, a

division of labor, an institutional function of remembrance (both scientific and managerial), which expresses the racist attitudes of those conducting the studies, the briefly mocking voice of the subject, and the rhythm of the hand rotating in time, spinning time. However far that framing system extends, that is the Real; that is the noise that the recording captures and propagates into present space.

Mnemesis and Methexis

But let's return once more to that event-stripped surface, or that volume of synthetic-analytic reciprocity where two systems become one system in the production of some third thing, which we call a recording or a memory. Regarding sound, this seems equally to be the basilar membrane or the diaphragm of the microphone. Regarding light, it might be equally the retina or the photographic film. At each of these surfaces systems of energy conjoin productively. As I have said, it is not so simple as that a sensitive membrane "receives" what falls upon it, which is then shipped backwards to the Smithsonian or to the brain. As Uexküll already knew, it doesn't really receive at all, at least in the sense of receiving a signal, something with meaning—it acts, and it acts precisely as it is already prone to act. To put it another way, the cells of the retina, or the follicles on the basilar membrane, the microphone diaphragm or the camera mechanism, enact their performance of whatever event takes place. They behave. And it is these behaviors which constitute either the materiality or the signal which will then pass through a serial process of synthesis.

Walter Benjamin, Theodor Adorno, and after them Roger Caillois and Michael Taussig,⁷¹ and then in contemporary cognitive science, proponents both of the "mimetic

⁷¹ See Benjamin, "On the Mimetic Faculty," in *Selected Writings*, v. 2, part 2, Adorno for example in *Aesthetic Theory* and in his correspondence with Benjamin compiled as *Aesthetics and Politics*, Caillois' "Mimicry and Legendary Psychasthenia," in *The Edge of Surrealism*, discussed below, and Taussig's *Mimesis and Alterity*.

hypothesis” for perception,⁷² and the “motor theory” of language, all emphasize this moment, which may be termed “mimesis.” Benjamin thought it likely that all “higher” cognitive function was based initially upon such a moment of imitative performance.⁷³ First those irritable cells or sensitive membranes, but then the whole of what Gibson called a “perceptual system” engage in increasingly-complicated gesture, by which it attunes itself to an immanent materiality, accompanying it like a paired dancer. But then, as we have repeatedly said, this moment is hidden. In asserting its foundational role, Benjamin, Taussig and Caillois, and to some degree Adorno as well, all actually asserted that magic, sympathetic magic as described by Frazer in his *Golden Bough*, or for that matter by Aleister Crowley or William Butler Yeats, underlaid logical thought. Something pre-logical, dance-like, imitative but substitutive, pre-dates objective relations, logic, and of course signal processing.

In fact Benjamin, Taussig and Caillois all identify two moments of magic in this series. The first magic is that of contact, that most fascinating and ongoing of moments where the surface of the body is the surface of its surrounding space; where space and body are mutually constructive; where the city and the skin are continuous and ontologically identical. This is the magic facilitating shock; shock is this magic. After that, mimesis. So mimesis is on the one hand imitation; it still operates under a sort of hypnotism by the world. Caillois called mimicry the result of a “temptation by space.”⁷⁴ But on the other hand it is a separation from that point of contact, which already replaces and obscures it. It stands in for the continuity between body and ambience, miming a version of that continuity which is from this point on discontinuous with that which it will come to represent.

Deleuze has codified this procedure, by which the “intensive” domain of energetic interaction, in continual motion and continual horizontal connectivity, is “recognized” by a

⁷² Arnie Cox has pursued this hypothesis specifically with regard to musical perception.. See “The Mimetic Hypothesis and Embodied Musical Meaning.”

⁷³ See Benjamin, “On the Mimetic Faculty,” in *Selected Writings*, v. 2, part 2.

⁷⁴ Roger Caillois, “Mimicry and Legendary Psychesthesia,” p. 22.

stack of mimetic systems, one after the other, serially commensurating whatever that externality was with a thoroughly mnemonic grid.⁷⁵ Deleuze's theory here is intended to be applicable both to the macro- and the micro- domains. It applies to both the process of perception in the individual, and that of incorporation of social externalities into a social formation via mimetic technologies. In either case, this membrane, and particularly this touch, are the starting point. Next, the first mimetic moment, which in perception is the "expression" of a perceptible quality. Then the repetitious or mnemonically-guided assembly of qualities as objects (remember that in Uexküll, on whose work Deleuze and Guattari build explicitly in *A Thousand Plateaus*, the object is "projected" or hallucinated), then the identification of perceptual objects as instances of certain concepts. In each mimetic stage a schematism of a "higher" order, ultimately a categorical or conceptual one, operates so as to reach out and incorporate the positivity in question. In fact though it is not just a matter of categorization, as when one places the right fruit in the right basket, because what one has at each level is always an entity of a different order from the one before. By the end we have words, which, Deleuze's Stoics notwithstanding, are not things, and decidedly not energetic events on photoreceptive cells (although they are acts, and hence energetic events). Each stage is a mimetic substitution. More, each is a substitution for something conjointly, sensitively present with a figure previously learned. Whether we think of it categorically, or conceptually, or gesturally, the "identification" of x is always the reiterative substitution of some past y for x. The whole process is mnemonic. We could express it more fully by calling it "mnemesis."⁷⁶ What mnemesis achieves is clarification of the identity of whatever is sensed; with that it stipulates, again as Uexküll noted, a possible regime of response. But it does this at a great cost. Namely, in substituting its own performance for that stinging sheet of continued

⁷⁵ In *Difference and Repetition*, particularly in Chapter V, "Asymmetrical Synthesis of the Sensible," beginning on p. 222.

⁷⁶ This is my own neologism.

conjugation, it produces a blindness. A thing identified is no longer sensed (or the positivity of the conjunction becomes peripheral and subliminal). Mnemesis is the procedure of categorical intellection; it is dependable, formulaic, and consistent; but it obscures whatever it names. All this it does for the sake of control, which is already the purpose of imitation in sympathetic magic. Adorno saw this exact problem and formulated the whole of *Negative Dialectics* as a response. Thought is never what thought is about, never what thought was seeking; it kills whatever it knows; it entombs it like an ethnologist.

I mentioned the “motor theory of language.”⁷⁷ That theory, which had an early formulation in John B. Watson, and even earlier ones in Nietzsche, Spinoza and Hobbes, hypothesizes that, the motor regions of the brain being directly contiguous with the speech centers, the elementary physical events underlying linguistic comprehension are in essence motor acts. Although we do not perform language with our limbs, the physical beginnings of gestures still constitute linguistic thought. Each of the phonemes, for example, of the structuralist linguists, is at base an act. Structurally one might locate signifier and signified; but conjoined to both there is always a motor routine by which the phoneme series is executed.⁷⁸ That action is the word; when we hear it, we perform it, and performing it is the act of knowing it. Language is very subtle dance. This is just what Benjamin had said: mimesis—imitative performance—underlies the higher cognitive acts. I bring that up again here, with the reference to contemporary theory, to clarify that what is in question with the mnemetic interpretation or “processing” of sensate realities may ultimately be the overriding of one physiological procedure with another one: more specifically, the overriding of the

⁷⁷ A basic presentation of this theory may be found in Robert Allott, *Motor Theory of Language Origin*. Broader discussions are in Studdert-Kennedy (ed.), *Modularity and the Motor Theory of Speech Perception*.

⁷⁸ Here is the point where Saussure in his *General Course in Linguistics* just falls short. How could he have missed it? Only by assuming very strongly that speech must be accidental to language, and the body accidental to thought.

immanent connection of body and world by habituated patterns exactly as complex as language.

But the world is far from defenseless. If we return again to that surface composing ambience—and perhaps it is always good to do so—we can see already that there are two systems of force there conjoined. When the miming perceiver or society begins its interpretive dance, it does so under some compulsion. The “temptation of space,” or of the local ambient field, is its quality as a lure, a contagion. When we hear loud music, we become excited, or sad music, then sad. This is why music was dangerous for Plato. What is happening there in the air has its own force, which is expressed from the side of the subject in the involuntary character of mimesis. Mimesis is not just the willful and violent erasure of the sensate. Before that, it is driven by a wish for greater conjunction. The famous Caillois essay that I am referencing, “Mimicry and Legendary Psychesthesia,” deals specifically with mimetic visual patternings in the animal kingdom. After showing that such imitative adaptation is often neither defensive nor strategic, he goes on to offer this idea that the ambient field itself is contagious. It is an energetic, patterned system, and it draws its participant out of its own repetitions, into a broader externality. By this it may drive him mad; or being so externalized is madness.

Jean-Luc Nancy has suggested much the same thing, specifically regarding music, in his book *Listening*, except that he places subjectivity in the place of madness. The term that he uses instead of contagion or temptation is “methexis.”⁷⁹ Before the individual begins to perform their own version of sound, in what must technically be called “hearing,” they engage in a “listening,” which involves an openness toward whatever is about to come. Listening pre-dates hearing, perpetually. Or to be more precise, listening occurs at a wavefront ahead of mnemesis; structurally it occupies an open futurity, which for the (post-)phenomenological actor is expectation, and which may be contrasted directly with the past positioning of the

⁷⁹ Jean-Luc Nancy, *Listening*, p. 42.

mnemonic axes, although it should not be overlooked that what is received via the former is dutifully passed to the latter. In this attentive, erotic disposition of the listener to sound—just that eros characteristic of the WSP—an encounter takes place. Sound interpellates the listener into a resonating expansiveness outside the regime of names. Non-technically this just means that music pulls us out of ourselves, and has the capacity to choreograph us in real space. This power is expressed as intoxication. Nancy calls its operation “methexis,” which is the old Platonic word usually rendered as “participation,” which on Plato’s model is supposed to explain the interaction of a transcendent domain with this immanent one (this is the same sort of model to which Young refers with terms like “universal structure” and “abstract” sound, which are supposed to underlie phenomena without being themselves given). If Nancy substitutes physical vibration in social space for Plato’s forms, he does so in order to account for the regular identifications, calibrations and intoxications of a socius operating in a shared domain. The individual participates in the common, receiving from it not only his identity, but also his own rhythm and his own desire. He is interpellated first by touch, an unending caress across all his skin, and only later by language.

As I said, it is far from being the case that the physical world or the ambient field (which is its name as locality) is impoverished. In this the WSP are mistaken. The ambient field is rich; if it is not “hi-fidelity,” it is high-powered. The rituals of the Nazis for example, which Nancy discusses, brought ambient structuration to a high pitch, the contagious, luring character of which was hard to resist. As more and more traversers of common space felt compelled to mime their ambience, the contagious power of that space grew. Common ambience is indeed the community on its most material level; it is also the conductor of real material and social power, which because it is exactly what is hidden by function and science, is reasonably called magic.

The Aesthetic Function

If we think again of the whole social body as broken into functional divisions (generally correspondent with job), the WSP, like the Fewkes expedition or Muybridge photographing the Modoc war, play a peculiar role. At this level of generality, the role is extremely similar to that of experimental science, which as Heidegger had described it constructs circumstances by which to elicit new data which will enable it to reiterate those circumstances. Both the artist engaged in field recording and the scientist producing high-speed images of colliding particles usher something in to the social formation that was not there before.

There is in this procedure, taken still at this level of generality, a moment of exposure, which we have above called the magic of touch. There is danger in that moment, because the exposure is exposure to real power. Now that connection is always already determinate; it is a conjunction of the scientist or the artist, performing energetically, with some other physical system. (On the other hand, neither system is properly “known”—and this includes the regime of science, which ignores its own habits.) The product, whether that is sound, or image, or data, while it purports to represent that externality, is actually a sort of echo of the conjunction, which remains hidden.

In general I would call this function, by which something from without the social formation enters in, the “aesthetic function.” The question to be addressed in the next chapter is whether “aesthetic” products differ significantly from “scientific” ones, “military” ones, or those of the general “media,” since at this point it is clear that this basic pattern of touch and integrative mnemesis is common to all, as well as to individual perception.

The one remaining point to be mentioned before passing to that next concern is that the frontiers of any social formation are by no means limited to its geographical national boundaries. There are always nooks and crannies within its own expanse so far eluding

integration. Police surveillance, documentaries, testimonials all serve the function of making visible what was invisible in this domain. The city turns inside and out, producing all its moments as distributable, contained representational elements. The borders past which the aesthetic gesture transgresses, pulled magnetically and not without peril, are everywhere. And the gesture which so reaches does so both to escape and to claim.

**CHAPTER 5:
AMBIENCE AND ALTERITY**

*“Me, I don’t want to be a man.”*¹

*“Inside this one body, there are various mythic things that are still sleeping intact.”*²

On first glance it appears that there are privileged surfaces of the body in terms of the environment. These are the “irritable surfaces,” those in most sensitive conjunction with the ambient array, which are called the sense organs. A closer investigation, however, expands the set of these indefinitely. “Propriocepted” sensations are integrated into perception in the same movement and moment as “external” ones; the distinction between them is retrospective.

Thousands of conjunctive surfaces perform basically as do the eyes and ears. The joints and viscera which press and pulse³ are received and re-worked into common perception just like any other externality. If there are privileged surfaces, their number is high and indefinite; and if there is a border to the body, it is a perimeter which in principle saturates its expanse.

There are also apparently privileged moments of the social formation in terms of intersection with externality. Experimental science stages encounters with minute aspects of non-human nature; the press and the scholar pass into foreign places; all enter representations, images into determinate channels of distribution. The analogy is not difficult: these “aesthetic functions” are the senses of a social body; by them we perceive what is not us. By this perception, incidentally, we retrospectively and mnemonically reiterate ourselves as distinct from some other. But here the same significant qualification holds as above. The borders of the social body are not limited to its national perimeter, or to the classically-alleged divide

¹ Bertolt Brecht, quoted in Adorno, *Philosophy of New Music*, p. 127.

² Hijikata Tatsumi, in conversation with Suzuki Tadashi, “Fragments of Glass,” p. 68.

³ Remember William James: “Our whole cubic capacity is sensibly alive; and each morsel of it contributes its pulsations of feeling, dim or sharp, pleasant, painful, or dubious, to that sense of personality that every one of us unfailingly carries with him.” Changes in the body “are so indefinitely numerous and subtle that the entire organism may be called a sounding board.” *Principles of Psychology*, v. 2, pp. 450-451.

between nature and culture. The whole regime of knowledges Foucault has identified under the heading “biopolitical”—those vast banks of statistics regarding “population,” in governmental and market-research archives—shows that the social expanse itself is subject to exploration and mining. Each point across that so-called “body” is a point of potential externality.⁴ The private life of the individual, psychology, resistance and desire are all moments of incomplete explication which can yield something further. These are plumbed as regularly as nature or Iraq, and the mnemonic influx enters those same circuits as media and scientific truth.

Nevertheless, just because of this ubiquity of conjunction with externality, followed by mnemonic uptake, there is value in considering the most obviously “aesthetic functions”: the manner in which science or media coverage frame and then perform the truths they then distribute may be generalizable to processes of perception or to the local, less obviously institutional production of truths. But here there is another problem. Just because these joint functions involved in the social production of reality are so bound up with “truth,” that category or that quality may steal the conversation. In both cases the degree of representational correspondence to an alleged external event or entity (always conceived as both independent and self-identically, stably objective) seems to be the most pressing question. We might like to know how certain scientific or reporting procedures distort what they recount, so as to calculate that out; so as to have at our disposal the corrected representational truth. But for present discussion that is not the question at all. In fact there is a quietly insurmountable problem here which we will note just in passing, namely that such correlation is impossible in every circumstance, just because events are not representations. If a representation has a connection to a truth which it conveys, it is because the representation

⁴ Tiqqun, writing in relation to the same body of thought: “The Outside is now gone precisely because today there is exteriority at every point of the biopolitical tissue.” *Introduction to Civil War*, p. 130.

acts as a sort of score which the one who cognizes it can perform. The truth is not had but done; all representations prescribe their own truths, which because they can only be performed in the ambience where they occur remain necessarily distant from some original.⁵ And the original was already a mimicking.

The scientific and the media cases are not the best ones to study in order to look more closely at the moment of exposure and mnemesis, and then to ask what aspect of this exposure may trail along through the distributional networks, because they are institutionally bound up with objective or representational truth. Art, however, escapes this relation: we know that the art product is supposed to be experienced “aesthetically,” not in terms of a simple semiotics, but in some other fashion. If there is truth in art, we are always ready to accept its slippage, and discursively we are already prepared not to find truth at all. When I named the prior functions “aesthetic” I already had this in mind. And when at the beginning of the last chapter I rather easily presented the “aesthetic” as that which is useless, I did so in order to move toward a discussion of Adorno, who takes that as his beginning point.

Fiction and uselessness may be veils behind which something else hides. That was Adorno’s intuition. He saw the always-failed pretense of art to autonomy (a pretense which may now well have been dropped) as a protest against an unjust, knotted and contradictory social formation. Now this very retraction from the linked and oiled social machinery, especially insofar as it necessarily fails, offers a glimpse into the irritable and inescapable conjunction of a social formation with its own material milieu.

I want to begin this chapter with Adorno, and to bring the notoriously-classical Adorno into dialogue with the recently-vogue Deleuze, for a couple of reasons. The first is that Adorno takes the relation of the aesthetic to the whole, and to its bordering other, totally seriously. Further, he recognizes the marriage of the social formation with war, and he seeks

⁵ This is roughly Spinoza’s position in the *Ethics*.

to understand what art has to do with that violence, and with the rage and suffering which it necessarily involves. For my own part I do not intend to uphold any claim about the autonomy of art, or even, in the end, about the final distinction between art and non-art, the functional and what is not functional. As Peter Bürger has noted in *Theory of the Avant-Garde*, responding critically to Adorno, all products in a social constellation are in one way or another functional. What I want to ask is rather the following. If we situate art-making, like sensation, or science, or war, at a certain exposed perimeter of the social formation, such that in it some glimpsing, glancing contact is had with something not quite common and not yet representational, in what fashion might this moment of exposure be retained in the aesthetic product, such that a viewer or a listener too, in listening becomes exposed? If we know that art is to be engaged with “aesthetically,” does this aesthetic engagement imply some relation to that exteriority?

Obviously any account, like those contemporary ones for example of Peter Kivy,⁶ who thinks he has made a breakthrough in identifying music as wallpaper, any account codifying the aesthetic as mere appearance, denies such a radical confrontation. Specifically what such traditional accounts deny is the existence of anything that is not representation. There is one modality of confrontation, which is that between perceiver and perceived, both of which are taken as ontologically pre-known, pre-formed, and non-problematic. In the contemporary language this is a confrontation between information source and sink. We happily overlook the glaring historicity of such formulations. Music for Kivy is information that is all pattern, no message. For him it is enough that the reception of such a message is pleasant; it tickles the cognitive machine.

It is exactly this easiness of the artwork that Adorno so strongly denies. If we think of an artwork in terms of its formal composition as a pattern, what makes that pattern forceful

⁶ See for example Peter Kivy, *The Philosophy of Music*.

will always be something excluded from it. That thing excluded, as in *Negative Dialectics*, is the exteriority before the representational regime and the exteriority excluded in the representational formation of the avowed social body. The moment of contact had by the artist, unconsciously with something beyond her, but neither transcendent nor immaterial, is supposed to be a contact with just that reality suppressed in the formation of a dominant and dominating socius. That reality persists in the work not at the level of content but at that of form: it is itself not even form, but a pressure sustaining the form; it is the asymmetry of form, or its force. What is interesting about Adorno is his insistence on these points. Art, exactly as critique—a parallel which we will presently discuss—stands in determinate negation to the social formation to which it nevertheless remains bound.⁷ It thus constitutes both an expanding and a retracting fringe; it is simultaneously flight from, reflection of, and incorporation into the social formation. It is both rejection and function. What I want to ask then is to what degree Adorno's aesthetic theory can clarify the aesthetic function. And because Adorno is, after all, in the end a dogmatic Hegelian, I want to show that a stronger, materialist account of his own insight can be offered by reference to habit and gesture.

That is the first half of this chapter. In the second I want to explore the consequences of this recoding of Adorno in terms of gesture for Adorno's conception of form, by considering Butoh as a critical art. In the following chapter we will pursue this model in an evaluation of certain dance and beat-driven music.

The Social Body Image

The parallel between body image and social formation is surprising. Deleuze and Guattari's work, for example in *Anti-Oedipus*, draws directly upon this analogy: they work out

⁷ "Art's asociality is the determinate negation of a determinate society." Adorno, *Aesthetic Theory*, p. 226. "Under present conditions, music is constrained to determinate negation." Adorno, *Philosophy of New Music*, p. 20.

the mechanisms of psychology and state in a single language describing “machines” that are transposable across these two levels. For us, for now, it is enough just to recognize a large correspondence. The body image is a mnemonic formation which exists by a process of exposure and mnemetic repetition. Sensate positivities are mnemetically articulated as inner or outer, and specifically positional in such a fashion that the “same” body is reproduced from second to second, while a changing externality, a system of percepts, is produced in spatial relation to that first constellation which is held steady.⁸ Psychological development in determinant social circumstances including force, threat, and touch and the correlate productions of desire and repression determine also which positivities emerge in this fashion as peripherally conscious, and which are kept unconscious. The emergent body, that which we feel as ourselves, is the product of this repetitious selection/suppression, mimicry and patterning.

Now some social formation, whether on a smaller scale, like in Shafer’s village, or on a much larger, national scale, has a discursive and jointly-experienced reality also only insofar as some distribution of material positivities is reiterated. Architecture, soundscape, and then daily social-discursive interactions, with recurrent characters, with their appearances, fashion, gestures, manners of speech and performed subjectivities are the elements entering into this pattern. The national or larger-scale cultural formation exists first of all as a composite of local bodily-performative constellations, but in our present circumstance increasingly as repetitious media performance. What takes place in the schizo-perceptual, archipelagous ambient is a distribution of sensate positivities, entering into repetitious conjunction as individual body image, but at the very same time reiteratively producing one and another social group, as well as their larger syntheses into national, religious, and market formations. Obviously in this

⁸ Schizophrenia involves a break-down of this process; in that breakdown it lays bear some of what typically occurs without our awareness.

process an indefinite number of individuals—those falling outside traditional regimes of identification of the sort described by Laura Mulvey, etc., mis-perform or are left out of this group ontogenesis.⁹ It may even be that every identificatory performance is a mis-performance in this fashion, which does not at all hinder the large-scale phenomenon granting entities like the “United States” a perceived and believable reality. Here it is again a question of which elements are presentational, which axial versus variant, and which repressed. Still, the process is one of pulsatile recapitulation, which brings some new positivities into distributed conjunctions the patterns for which which are largely mnemonic. The aesthetic function is the source of the materials involved in this process.

An indefinite quantity of repression and mis-performance is foundationally constitutive of local and national groups. What is presented as “us” is never really “us” but some thin and shady veneer, depicting poorly while veiling dependably; the social image is a partisan farce.¹⁰ Nevertheless at a momentary level it is still “us”: with the socius, as with the individual, there must be a continual influx of sensate material out of which for a nominal unity to be formed, and given such a continual influx and habits for its patterning, that unity is materially achieved. Many or most may feel the sting of the lie, yet still the lie is a material reality dependably behaving in its own representational fashion. In the absence of sensation “hallucination” ensues; homogeneous or hegemonic reality flickers out of existence. That hallucination, like schizophrenia or the acid trip, may be a manifestation of the reality of the social field: that it is diverse, fluctuating, multiple, non-representational, energetic. It is for the most part however an unbearable reality, fled in a massed bad faith.

⁹ These are the people who Judith Butler in *Bodies that Matter* calls “abject.” (And “ontogenesis” is a technical term Deleuze takes from Gilbert Simondon.)

¹⁰ Karl Marx in *The German Ideology* expressed this by saying that the ruling ideas were always the ideas of present rule and the present rulers; because every dominant elite must present its own interest as the general interest as one aspect of their social ascendance, the flow of representational elements through social space, which is controlled by the heavy industry underlying the physical productions of representational material, must reiterate just this certain social identity and no other, while creating the illusion that just this and no other identity is normal and natural.

The critical question is how to counter the lie; this is the purpose of Frankfurt School critique on the whole, and Adorno's aesthetic theory in particular.¹¹ Adorno derives his model largely from Benjamin, and particularly from the latter's two essays on history: "On the Concept of History" and "Paralipomena to 'On the Concept of History.'"¹² Benjamin's now-famous point in the first of those essays is that history is written by the victors, not just once or mostly, but in every instance, and ongoingly.¹³ Dominant histories are just those which present the present regime of dominant relations, along with those normativities conducive to those relations, as the only natural ones; history itself becomes a story of the necessity of the progression of the past to this very moment.¹⁴ Such a story is not really historical at all: it is an appendage of present relations of domination, something grown from a present, fictitious and fictively-smooth totality. This is just to say that it is a social perceptual formation, or what Jacques Rancière calls a "distribution of the sensible."¹⁵ It leaves out everything disharmonious because its function is to do so. Every victorious class inherits such a discursive instrument of rule from its predecessor.

While Benjamin's essays bear chiefly upon the longer duration, we might say that the same process occurs daily or even moment by moment. History, or the news, depict not chiefly past, external events, but much more forcibly a certain constellation of subjectivities in their positions of reception, and a certain image of a whole and complete social body. In principle, this system communicates nothing across time so much as itself. Whatever else comes to pass enters from the dimension of noise. Adorno, like Benjamin, was interested in the possibility of a counter-force to this process. Benjamin located it in the critical historian

¹¹ As well as of many other texts, including the group that we considered in the Introduction, and for example in Laclau and Mouffe's *Hegemony and Socialist Strategy*.

¹² In Walter Benjamin, *Selected Writings*, v. 4, 1938-1940.

¹³ "The only historian capable of fanning the spark of hope in the past is the one who is firmly convinced that *even the dead* will not be safe from the enemy if he is victorious. And this enemy has never ceased to be victorious." Walter Benjamin, "On the Concept of History," p. 391.

¹⁴ Althusser notes this explicitly in *The Philosophy of the Encounter*.

¹⁵ See Jacques Rancière, *The Politics of Aesthetics*.

and specifically in the so-called “dialectical image.” Adorno located it both in critique and in art, the products of which have an explicitly dialectical relation to the (false) totality which bears them and which they reject.

The Aesthetic as Determinant-Negative Abscess

For Marx and then for Adorno, the social formation is a sprawling volume rent with cracks. These cracks are the famous “contradictions,” exact lines of separation and antagonism characterizing each of the primary aspects of contemporary productive conjunction in its present moment of development. The cracks may be divisions of labor, which physically keep individuals separate within different cubicles and buildings, and prevent them from speaking to other individuals on the basis of superficial differences of appearance or deeper differences of experiential pedigree. They may be rifts between the technical aspects of the infrastructure and the technical knowledge or social organization necessary fully to integrate with them. Most importantly they are clefts between one and another class, each class being formed always and exclusively “over against” another class, such that the very material delineation of any class is given only on the basis of such opposition:¹⁶ the class of managers versus that of managed, or of owners versus workers, men vs. women, straight vs. gay. There will be some such a crack wherever processes of visibility fold over into invisibility and hence where certain persons are mimed as social representation while others are not. Social perimeters are founding cracks of this sort, between one group or socius and another. As population is always growing, technique changing character, capital changing hands and behind such exchange, like a fast shadow, architecture assembling and collapsing, division of labor complicating kaleidoscopically, the full pattern of cracks across the whole of the social volume is always

¹⁶ This quick account is a synopsis of the picture Marx draws in *The German Ideology*, although in emphasizing the term “antagonism,” I gesture toward Laclau and Mouffe.

unique, like a vast fingerprint or the sutures on a particular skull. That pattern is the material form of the socius, in distinction from the perceived identity passing across it like thoughts on the face of an awkward adolescent, trying now to be one, now some other thing, always emulating an intactness which in obvious fact he lacks.

Each of these rifts or fissures is productive of aesthetic positivity. Recall that the experimental laboratory is built upon a fault line, which it straddles with its equipment, which it mines and from which it extracts elements to be socially distributed. Similarly the media. Not only at these controlled frontiers but also across the vast social crystal, any line of conflict is pregnant with a certain tension. These are the points at which art may occur.

The whole social configuration is always changing. It has to change, moment by moment, like a person in a fever, moved in the night by tremor or chill.¹⁷ Adjustments have to be made in configuration to maintain a quasi-unitary social operation, and ever new representational formulations must be fabricated and passed across the volume's surface, as one key aspect of the sustained allegation of unity. But there is pressure at each point where unity is not real, and the very materiality of the social formation is determined by the seismic field of these discontinuities. There is tension laterally, on the material level of behaviors, and also in a sort of half-vertical dimension, between the socially-distributed message of unity and the experience of something other. "Between the idea and the reality," as T.S. Eliot put it, "between the motion and the act, falls the shadow."¹⁸ The social formation aches. Adorno says it suffers; and it suffers in these exact patterns, or behind them like weeping behind a mask.

¹⁷ In Plato's *Republic* Socrates characterizes the city Glaucon and Adeimantus urge him to construct, one which goes beyond his primary formulation to include luxury goods like "prostitutes and pastries," as a city with a fever. (Book 2). It is worth noting that the "ideal" city that Socrates goes on to describe, the one necessitating a "guardian" class over against a productive one whose initial function is the military acquisition of bordering territory, is therefore not "ideal" at all, by Socrates' own reckoning. Its fever breeds war, and without public explanation somehow warriors become police.

¹⁸ T.S. Eliot, "The Hollow Men". The motion is gesture, the act telotic. The act means toward an end, the motion means without end.

Art occurs as a phenomenon of this suffering, and of revolt against it: hence art too occurs with some topological and topical exaction.

Because the social formation is always changing, the position and the formal content of art is always changing as well; in fact art and critique, as localized determinant negations of the conflicted and alleged whole, are means in its continual recalibration. Each rejects the antagonistic whole, or the pretense of the antagonistic crystal to harmonized wholeness.¹⁹ In so doing either critique or art emerge like an abscess on the skin of the social volume, some irritated pocket extending outward at a juncture with the foreign. They stand opposed, and Adorno says that in their own formal patterns they reflect the pattern of the whole conflicted system.²⁰ In their tension they are animated by those material elements suppressed by the dominance operating in this particular present constellation: they are premised on suffering and they constitute proto-voices for what is excluded.²¹ They speak for society's invisible and history's victims, just insofar as they are animated by something standing structurally outside the functional whole, something suppressed and non-integrated.²²

But they are compromised as well. If their tension is always the asymmetrical tension of excluded life, they are yet contiguous with the social volume, with regard to which, even

¹⁹ "Art acquires its specificity by separating itself from what it developed out of; its law of movement is its law of form." Adorno, *Aesthetic Theory*, p. 2. "Art can be understood only by its laws of movement, not according to any set of invariants. It is defined by its relation to what it is not." *Ibid.*, p. 3.

²⁰ "Art sublimates the governing principle of empirical reality as 'the ideal of the self-identity of its works.'" *Ibid.*, p. 4. One needs to "locate... the social dimension in their autonomous form and perceive... it as aesthetic content." Adorno, *Sound Figures*, p. 2. "...all musical forms, all the materials and elements of the language of music, were once contents. They bear witness to social processes, and their social meanings must be brought to life again by the persistent observer." *Ibid.*, p. 10. Adorno also refers to formal content as "the unconscious writing of history" (*Aesthetic Theory*, p. 192). "Aesthetic form is sedimented content." (*Ibid.*, p. 4). "As are all sedimentations of objective spirit, artworks are the thing itself. They are the hidden essence of society, summoned into appearance." *Philosophy of New Music*, p. 101.

²¹ "Aesthetic identity seeks to aid the nonidentical which in reality is repressed by reality's compulsion to identity." *Aesthetic Theory*, p. 4.

²² "In artworks, the criterion of success is twofold: 1. whether they succeed in integrating thematica strata and details into their immanent law of form and 2. in this integration retain at the same time what resists it and the fissures that occur in the process of integration." *Ibid.*, p. 7. "...the rank of an artwork is defined essentially by whether it exposes itself to, or withdraws from, the irreconcilable." p. 190.

and precisely in their repulsion from which, they perform a function. That is to explicate some set of tensions, some otherness, and hence to begin the process of integration.²³ Artworks mime exteriority, if only as a feeling or a mood. They speak for the suffering outside; but just thereby they subsume it mimetically. The social body crackling through time is ruptured by innumerable moments of this sort: small, border volumes of friction, inversion, regions of singular incommensurability, wavefronts of repulsion and subsumption. Adorno understands both artwork and critique to be such border volumes, positioned between pattern and milieu, the system and its others, teetering in the pivot of justice and violence.

The work of art or the critique are thus always positioned at some special place of weakness or contradiction within the social volume. They bubble out from its cracks. They are exuded by those cracks, as protests; they are tentacles of those cracks, reaching out in subsumption. They are the driven cathexes of the socius, where energy flees and then returns: flees methexically, under the negative charge of suffering and in the erotic pull of the other, returns mimetically, mnemetically, the wavefront of integration. Art is mnemetic moment, an aesthetic function like science or media but with its elements, pre-truth, exposed. This moment pulses, with the suffering of the excluded and the rage of the fractured whole.²⁴

Hegelian Negation, Freudian Expression

Adorno's model derives from Hegel and Freud as well as from Marx and Benjamin. From Hegel Adorno takes the notion of determinant negation. From Freud he takes the idea of

²³ Art "posits the limits," "by abstract negation," "and with that they are surpassed." *Ibid.*, p. 6.

²⁴ These two aspects of the aesthetic moment are clearly delineated in Adorno. The suffering connected with art and critique is the suffering of those not included or those exploited by present and past social organization. The rage that is indissolubly involved is that of the system pressing for incorporation, which is insatiable. Adorno discusses the suffering of the other particularly in his book on Mahler (*Mahler*: see e.g. p. 26) and also in *Negative Dialectics*, e.g. pp. 362-363; he discusses the rage of the subsuming system in *Negative Dialectics*, e.g. pp. 22-23. We will need to investigate presently whether these two moments are actually one, such that the rage of the system is a behavior out of its own suffering, as repetition compulsion is an iteration of trauma.

a repressed unconscious milieu and the possibility of its expression. Art is thus at once a negative image, supposedly of the whole social “totality,” and an uncanny rendering of its buried reality. These processes are linked: what is expressed is a determinant negation, and the moment of explicative expression occurs under the force of negation. I have also said that art and critique operate for Adorno in equivalent ways. Before moving on to inquire how such a process might be materially comprehensible, I would like to clarify these three key ideas: art as determinant negation; art as expression of the social unconscious; art as equivalent of critique.

A determinant negation is a negation that is precisely local and exhaustively relational. One of the key initial points in Hegel’s *Phenomenology of Spirit* is that all negations phenomenally are of this sort. Particularly within traditions like art or philosophy, any new position, even and especially the most revolutionary, can establish themselves by no other means than opposition to what went before. Hegel thus determinantly negates Kant, or Marx Hegel; atonality makes sense at least initially only in relation to the tonality that it rejects. Even momentary thought is supposed to work in this fashion. Each new conceptual formulation will be an inverted image of the thought that precedes it, from which it peels away under a negative energy perpetually dissatisfied with representations as insufficient for what they purport to convey. It is this insufficiency which Adorno seeks to emphasize and retain in *Negative Dialectics*, as a conceptual penitence for perpetual conceptual violence, following upon mimesis and always substituting some cognitive “identity” for whatever might be known. Negative dialectics is the practice of remembering and returning to the fundamental non-identity that persists between the thing and its representation.²⁵ This gap is the breath of art.

²⁵ “... no matter how hard we try for linguistic expression of... a history congealed in things, the words we use will remain concepts. Their precision substitutes for the thing itself, without quite bringing its selfhood to mind; there is a gap between words and the thing they conjure... The determinable flaw in

Art for Adorno is the determinant negation of the social “totality.” By his later work he recognizes that this totality is whole and complete in name only. We will consider that more fully in a moment. The point for now is that art, specifically in its “formal content,” is supposed by Adorno to be a sort of rubbing of that lattice of fractures constituting the antagonistic social volume at the time of the work’s construction. More specifically, the work resembles that pattern in its formal character, but is animated, has a “tension,” just insofar as it also retains a constitutive relation to unincorporated or subjugated elements. This is the manner in which art is supposed to be a form of protest. Adorno does not offer a thorough account as to how it is that some particular artist is in connection with the “whole” that through their work they express. He only says that “...artworks recuperate, neutralized, what once was literally and directly experienced,”²⁶ and that “the unsolved antagonisms of reality return in artworks as immanent problems of form.”²⁷ The expression happens unconsciously, and its possibility seems in Adorno to be premised upon an uninspected faith in the existence of dialectical pattern in the substance of material reality. That will be insufficient for us, and we will offer a stronger explanation presently.

At any functional location within the social constellation, the totality of that constellation precisely as fractured and incomplete is hidden. The crackling whole and each rift within it is a trauma. Ideology compulsively covers it over. The pulsations of the physical networks distributing aesthetic positivity are a repetition operating under the continual re-stimulus of disjunct organization. At each moment it is as if the system sensed its own incompleteness: thus it is driven to represent its own intactness. Art and critique, while being of

every concept makes it necessary to cite others...” Adorno, *Negative Dialectics*, pp. 52-53. “Knowledge no sooner starts from scratch, by way of a stabilizing objectification, than it will distort the objects. Knowledge as such, even in a form detached from substance, takes part in tradition as unconscious remembrance; there is no question which we might simply ask, without knowing of past things that are preserved in the question and spur it.” p. 54.

²⁶ *Aesthetic Theory*, p. 4.

²⁷ *Ibid.*, p. 6.

an ontological type nigh indistinguishable from ideology, are supposed to be the moments in which this repressed domain finds expression. At its blistered borders totality tells its own fragmented truth.

There are three things to note here, in addition to the above question as to how any individual artist or thinker could find themselves in some connection to the whole of the social field. The first regards the manner of expression. Adorno is careful to explain, in *Philosophy of New Music*, that music is no longer “expressive” in the romantic sense.²⁸ That is, it is not composed of a sonic continuum “evoking” some emotional states, which hover over that continuum in its unfolding as the “expressed” correlate of the expressive harmonies, melodies, etc. Adorno holds that in Schoenberg in particular, expression is direct. The compositional constellation is itself the expression of the social formation. It does not evoke it; it performs it directly. The dissonance of early twelve-tone music is socially unpopular for exactly the same reason that social tensions are hastily overlooked by the larger population.

The second point is that what is unconscious here, while it is traumatic, is not sheerly mnemonic. It is not past, but present, or more accurately, its pastness itself is present as a manner of performance. This is true for Freud, in his material conception of neural cathexes, though it is not the case for many psychoanalytic interpretations, which take the traumatic and the repressed to be a sort of stored representation. Here at any rate what is unconscious is absolutely present; it is sprawling, fully material. It is the set of productive practices in their

²⁸ Previously expression was “stylized and mediated... a semblance of the passions... The genuinely revolutionary element in [Schoenberg’s] music is the transformation of the function of expression. Passions are no longer faked; on the contrary, undisguised, corporeal impulses of the unconscious, shocks, and traumas are registered in the medium of music. They attack the taboos of the form because these taboos submit the impulses to their censorship, rationalise them, and transpose them into images. Schoenberg’s formal innovations were closely related to the change in the emotional content. They serve the breakthrough of its reality. The first atonal works are depositions, in the sense of psychoanalytic dream depositions. In the earliest book published on Schoenberg, Wassily Kandinsky called the composer’s paintings ‘studies of the mind laid bare.’” *Philosophy of New Music*, p. 35.

horizontal conjugation, and with their architectonics of violence. Precisely the domain of material practice is functionally repressed, but in these special cases expressed.

The third point is that both what is expressed, and its expression, are characterized by shock. Both Schoenberg, who Adorno considers successful, and Stravinsky, whom he does not, have this in common, that they deliver shocks, and render an experience of shock. Adorno thus takes it that Simmel and Benjamin are quite correct in their diagnosis of present practical life. Either the traversal of social space, or its own formal structuration, or both, have this shocking character. The repressed formation is not only material and not only traumatic, but traumatic precisely in its character as haptically proximate. It is because the material expanse touches us, pokes and jabs, that it traumatizes. And it is this tactility that is suppressed.

Insofar as art negatively reflects the whole from which it withdraws, and expresses that whole in its form, it is equivalent to critique. The Frankfurt School model of critique comes directly from Marx, who for his part grasped it on the basis of Hegel. In the short essay “For a Ruthless Criticism of Everything Existing,”²⁹ Marx presents critique as the relational conjugation of an existing social formation with its own real but unrealized material possibility.³⁰ Critique considers the present in terms of its own material horizon; it compares what is and what could really be. In so doing it makes explicit what is regularly suppressed, and it stands in direct functional opposition to ideology. The role of ideology is to present the allegedly-complete present, the extant actuality, as the exhaustion of the possible. In rendering the actual as the totality of the possible, it produces the possible as the impossible. Critique is the counter-movement revealing both the possibility of what is ideologically proscribed and the veiling function of ideology itself. Now art is not identical to critique, because it does not explicate these elements discursively, but formally. In this regard, as we will see, it may be all

²⁹ In *The Marx-Engels Reader*, pp. 12-15.

³⁰ Marcuse, for example, repeats that definition in “On the Affirmative Character of Culture.” So does Horkheimer at various points.

the more forceful. For Adorno, art both reveals the fractured whole, and places whoever experiences it in affective conjunction with what is materially real but functionally proscribed.³¹ That is to say that what critique does by means of declaration, art does by means of participation.³² It brings the excluded other into the felt horizon of experience. In so doing it produces asymmetry, discontent, suffering in that experience. Previously, in the context of particular pieces by La Monte Young or by the Beatles, we referred to this circumstance as “intensity.” Art’s intensity for Adorno, its “tension,” is the formative if formless force of the social formation’s others. By distributing such intensity, such a conjunction with an impossible but forceful domain, it would seem that art has the capacity materially to produce an experiential and even physiological resistance. That Adorno nevertheless despaired of its capacity to effect any real change corresponds to his classical and idealist belief that felt states are distinct from and inferior to cognitive ones. For this reason, art expresses suffering, but it cannot mitigate it. Meanwhile critique, which in its linguistic formality is in principle more up to the task of raising a rational resistance, fails as a result of social mechanisms designed to inhibit thought—the sort of mechanisms best elaborated in Marcuse’s *One-Dimensional Man*. We will return to this question of the relation of feeling and thought by the middle of this chapter.

Performative Ideology

Adorno, like the rest of the Frankfurt School, was involved with the theory of ideology for the whole of his career. Both the early work in *The Philosophy of New Music* and the later work in *Mahler* or *Negative Dialectics*, thematize it regularly and explicitly. Yet there has always been a problem with the details of the theory of ideology, particularly regarding

³¹ Again here are Judith Butler’s “abject”; those persons and practices whose very reality constitutes the definitive incommensurability against which “normalcy” has its identity.

³² Ultimately we would have to argue, of course, that discourse is itself (mnemonic) performance, such that again this distinction collapses.

how exactly it comes to have its particular form. For Marx, ideology was supposed to reflect the infrastructure from which it arose, if in an inverted fashion, “as in a camera obscura.” On the more developed theory of later years, for example in Wilhelm Reich and then in Althusser, ideology seems to have a facilitating function as well: it takes part in production, and particularly in the reproduction of a given constellation of relations which is necessary for the fruits of production to continue to fall into the same laps. The question of the critical role of music, and more generally of the relationship between particular works of art and the rest of the social formation, is thus presented in terms that are directly derived from the theory of ideology. Schoenberg or Stravinsky, like the outright propaganda of Goebbels and Limbaugh, emerge as a sort of reflection of the socius that produces them. They reflect society. Further, especially as recordings, they cannot help but enter functionally into that society as commodities distributed through its volume. And in the case of bad music, which includes almost all of it for Adorno, there is even a clear ideological function to the sound itself: in its beats, it integrates bodies into machinic pulse; in its manipulation of emotion it covertly shuts down critical intellect; in its production of body-ambient synchrony, it offers a substitutive illusion for real social solidarity. Only the Second Viennese School is allowed a certain exit from this compromised position.

The untenability of the absolute distinction between high and low art, between dance music and art music, etc., as well as the barely-veiled classist and racist assumptions involved in that distinction, have been sufficiently shown by others. To some extent we will see it ourselves below. The real reason to consider music in terms of ideology is that the question raised above, as to the manner in which some artist could materially have contact with the “whole” or at least some large sector of it, can be answered on the basis of analyses oriented toward this specific problem, especially those of Althusser and Žižek.

Adorno holds that works by Schoenberg or Kafka, etc.—good, strong works—reflect in their formal content (not in the superficial content composing musical material or scenic settings) the form of the social whole. How is this possible? Adorno says that “...artworks recuperate, neutralized, what once was literally and directly experienced,”³³ and that in this recuperation unresolved antagonisms are the driving element. For Adorno the presence at the part of the form of the whole may not be such a great problem, and this only because in so many ways Adorno remains dogmatically Hegelian. The “materialism” that Adorno professes relates more to the “concretion” of his analyses than it does to the offering of some material process through which some individual body might have real physical or experiential conjunction with a broad social expanse. Adorno, like Hegel, is convinced of the importance of concretion; but he is dismissive of the immanent itself, of the body, of habit, etc. And he seems to assume that the presence of the whole at the locality is sufficiently likely on unspoken Hegelian grounds: reality is rational; rationality fundamentally involves the relation of the whole and the part. Because of this assumption, Adorno’s theory is rather easily dismissed. Why should we believe that when a composer composes, by some remarkable speculative process the whole passes through his mind onto the staff? Simply put, we should not.

But the idea that the work bears some tight and critical connection to the reality from which it stems is essential for any materialist approach. In fact we have to allow some tight conjunction with context if we are not to fall into that other dismissable favorite of the avant-garde, the notion of the “autonomy” of art. If there is no pure outside of social relations, then various aspects of those relations must be bound up in artistic works. Seeing how this might be so on a material or even physiological level is therefore useful.

³³ *Aesthetic Theory*, p. 4. (Quoted above).

The account that Althusser offers in “Ideology and Ideological State Apparatuses,” derived from Wilhelm Reich and Jacques Lacan as well as from Marx, and also from Spinoza, offers a compelling solution here. Althusser presents ideology as operating on two discrete levels, both of which unfurl in concrete, material circumstances, particularly in closed, institutional spaces like the church, the family, the school. The two things that occur in such confines are 1. a training of the body in particular habitual routines: first those directly correlative to the division of labor; second those related to authority, its execution and its recognition; and 2. an “interpellation” of subjects within a discursive or symbolic network, together with the training accompanying such subject-positions in terms of types of iteration and voice, etc. This is to say that ideological institutions, which Althusser presents as indispensable augmentations of repressive state power without which no class could remain dominant, form both bodies and minds, both individual and subject. They compel certain habitual regimes, such that proprioceptively individuals feel themselves in quite specific manners. Certain muscle groups are developed, but not others; certain postures are permitted, others are rigorously disallowed. Then, on top of this forming of the body, by what Marcel Mauss had already called “Techniques of the Body” in 1917, and which Foucault calls “discipline,” a linguistic seizure occurs. One becomes boy or girl, man or woman, white or black, straight or gay, etc. The two regimes here are interlinked but discrete; they may vary from one another, although in principle institutions correlate them in pairs.

Foucault and Butler have extended this manner of analysis quite widely; Deleuze even thought that the disciplinary institution was defunct, since the totality of social space has become both panoptic and disciplinary. These accounts cast each socialized physical circumstance in which an individual spends time as a field of force instilling certain patterns of behavior, as well as certain patterns of speech together with very specific syntaxes and subject-positions. To put that more crisply: functionally-articulated space sculpts gesture,

impels a certain form in the very energetic time which is the performative bodily-ambient. Every prolonged stay in some architecturally- and disciplinarily-constructed environment would be akin to the teaching of a whole regime of bodily and linguistic skills. (Plato compared this process to the dipping of a cloth in dye.) All of these become habits; they nest within the overall cycling routines that each body lives and repeats in each of its days and moments. The body becomes these patterns. Or rather, the bodily-ambient is these patterns; the body image, that which coincides with and forms consciousness and subjectivity, is a subset, an organizing but occluding pattern ontologically the same in kind as what it “interprets” or maps. As Deleuze and Guattari put it: “the whole occurs alongside its parts.”³⁴

We could then think of the artist as really being inhabited, or really performing, some large sub-section of the social formation, on the cusp of the inclusion and exclusion of the immanent materiality of that formation into or outside of mnemonic intelligibility. We would have to throw out the idea that works could reflect the “whole,” (even if we were to assume that such a thing exists), as did the later Adorno and for example Raymond Williams.³⁵ But it would now seem reasonable to think that when an artist produces, she does so out of the regime of gestures composing her own habituated performativity, at both material and semiotic levels (the latter being, again, a codification and subset of the former). And we could still say that she does so under the pressure of a host of iterations or fluctuations themselves not functionally harmonized. The determinatively negative character of the moment of expression would be the rendering of some local sector of performance under the force of its own disequilibrium. Bodily-ambient habit would press against itself in the region of this individual; the basic antagonism between a roughly-systematized regime of habit and those elements of excess material positivity—those other habits, indefinite in expanse,

³⁴ In *Anti-Oedipus*, e.g. p. 43.

³⁵ See in particular “Base and Superstructure in Marxist Cultural Theory,” in *Culture and Materialism*, pp. 31-49.

forming the former's milieu, feeding the dominant regime but opposing it as that which it is not—would abscess in a process printing the formed individual from without, pressing the individual into her medium, rendering their conjunction. The moment of the work would resemble that imprinting flash at Hiroshima that Virilio likes to remember, which photographed figures on sidewalks. This would be Benjamin's dialectical image or Adorno's frozen monad, in which all the various tensions of a moment flicker into coherence. The imprinted "form" would remain vibrant and taut in relation to the rest of material ambience just insofar as that ambience pretends to a false equilibrium. The work of art would be a rupture of bodily-ambient performance, a splitting of itself along its own lines of force; and it would persist as such a rupture, until such time that the local material ambience in which it sits adjusts to this disturbance—at which point, as Adorno says, art ceases to be art, becoming instead that mild-mannered decoration beloved of analytic philosophers.

The pressure of the "other," the "subjective impulse"³⁶ which the artist feels, is according to Adorno the "need to lend a voice to suffering... [the] objectivity that weighs upon the subject..."³⁷ In this manner the objectivity may be understood as truly material: what is felt, per William James, is what is always already performed. The other is in us; even we are other; "I is an other"³⁸ to the material splay of gesture. The artist would be a tautness of feeling correspondent to a knot in social performativity, and Joseph Beuys would be right that in principle, therefore, everyone is an artist. In them the material contradictions of the bodily-ambient (may) come to a fertile, ruptured point.

If we accept this practice-oriented rendering, which insists upon differential performance in place of dialectical relationality and hence, as Marx says, accepts as real

³⁶ "The subjective impulse that registers what is to be done is the appearance of something *objective* transpiring back of this impulse, the development of productive forces, which art in its innermost has in common with society and at the same time opposes through its own development." *Aesthetic Theory*, p. 192.

³⁷ *Negative Dialectics*, p. 18-19.

³⁸ (Rimbaud's phrase).

premises only “the real individuals, their activity and the material conditions under which they live, both those which they find already existing and those produced by their activity,”³⁹ what further consequences would this have for Adorno’s aesthetic theory?

The Produced Subject

Althusser distinguishes between the “individual” and the “subject.” The first of these terms denotes a natural body prior to its physical and semiotic coding within some ideological institution. It is a limit term about which not much else may be said, since all of us, and anyone else who can speak, is already some sort of subject. This latter term then denotes a speaking and perceiving position within a Lacanian symbolic network. Such positions pre-exist the interpellation (or coercive “calling”) of any individual as an occupant or performer, although the positions are themselves distributed by the regime of practices. Žižek has developed this model in *The Sublime Object of Ideology*, depending particularly on Alfred Sohn-Rethel’s *Intellectual and Manual Labor*. We are always already engaged in such semiotic-linguistic networks having a form correlated with dominant practices and ultimately matrices of ownership and control. A large portion of cultural criticism spanning from the mid-1960s through the late 1990s accepts this originally psychoanalytic analysis. The “subject” is an effect of power.

“I say: the category of the subject is constitutive of all ideology, but at the same time and immediately I add that *the category of the subject is only constitutive of all ideology insofar as ideology has the function (which defines it) of ‘constituting’ concrete individuals as subjects.*”⁴⁰ Subjectivity for Althusser has its initial moment in “the ideological *recognition* function,”⁴¹ which consists in a “hailing,” a “Hey, you there!”⁴² (“yes, you!”) as on a street;

³⁹ Marx and Engels, *The German Ideology*, p. 42.

⁴⁰ Louis Althusser, “Ideology and the State,” in *On Ideology*, p. 45.

⁴¹ *Ibid.*, p. 46.

“all ideology hails or interpellates concrete individuals as concrete subjects.”⁴³ When the individual responds, the interpellation succeeds. Whether one likes it or not, one is now man, woman, gay, straight, black, white, Arab, same, other, terrorist, enemy etc. One has a perspective, but it is a perspective itself known and meaningful, a perspective which is simultaneously a content; it is a perspective both for perception and for speech, where speech already has a voice which always speaks itself, its own name, before and under anything else, where perception first perceives perception as the correlate of a subject. Thus Lacanian proclamations like: to see is to be seen. This perspective would be an implementation at the level of the pulsatile reproduction of the body image by means of the discrete distribution of sensate-gestural positivities: for each constellation of clear perception there would be a dominant rendering of such perceptions as standing over against a “subject.” Although in fact the subject would be a mnemonic element rearticulated at the same level as all the mimetically-presented sensate elements in a mnemetic process—just a gesture or a pre-motor firing—in the order of the concept it would play a mastering role, determining the positional framing of the “whatness” of the presented.⁴⁴ In truth it would be a higher-order mnemetic substitution, casting present bodily-ambience as object not only for subject, but for just this subject, such that elements of perception are selected out precisely insofar as they repeat the identity of the subject. (This is lived as [narcissistic] erotic connection: identification). In this manner percepts become echoes and mirrors. We hear and see what we “are;” perceiving confirms our being. Althusser asserts that this (re)capitulatory seeing and hearing are organized so as to reproduce certain habits which are directly useful for either a. the contemporary organization of production, or b. submission to authority. The production of

⁴² p. 48.

⁴³ p. 47.

⁴⁴ This is a quick rendering of Lacan’s analysis of the relation of phenomenal presentation and subjectivity in the two lectures “What is a Picture?” and “The Line and Light,” in *The Four Fundamental Concepts of Psychoanalysis*.

perception and the production of the subject are bound to one another. Ideology includes the calibration of such performative substitutions socially, in terms of work and in terms of fear.

The system of possible subject perspectives is limited, and it is this structuration which according to Žižek is traceable to the material, behavioral or “infrastructural” domain. The beliefs which a subject holds, even more than her percepts, are analytically-necessary explications of her subjectivity. Both position and content, then, within the semiotic field, are “determined in the last instance” by an underlying, unconscious and physiological performativity, itself minutely articulated and conjoined with the full splay of productive and dominating social activities. Whatever aspects of gestural materiality exceed or fall short of this dominant network, and incommensurable signifying practices as well, are thus irritants to subjectivity. “Affect,” which now is so popular a general term, may well just be the name for the unfolding of dissymmetries between perfect social harmonization (in a dominant/dominating formation) and its failure, folds and swells of social consonance and dissonance. One feels the more strongly the less one congeals in social lockstep. Per Adorno, one “suffers” to the degree that the non-identity of gesture and gesture, and then gesture and sign, sign and sign, are inflamed. One suffers, but one also rages, insofar as the subsuming regime of habits, both those seizing the body, and those wearing the nametag “sign,” are performed immanently. The individual, coextensive with exteriority, is the site of social conflict.

This last technical point needs to be elaborated. On Althusser’s account, either the “sign” or the “idea” are performed. They are at base nothing but the activity attending their appearance as such, as identified and named as being representation, meaning, discreteness, ideality, where each of these identifications is in truth gestural and material. The very idea that ideas are ideal, says Althusser, is ideological. (Spinoza deals with this by asserting the immanence solely of the “formal reality” of the idea, its occurrence as local process, versus

the “objective reality,” the representational content, which is “inadequate” just insofar as it interrupts affirmation of this immanence.)⁴⁵ The notion of the “idea,” as a discretely “mental” phenomenon standing over against a “subject,” is a socially historical formulation corresponding to certain regimes of practice and a certainly-patterned social formation. Althusser does not discuss this history—for that we could look to various critiques of Cartesianism or even of “ocularcentrism” as for example in McLuhan-inspired media theory—but he does cite Spinoza as the key point of critique. In Spinoza, the experience of “ideas” as independent entities is a characteristic of “imaginary” as opposed to “intuitive” understanding. Spinoza’s Cartesian-inspired “imaginary” here, denoting presence of an oppositional static entity encountered passively, is made to coincide with Lacan’s. Ideology has to do with the holding of the subject in this epistemological-phenomenological deadlock, which systematically renders anything which is to be known “objective,” and hence a confirmation of the opposing subjectivity.⁴⁶ All ideology therefore renders certain relations according to certain prefabricated matrices; but at every moment it first of all renders and affirms a subject. The subject-idea dyad, taken by many philosophies including Adorno’s as ontologically foundational, is itself a construction, inscribed, upheld and performed by individuals choreographed in their institutional circumstances. It is of exactly the same sort as the model of an information-processing agent confronted with a meaningful signal-flow; it is the predecessor and still the underpinning of that model. Adorno produces subjectivity just as does Broadbent. To that extent, “Adorno serves imperialism.”

⁴⁵ Giorgio Agamben, who will reappear below, affirms this position as well, specifically in terms of gesture: “the idea, which is not at all an immobile archetype as common interpretations would have it, but rather a constellation in which phenomena arrange themselves in a gesture.” *Means Without Ends*, p. 56.

⁴⁶ This is just the process that Heidegger discusses in “The Age of the World Picture.” The present epoch, or the one dominant at any rate for the latter half of the 20th century in Northern discourse (probably I am propounding the newer ideology, which has to do with bodies and gestures), is one in which everything that is allowed to exist must become frontally presentational, a representation, a picture.

The Subject Called Adorno

The identification of the subject as a product of power, and for that reason not in the least power's opponent, sits very poorly with someone like Adorno, and with the Frankfurt School as a whole or even the Existentialists. These are more classical, more conservative, more "stable" systems of theory which rely upon the existence in principle of a natural subjectivity, taken to be the seat of decision and reason.⁴⁷ Nearly all of the Frankfurt School's critique can be seen as a lament over the disruption of this "natural" person, with its innate capacity for democracy and reflective, negative thought. When the subject becomes nothing but a prescribed position, a mask that one is forced to wear and which one comes to imitate compulsively, the whole ground of classical resistance is lost. Thus the large shift in this same time period to a discourse about the body and its own capacities for resistance. In our case, thus the need for a shift from Adorno to Butler or Deleuze.

Adorno's critique of the "culture industry" as purveyor of social opium, like Marcuse's critique of the collapse into "one-dimensionality," where the "outside" of the social formation is rendered invisible by the foreclosure of negative thought (in the Hegelian scheme, the essential motion of unrealized possibility), rests upon a faith in the subject. Nor is it just any subject. It is a thinking, active subject, a powerful subject and a moral one. More, it is a male and aristocratic subject. Adorno laments in the triumph of ideology the

⁴⁷ This is the insurmountable limitation also of Noam Chomsky's critique of ideology, for example in *Manufacturing Consent*. While he has claimed repeatedly in interviews that he sees no overlap between his linguistic work and his political criticism, they do indeed meet here, where a basically hard-coded, categorizing subjectivity is assumed as an historically-invariant human capacity offering the possibility of a simple, logical reason in opposition to politically-distributed falsehoods. Chomsky himself has identified this subject as "Cartesian." In maintaining its naturalness Chomsky continues both the most naïve tendencies of anarchism, which traditionally has taken the human subject to be basically free and good, though unfortunately oppressed, and the ideological position that science is not ideological. This latter mistake is one that Althusser shares: the person in the position of ideological production seems to have an inertial or institutional tendency to exempt themselves from the deceptions operant upon the non-intellectual classes, to whom they deliver a purified and authoritative truth. They thus perform the very authoritative chasm they intended to defeat.

“emasculat[i]on of mind,”⁴⁸ “conformity with a blindly integrated society, one effectively of eunuchs and the mindless.”⁴⁹ While Schoenberg is to be praised because in the face of social shocks “[h]e endures as subject, in control of himself,”⁵⁰ Stravinsky is a failure made to utter without irony the Brechtian renunciation: “me, I don’t want to be a man.”⁵¹

The subject is a male and controlling one defined against an unnamed, feminine passivity. Affirming the one announces and defines the other. There is a whole system of dichotomies in Adorno connected to this one. Stravinsky is inferior to Schoenberg because of his appeal to the body and the passions as versus the mind, a correlation that is obvious given his position as composer for the Russian ballet. Dance music is inferior to non-dance music, because the latter is intellectually transformed, thought through, while the former is not. Those sensate positivities entering into direct physiological conjunction are “pre-art.” If all the elements of classical music derive from local dances, it surpasses them to the extent that they are no longer involved in its essence.⁵² We have active vs. passive, male vs. female, subjectivity and freedom vs. automaticity and enslavement, mind vs. matter, which is taken as life vs. lifelessness.

Jane Bennett has recently criticized this last opposition, of mind as living and matter as dead or mechanical, in the interests of ecology, in her book *Vital Matter*. In her presentation of an opposing model she uses chiefly Spinoza and Nietzsche. Adorno also was a reader of Nietzsche and Freud; yet his predilection for Hegel seems to have outweighed the tendencies here to see mind and mechanism as linguistic or reactive constructs. There is neither will to power nor libido circulating in nature; rather these are properties of mind, which therefore

⁴⁸ *Philosophy of New Music*, p. 20.

⁴⁹ *Ibid.*, p. 119.

⁵⁰ p. 117.

⁵¹ p. 127.

⁵² Regarding the student of music: “He should not confine himself to the social origins of these elements, their connection with song and dance, for example, but must focus on the forces that have transformed elements that were substantive, social, and functional in origin into compositional and formal features and that have developed them further...” *Sound Figures*, p. 12.

gazes always out on death. On the one hand, life, on the other death, and death just because of the discursive quarantine of the living. Bennett's point is that this particular partition of the sensible underlies the rest of the domineering attitudes involved in environmental catastrophe. For all their criticism of industrial capitalism, and for that matter, for all Marx's lament of the alienation of person and nature, the Marxist-Frankfurt line strongly upholds the model of a "domination" of nature which if not the primary vocation of mind itself, is at least its workaday life. What is mastered is equated with matter and death or automaticity. Agency, vibrancy, are sequestered and in this act a region without soul is cleared.

The construction of objectivity accompanies that of subjectivity. In that same habitual linguistic reiteration, which posits the whole system of distributed percepts as well as the proprioceptive matrix as something "mine" and at that moment as distinct from me, there is the positing of subjectivity, identified with activity, and of objectivity, identified with its other, which is now both body and nature. If the subject functions as a master signifier in the conceptual field seizing the field of perception, the object, as the other of this signifier, takes part in the self-same quilting. To be man is to be not-woman; to be music, to be not-dance; to be mind, to be not-body. The positing of normative positions for action and freedom involves necessarily also a construction of a domain of otherness, of exclusion. What is not the former will be the latter.

The ubiquity of these normative formulations in Adorno, regarding the very touchstone of hope and freedom, and the very nature of life, is startling given his later work, which so emphasizes the subjugation of the materially real by the regime of a mnemonic conceptuality. Conceptuality, Adorno himself recognizes, covers over whatever it names. But this critique applies to Adorno. First of all, the upholding of a masculine subjectivity, which endures and controls, necessarily obscures and belittles whatever is not masculine, not enduring, and not controlling. (Butler would say that Adorno performs the masculine control

of the phallus—that irrational display of force by which it is determined who may speak and who, castrated, must remain silent). The pattern of valuation is also one of devaluation: it does injustice to what it from the beginning casts to the side. In this moment it must be “woman,” “matter,” “body” for which art and critique speak; it must be woman, and matter, and body, which give the force to works properly called art. To press the point more fully, however, man and woman both are belied by their names. There is no man, and no woman, except in this gesture of forcible identification. Materiality, material sexuality, the sexuality of matter, and the intelligence of movement are all left out, all named into oblivion. It is these then, which must speak through critique; it is these which give the tension even to Adorno’s own, often-beautiful prose. (And this is the point where Adorno and Deleuze may be brought into conjunction, since what is always left out by a field of semiotic equivalence, for Deleuze, is the living, moving quality of matter.)

What Adorno sees in Stravinsky’s *Rite of Spring*, then, as horrific and fascist, that sacrifice of the individual allowing a return of fertility and shared pre-individual communion, is in some way the interruption of the very hegemony Adorno himself upholds, namely that of the subject. For John Cage as for the kamikaze, for Nietzsche as for Foucault, the ego is something needing overcome. This is true for the continuations of Freudian theory in the same period as Adorno’s own writing, particularly in Jean LaPlanche,⁵³ Leo Bersani,⁵⁴ Deleuze and Guattari. For all of these thinkers libido is bent not on domination but on self-destruction, precisely as a result of its own vitality. The explosion of the ego is necessary because the ego supplants a community which might otherwise exist. That Adorno sees in the sacrifice of the virgin in Stravinsky’s *Rite* nothing but horror, something “antihuman,” “the self-extinguishing of the spectator,” is understandable as a process on the back-side of identification. Self-

⁵³ See *Life and Death in Psychoanalysis*.

⁵⁴ See *The Freudian Body*.

destruction, like automaticity, is uncanny from the perspective of the subject. It is not that these are fear-inspiring or immoral because they negate what is most essential. Rather they are uncanny because they affirm the human's own inhumanity. Similarly for automaticity: Adorno observed with disdain the tight locking of musical figures with the movements of bodies in Stravinsky's music. Dance, he says, "in contradistinction to mature music, is a temporally static art, a turning in circles, movement without progression."⁵⁵ This variety of music is "motoric,"⁵⁶ in it the "dynamic element is associated with a mechanical one;" it is "proud to negate the concept of mankind... [a]nxiety in the face of dehumanization is transformed into the joy of its unveiling."⁵⁷ By its "power of command that trains the body..." it achieves an "exorcism of the soul."⁵⁸

Throughout Adorno's criticism a loathing of (passive) femininity and the material automatic persists. In the end, Schoenberg is indefinitely superior to Stravinsky because in the former the subject is retained. *Erwartung*, for example, obtains a sober representation of the totality, complete with its shocks and fissures, by the process of direct expression, as an objectivity standing over against, but just thus in constitutive relation to, the enduring, manly subject—the virile, commanding mind on which all hope of reconciliation depends. We need a man to save us, or else we will go under; we will be subsumed in a mindless machinery. Matter, with teeth of void, will castrate us, chewing with jaws like pistons. Adorno cannot comprehend the celebration of such a retreat to pre-individuation as anything but a final defeat. The passage of the individual into that fragmenting machine in Stravinsky is supposed to be psychotic. But Stravinsky, and contemporary electronic dance music as well, find in this a blissful release. This destruction is bound up with the possibility of fascism, it is true, since it involves the collapse of individual into milieu. In this Adorno is right to associate

⁵⁵ *Philosophy of New Music*, p. 143.

⁵⁶ *Ibid.*, p. 132.

⁵⁷ p. 127.

⁵⁸ p. 129.

Stravinsky with Wagner. But if the “motoric” school tends toward the wrong kind of revolution, the political reiteration of the subject is absolutely conservative, wanting nothing so much as manhood and the aristocratic elevation which allows absolute dismissal of the music of all others, jazz, entertainment music, dance music, anything else produced by the besmirched industrial sphere or the proletariat, who Adorno actually claims have never made music.⁵⁹

Form as Dance

Adorno’s aesthetic theory is a formalism. Form as he conceives it is bound up with the controlling subject, with conceptuality, and with the rejection of matter, immanence, body and dance. The nature of form must therefore shift significantly with a reinterpretation of the theory along the above lines.

In *The Sociology of Music*, Adorno outlines a hierarchy of listening types which is useful in thinking about the nature of form in relation to the experience of it. The so-called “expert” or “adequate” listener is defined by his comprehension of form, which amounts to a sort of (mnemonic) reading of the music he hears.

[T]he fully conscious listener... tends to miss nothing and at the same time, at each moment, accounts to himself for what he has heard... Spontaneously following the course of music, even complicated music, he hears the sequence, hears past, present, and future moments together so that they crystallize into a meaningful context. Simultaneous complexities—in other words, a complicated harmony and polyphony—are separately and distinctly grasped by the expert.⁶⁰

Adorno refers to the art of this listener as “structural hearing.” Such hearing may be done only by a “consciousness” who accounts to himself analytically for all of the elements he hears, and

⁵⁹ “To date, music has only existed as a product of the bourgeois class... and the proletariat, as a mere object of the domination of the whole society, was prohibited from constituting itself as a musical subject by the repression that shaped its nature as well as by its position in the system: Only in the realization of freedom, freed of all manipulative management, would the proletariat achieve that subjectivity. In the given order of things, the existence of other than bourgeois music is dubious.” *Ibid.*, p. 100.

⁶⁰ Adorno, *The Sociology of Music*, p. 5.

reconstructs internally the system of their relations (through a mnemonic process). It is then this system which he comprehends “adequately.” Music is in the whole, not in the part. The form that Adorno believes expresses in some fashion the social formation and its antagonisms is what is grasped by the pure intellect, by the thinking, paternal subject, after the fact of the sound. He soberly gathers past, present, and future together, to plumb their real connection. He extracts the continuum from time, and if he comprehends it still at some point, that point is posterior to sensation. Sound is thus incidental to music; music is perceived and then, normatively, conceived, but not sensed—sensation gives only the element, never the form. This is one of the many grounds on which Adorno criticizes Stravinsky, whose music becomes “spatial” rather than temporal, losing its native strength as progressional unfolding. As an object of consciousness, essentially intellectual, form exceeds sound, and it is in this frontal, represented form that the essence of music is to be found. Music is even a “critique of immanence,” insofar as its form is temporally distended in this manner. It refuses to give itself over in the moment. The moment is mediation, not presence. In this respect also music is critical,⁶¹ urging the negative retraction of intellect from compromised totality.

There are several ranks below that of the expert listener. Midway down one finds the “emotional” listener, who stands in the clearest opposition to the expert in terms of listening, given that the lowest ranks reject music altogether. The emotional listener is a lover of music, but in the wrong way. This listener makes music a means to psychological ends. He allows the various mechanisms of music to operate as triggers, by which instincts, especially the primitive ones of arousal, fear, desire—those involving goosebumps and the quickening of the pulse, bringing the “ancient shudder”⁶²—typically suppressed in the interests of social labor

⁶¹ “Even in music—as in all art, presumably—the impulse animating the first bar will not be fulfilled at once, but only in further articulation. To this extent however much it may be phenomenal as a totality, music is a critique of phenomenality, of the appearance that the substance is present here and now. Such a mediate role befits philosophy no less.” *Negative Dialectics*, p. 16.

⁶² *Sociology of Music*, p. 43.

(per the late Freud),⁶³ find a temporary release. The duration of the musical listening constitutes a little bubble of gratification, of lifting of oppression. But this bubble is false or ideological, since oppression falls immediately afterward, since nothing has really been done to the formal structure of the social assemblage (conceived again as representable), and since the usage of music for the sake of instinctive triggering occludes the intelligible form. Worse, this lifting of oppression is itself oppressive insofar as the agency involved is not that of the deciding subject, but of the immanence of the sensate sound, and indirectly of its industrial producers. The delight of Stravinsky's sacrifice, or of the listener allowing themselves to be manipulated by him, is a fascist one. The condition of the dancer seized by a certain soulless "electrification"⁶⁴ in a club is not even worth mentioning. These dancers are humans become machine. In them critique, as abstinence from immanence, is lost.

With regard to form the familiar dichotomy recurs, between intellect and body, between conscious presentation and physical phenomenon, and between freedom as transcending, conceptual domination and enslavement as somatic choreography with an immanent sensory field. Expert listening is cogitative, emotional listening is somatic; the former is free, the latter automatic. The "social content of great music is grasped not by sensual listening but only the conceptually mediated knowledge of its elements and their configuration."⁶⁵ The emotional listener, like Stravinsky's dancing puppets, integrate with the music they hear by "reflex" action, not with the free intellect. This automated obedience is supposed to withdraw that listener from memory, continually reorienting them in a twitching present, precisely according to Simmel's and Benjamin's evaluation of ambient shock. "[Stravinsky's] music knows nothing of memory and thus nothing of any temporal continuity

⁶³ See *Civilization and Its Discontents*.

⁶⁴ *Philosophy of New Music*, p. 144.

⁶⁵ *Philosophy of New Music*, p. 100.

of duration. Its movement is a sequence of reflex gestures.”⁶⁶ Yet we should note that reflexivity, or synchronous action with sensate ambience—what Varela calls “coupling”—does correspond to a certain memory, just not the conscious sort. That is, anyone who engages in some “reflex” manner actually performs a mimetic version of the mechanism with which they engage, on the basis of their prior habituations, which continue their own past into this present. The value of Uexküll or Varela in this regard is that they emphasize the mistake of behaviorism, in thinking that ambient-body circuits are mechanical. They are not mechanical, but first erotic or tactile, swayed by ambient methexis, and then mimetic at various levels.

The simple picture that Adorno draws is one in which the proper phenomenal engagement with music sustains the distance between the subject and the object, but which above all performs the continuity of that subject. Expert listening must occur in an unbroken continuum of syntheses of the transcendental ego (remember that Adorno’s doctoral work was on Husserl), at a level far above tactility and the onset of mimesis. It must consist in a series of intentional objects or moments knit into objects, each of which in its constitution simultaneously establishes a noetic listener. The whole line of musical form unfolding in time, but gathered only after, glistens with the sheen of frontal, full consciousness. It is an ideal synthesis, distant even from the mild embodiment of Merleau-Ponty. The body is here understood as the mechanism of the uptake of music, but as yet remaining at a distance from it. As in Descartes’ world, and as in Broadbent’s, every sane mind must decode the flow of sensations, transforming it back into its native essentiality as cognitively commensurate. Though music appears as sound, this appearance must be peeled back to reach again an ethereal essence. It is meaning that Adorno insists lies at this temporally-eccentric depth; it is meaning that music conveys. Only within the configuration of this meaning, or only in the

⁶⁶ *Ibid.*, p. 122.

configuration that means, may its proper essence be located. Like Descartes or like Broadbent, Adorno tends to understand feeling as a noise interrupting this signal.

And yet like Plato or like Nietzsche, there are moments in which he recognizes the fuller involvement of affect with listening. These allowances occur at key moments, and in fact are quietly allowed a defining role in expert listening and hence in the intelligent engagement with form.

As a matter of fact, without an affective factor adequate listening is not conceivable either. Only, here the factor is the thing itself, and the psychological energy is absorbed by the concentration on it, while the emotional listener considers music as a means to ends pertaining to the economy of his own drives. He does not give himself up to the thing, which thus cannot reward him with feelings either; instead, he refunctions it into a medium of pure projection.⁶⁷

Here we are granted access to the moment of sensate conjunction, or at least to the root of the noetic/noematic figure, prior to the distinction of its dyadic elements. The strength of listening is here not primarily in the conceptually-synthesizing capacities of a subject understood as formally removed from his object. Rather, he is seen falling into the music itself. The feeling of the individual just is the sound on which he focuses; his body thus necessarily becomes one with or entwined with its sensate ambience, in this particular and highly-articulated, highly-precise moment of conjunction. Adorno says that this spills psychological energy. We are talking here about attention, understood in its technical sense as a certain distribution of physiological energy, calories: arousal. The distinction that Adorno continues to make between the emotional and the expert listener now is not based on the strength or weakness, presence or absence of feeling, but on the performative gestures to which that feeling corresponds. “Emotional” listening is a lesser conjunction with music because it uses only certain aspects of that music, the “triggers,” as keys by which to perform its own pre-configured “ancient” dance, leading to some primitive catharsis, to the release of tension.

⁶⁷ *Sociology of Music*, p. 9.

Expert listening differs in two regards. For one, it remains glued to the stream of unfolding sound, rather than adhering only for an intoxicating jolt, and then withdrawing. By this means the totality of the music is mnemotically incorporated into the listening body. But secondly there is a certain intriguing inversion of the Freudian model here: the expert listener does not seek a route to the diminishment of instinctual tensions. Because the good work, at any rate, consists materially in a distribution of material-sensate positivities which are themselves under a formal tension, expressing directly a social field constituted by antagonism and thus the continuation of intensity, as opposed to comfortable return to zero (everything evened out), the application of physiological energy to a tight mimetic unfoldment of such work amounts to an investment of cathexis yielding a heightened return. Attention here yields greater focus, not diminishment. The pattern in the abstract is identical with capital: what makes value capital, for example in the *Grundrisse*, is precisely its participation in a self-augmenting circuit. But here that self-augmentation, in the circuit of the listener and the sound, is defined in opposition to the exploitive capitalist system. The listener in conjunction with good music is counter-power. Our question eventually will have to be whether more musics than Adorno allows, most importantly the “motoric” variety bound up with dance, for example the strand of dance music beginning with James Brown and then Klaus Dinger’s or Jaki Liebezeit’s “motorik” beat, can be understood as good. If one follows dance music in the same manner as just described, thereby heightening one’s own energetic state, and bringing the erotic clinch of mimesis, by which the body performs its exteriority and by which means “coupling,” as choreography, occurs, to a sort of technical-tantric plateau—and further, if one’s following is even allowed to include the full motion of the body, with fine articulation—may this not also achieve such a counter-power? May this counter-power not be even indefinitely greater? The problem here will be that fascism and resistance are hard to distinguish. Both are phenomena of somatic incorporation.

We may even push Adorno a bit further. While in most of his writing, Adorno retains the simple opposition of body and mind, where the latter is essential and the former accidental, there is another quick moment in which an extremely interesting slip takes place. Recall that the function of music as critical is its formed testimony to the alterity of the social formation. Good art in general has its tension or its force sheerly because it remains in some patterned conjunction with that alterity, which acts upon it and gives it its shape. (Note already the similarity here with the “motoric”.) Now typically Adorno seems to think of this alterity as itself a meaning, or a dimension of meaning. The whole socius, in harmony, or the possibility of that consonant socius, is the frame pressing against the structured dissonant actuality; the artwork is a configuration rendering the conflicted conjunction of these systems. It is thus typically a sort of intervallic meaning, a meaning on a border. My point here is that Adorno’s idea of the ontology of alterity as intelligible is persistent. He even claims, in the concluding chapter of *Negative Dialectics*, where he discusses Kant at length, that the “intelligible,” here conceived on Kantian lines, as that reality exceeding representation, which representation seeks to recuperate or at least forms in partisan fashion, is identical with the other.⁶⁸ Yet three pages before, he acknowledges that “[t]he separation of the sensual and intellectual realms, the nerve of the argument in favor of the block, is a social product,” that “sensuality is” in this moment “a victim of the intellect.”⁶⁹ These two assertions put together affirm that it is the sensible itself that is the socially-produced other, or that alterity is sensible.⁷⁰ Not justice, not meaning, not a cognitive pattern or representation logically possible for the socius, but the very materiality of that socius, in its indeterminate leakage into materiality on the whole, is suppressed. And Adorno never quite succeeds in ceasing himself to perform this suppression, however much he wishes to do justice to the non-identity of concept and reality.

⁶⁸ *Negative Dialectics*, p. 392.

⁶⁹ *Ibid.*, p. 389.

⁷⁰ In *Difference and Repetition*, Deleuze identifies the being of this sensible as intensity (pp. 236-237).

Adorno retains a key distinction in his analysis of listening between focality and periphery or ambience. Even if it be allowed that the expert listener is like the emotional one in that he collapses into the sensate in an affective fashion, just doing so with greater discipline or self-surrender, this feature of “consciousness” and subjectivity remains. What is bad for example about movie sound is that it is designed to exist in the periphery. It is “a torrent of music that is not supposed to be attentively apperceived at all, only to be processed by the spectator’s instincts.”⁷¹ Meanwhile the good listener to good music sacrifices himself to its every contour like the kamikaze does to the deck of the ship, frontally, intentionally, with an ongoing conscious fury. It is a man who listens to good music, who has control of himself even to the point of self-surrender. His listening, like his being, is unto-death. Adorno codifies peripheral engagement as definitively “instinctual.” Because he retains the classic distinction between thought and instinct, such a peripheral engagement is cast as lower in a hierarchy. Here Adorno is just, surprisingly, a terrible reader of either Nietzsche or Freud, both of whom he otherwise seems to respect. One could probably go so far as to say that the very center of Nietzsche’s entire philosophical project has to do with the collapse of this precise dichotomy. Instinct is thought, for Nietzsche; thought is instinct. The “mind” and its “objects” are a veiling aftermath of this motive reality, brought on by language and priests, who by means of such deception conduct power and legitimize punishment.⁷² And Freud, who in his diagram of the relations of conscious and unconscious, as in his notions of the phylo- and onto-genesis of their structuration, was so heavily dependent upon Nietzsche, also specifies that the energies of the ego are borrowed from the unconscious. The superego too is id, performing through a

⁷¹ *Sociology of Music*, p. 47.

⁷² Regarding the production of the subject on the basis of language, see *Beyond Good and Evil*, “On the Errors of the Philosophers.” Regarding the relation between subject-formation and the development of a discursive justification for systematized and socially-formative physical cruelty, see *The Genealogy of Morals* and much of Foucault’s work, especially *Discipline and Punish*.

social metric—this is a point that Žižek takes as central.⁷³ Meanwhile the ego is a pooled libido obeying in its dynamics the pleasure principle, which is what guides all structural adjustments within the id. If there is a special additional principle like the death drive, that is tightly tied with the destruction of the ego, again under instinctive energies.

Thought happens for either Nietzsche or Freud at the border-junctions of id/ego, ego/world. Cognitive appearances are just the irritable slide of “internal” or “external” material energy, “instinct” or “event,” against a social-conceptual metric, which according to Nietzsche makes “mummies” of that motivity.⁷⁴ If the intelligible and the other are the same, and if the sensate is the other, then instinct is thought, and ambient listening, the engagement of the body with its sonic ambience, is intelligible, is even a hyper-individual intelligence, an intelligence of living space. Perhaps we could go so far, following Nietzsche and Althusser back to the atheist pantheism of Spinoza, as to suggest that the indefinitely-complex and infinitely-fine rhythmic slide of the body with its ambience, is thought itself, only certain aspects of which perpetual conjunction ever enter into a perceptual or a subjective production, into a body image with its percepts and its “mind.” The manner of this latter construction would be historical, ideologically and coercively-guided, etc. But we would then have a model in which thought itself, in its antagonism to, flight from, pressure against meaning, is actual, material resistance to power. Rather, as counter-power is still power, and as even those elements entering into a formed production of the ego versus the world, the same versus the other, are still of this material sort, ambient conjunction would itself be power. Social power would occur materially as the structuration and patterned ecstasis of the ambient.

Thus Adorno’s insistence that form is frontal and that listening must be focal to be intelligent are essentially ideological. The bringing of the sensate into conceptual reality may

⁷³ Both in *The Sublime Object of Ideology* and *For They Know Not What They Do*.

⁷⁴ See *The Twilight of the Idols* and *Beyond Good and Evil*.

only be done according to the mnemonic gestures composing a certain material present. To focus is to mime both the deadness of the object and the position of the subject. No normative focus, at the least, takes place except inside the matrix of ideology and its constituent production of subject-positions. Nor may any object appear on this well-lit stage except as satisfying the dominant pattern for truth, for example as dialectical conceptuality—as a representational part mediating a speculative whole—or as information, as signal conveying message. What takes place in those shadowy, instinctive, near-unconscious but still-felt wings, though, in the living ambient which thinks us through methexic caress, is much more interesting. And if Adorno is indeed on to something important when he notes the will to intensification that occurs in the intent listener, we need to ask whether it is possible to build intensity in ambience, to make ambience a self-augmenting plateau, instead of strengthening the subject, who is our dearest betrayal.

Overall, this sort of reading inverts the very nature of form. What was representational becomes gestural: form is something done by the listener, where the sensate positivity of the sound, iterated by players or by electronic device and speakers, constructs a particularly-unfolding methexic lure. The classical form is still here, but its nature as representational and conceptual relation devolves to the position of a productive instrument. The score is like the grooves on the record: a means according to which a certain sensate positivity may be rendered. That positivity in existence is then engaged mnemotically by listening, under a methexic sway. Form is the gesturality of that methexic/mnemonic course. It is *performed*; formed in time in the conjunction of listener and sound.

When form is primarily conceptual and thus representational pattern, conceived as static and given as the object of a subject, rhythm is just a low-level, short-term variety of frontally-representable pattern. The beat, for example, in dance musics, is from this classical perspective just a rudimentary variety of rhythm, and rhythm just a local striation of a whole

which is ultimately to be cognitively-grasped. These are just different scales of possible representation, and Adorno is in bad faith when he accuses Stravinsky of spatializing music and losing the dimension of time, since the procedure of structural listening does just that, in the way that Bergson says time is falsely spatialized in Zeno.⁷⁵ On the present model, however, where form is enacted, at both conscious and unconscious levels, all form is an abstraction from rhythm, and all rhythm a modulation of beat, which denotes the methectic-mnematic juncture in its character as pulse. What is foundational is the methectic pull, the mimetic entrainment/attunement, at the level of momentary sonic gesture (and this works also for visual or literary art). The recapitulation of this erotic lure—Caillois' "temptation of space"—and of the gestural caress of the sensory curve, is everything: all larger form are larger splays of this. Material does not obey form as mindless building block; form is the living gesture of matter, glimpsed in some conjunction. Music exists at the dancing perimeters of bodies, those many shifting edges of living ambience.

For this reason music or art in general, except where the art is purely conceptual, are political in the sense of being fully material and fully involved in a common space, in what I have called the bodily-ambient or the ambient field. The materiality constituting a certain sensory-body volume known as music or as image is, as Jean-Luc Nancy says, a call to social integration.⁷⁶ The call is physical: each such field is a materially mobile and psychoactive agent, capable of recruiting and incorporating bodies for some duration, during which period inscription occurs. Such fields are productive: they produce bodies, or enter themselves into the performativity of those bodies. They do so via their active spatiality, they are productive space, and in reciprocity with bodies, which pattern space. In *Means Without Ends*, Giorgio

⁷⁵ See Bergson, *Creative Evolution*.

⁷⁶ "...the visual is tendentially mimetic, and the sonorous tendentially methectic (that is, having to do with participation, sharing, or contagion), which does not mean that these tendencies do not intersect." *Listening*, p. 10. "Communication is not transmission, but a sharing that becomes subject... An unfolding, a dance, a resonance. Sound in general is first of all communication in this sense." p. 41.

Agamben identifies this politicality of the artwork in a consideration of Deleuze's theory of film.⁷⁷

the mythical rigidity of the image has been broken and... here, properly speaking, there are no images but only gestures. Every image, in fact, is animated by an antinomic polarity: on the one hand, images are the reification and obliteration of a gesture (it is the *imago* as death mask or as symbol); on the other hand, they preserve the *dynamis* intact (as in Muybridge's snapshots or in any sports photograph). The former corresponds to the recollection seized by voluntary memory, while the latter corresponds to the image flashing in the epiphany of involuntary memory. And while the former lives in magical isolation, the latter always refers beyond itself to a whole of which it is a part.⁷⁸

If dance is gesture, it is so, rather, because it is nothing more than the endurance and the exhibition of the media character of corporal movements. *The gesture is the exhibition of a mediality: it is the process of making a means visible as such.* It allows the emergence of the being-in-a-medium of human beings and thus it opens the ethical dimension for them.

*Politics is the sphere of pure means, that is, of the absolute and complete gesturality of human beings.*⁷⁹

*The Rebellion of the Body*⁸⁰

Agamben presents gesture as a manner of activity between poiesis and praxis.⁸¹

Poiesis, production, as defined by Aristotle in the *Nicomachean Ethics*, aims at some end other than itself. It is locally-effacing, laterally-tended means, always ending elsewhere. Praxis on the other hand is action aimed at itself, end in itself. Gesture, the third type of activity, which Agamben here introduces, is outwardly conjunctive and hence not in itself; hence it is means; but in this outward orientation, which Agamben identifies as reference to the whole or to the socius, it aims at no end. It is local-ambient splay. Gesturality is thus "means without ends"; productive activity without product other than act, self-desirable activity oriented toward another. It is space-time immanently and energetically turning itself inside out. If we

⁷⁷ See Deleuze, *Cinema*, v. 1-2.

⁷⁸ Agamben, *Means Without Ends*, p. 55.

⁷⁹ *Ibid.*, p. 59, 60.

⁸⁰ This is the title of one of Hijikata Tatsumi's most famous performances. Stephen Barber used the translation "Revolt of the Body" for the title of his book on the subject of Butoh.

⁸¹ *Ibid.*, p. 57.

remove from Agamben the theological cleanliness derived from reading too much Heidegger, if we turn its transparency black, this gesturality may become that of Hijikata Tatsumi.

The inversion here is related to that of form. Understanding Hijikata's Butoh, which is understanding local, intensified gesturality in its antagonism with an oppressive power crossing bodies, hence grasping or being grasped by the criticality of art at the infrastructural level of action beneath meaning, means also inverting matter and form. The official meaning of form has not changed since Plato: it is intelligible shape and identity as distinct from unintelligible, multiplicitous matter. Form is what defines matter; matter itself is dumb, local and low. The inversion occurring when form is seen as effect of a matter that lives involves the raising of the dead from the grave, the haunting of the noble by the base, the erasure of telos and name. It is anti-nature, insurrection and madness.

On the Platonic model that becomes categorical in Aristotle and continues right on through to Kant, Husserl, Heidegger, Merleau-Ponty, all those beings living happily in the house of language and the Library of Congress, categorizing form is the active element descending upon a passive matter. In even older stories this is Zeus descending from the sky to rape some maiden, a descent which, if it reflects a certain frivolity of the divine, is unambiguously yet an honor to the recipient of the violence, yielding as it does both heroes and the beauty of war. Her protests warrant a tolerant smile and a barrage of priceless paintings.

Plato's early dialogues constitute an initiation into the necessity of moving in thought away from this passive locality upward to the form-giving transcendent. Minus this turn, no thought, supposedly, may occur. No knowledge and hence no legitimate power or legitimation for power. The middle dialogues elaborate the theory of the forms, happily deriving both the eternity of the soul and the just state from these hypothesized principles. But in the late

dialogues, particularly the *Parmenides* and the *Timaeus*,⁸² the theory is shown still engaged in struggle with its unruly underling, its nemesis. The divine rapist cannot quite subdue his woman; she eludes him in all his precision. Under his edged writhe she slides away as mud, worms, hair. When Parmenides, teasing the young Socrates (the dialogue is set before Socrates' full manhood), asks him whether there are also forms for such low and base things, Socrates becomes uncomfortable and responds that he is not sure, that he prefers to think about justice, courage and so forth. Parmenides responds that he had better become much more thorough. Of course there is a form for dust: how could it be without the bestower of being? A matter without a transcendent form is rebellion, psychosis. That is the matter of Hijikata's *butoh*, matter under form, fleeing form, matter as its own form in battle with or subversion of the mastering, functional form. Matter that forms itself, like the dead that return to life. Body without mind; parambulate somnolence.

After Hiroshima

Adorno famously wrote that there could be no poetry after Auschwitz. In *Negative Dialectics* he retracted that comment, allowing that in the wake of utter dehumanization the voice still has a right to cry.⁸³ Music too in its best instance is such a cry, and even the grown man is permitted to sob along with it.⁸⁴ In his tears as in the sound untold suffering pass

⁸² The dialogues of the greatest interest to post-structuralists and deconstructivists like Deleuze, Derrida, Butler or Irigaray.

⁸³ *Negative Dialectics*, p. 362.

⁸⁴ "As at its end, so the origin of music reaches beyond the sphere of intentions, that of meaning and subjectivity. It is a gestural art, closely akin to crying. It is the gesture of dissolving. The tension of the facial muscles yields—the tension that, while the face directs itself pragmatically toward the world, separates it from this world. Music and crying open the lips and bring delivery from restraint. The sentimentality of inferior music caricatures what superior music is truly capable of shaping at the boundary of frenzy: reconciliation. The man who surrenders to tears in music that no longer resembles him at the same time allows the stream of what he himself is not—what was dammed up back of the world of things—to flow back into him. In tears and in singing, the alienated world is entered. 'Tears pour, the earth has taken me back'—this is the gesture of music. Thus, the earth reclaims Eurydice. The gesture of returning, not the feeling of waiting, describes the expression of all music, even in a world worthy of death." *Philosophy of New Music*, p. 99.

briefly through expression. Still, the meaning is wanting. A true lament would require the real alteration of actuality toward its juster possibilities. Really to remember Auschwitz, or for that matter Hiroshima, would be to discontinue the drone attacks in Pakistan and the aerial bombardment of Gaza,⁸⁵ to disarm globally and to distribute to each according to their need. Absent that realized memory the present twitches compulsively, constantly shocking itself into calm with the arms it exudes and its own media-packaged wars, shocking itself into a repetition of that very same production, which absorbs the mind while propelling the body.

The problem with Adorno's account regards again this relation of body and mind. The extermination camps treated ends as means and then went even further, making subjects objects to the absolute degree. Adorno saw in this the hidden nature of the industrial-capitalist system, the Nazis being but one of its expressions. He conceived the evil in relation to subjectivity: as for Kant or for Augustine, evil is the forcible denial of entry into the kingdom of ends. Bodies burnt are a consequence of minds made matter. That banal ability to kill with a septic glance, or with the performative word "vermin" or "Jew," is the germ of the gun and the oven. It is first the ideal othering, the making of enemy or animal; then it is the gas chamber.⁸⁶ The other subject, like the other person in Sartre's battle of gazes,⁸⁷ falls prey to the objectifying identification of a dominating subjectivity. As even the victimized subject has its essence in conceptual comprehension, reconciliation too must be a meaning, a meaningful remembering. But what is to be remembered, beneath the evil and the war (which Adorno retained while the self-satisfied liberators slunk away into a televised amnesia), is the diabolical aspect of matter, of automata, of industry; of goosestep, blitzkrieg and Zyklon B. It is a material memory that Adorno demands, but specifically a memory of material itself as the

⁸⁵ (Which form is it really that is delivered from above?)

⁸⁶ Regarding the ubiquity of the animalization of the enemy in wartime propaganda, see Sam Keen, *Faces of the Enemy: Reflections of the Hostile Imagination*. It is always easier to kill another human when they are believed to be subhuman. What neither Keen nor Adorno addresses though is this ease associated with the destruction of the animal.

⁸⁷ See Sartre, *Being and Nothingness*.

enemy of the mind. One might say that subjectivity is always armed with a power of objectification; Adorno cannot see a way clear to disarmament in this regard. He does not see the role of subjectivity in the apparatus. While he even felt himself unworthy of remaining alive, seeing no reason why he in particular should have been spared,⁸⁸ he retained subjectivity as a domain kept clean of blame. The true subject, the good subject, the one open to the regulative ideal and the flush of transcendence, even if its position is foreclosed at the shopping center as at Auschwitz (if by subtler means), is in principle supposed to be something other than this system, and the human, that utopian “we,” is something other than these deeds, our bodies or this viral systematization which rages even through thought.

Trauma, memory and art occurred differently in Japan after the war, although by Hijikata’s Butoh matter would indeed, again, revolt in the face of meaning. Hijikata, who gave the form its name—dance of darkness—began performing this variety of dance in 1959. It would be difficult to say just what precise traumas, what forgotten injustices and which vicinity of horror enter into its choreography.

Hijikata was from Akita, one of the most rural and the coldest of the Japanese regions; he was just too young for the war, but in it all his brothers were killed.

All my older brothers went into the army. My dad has them drink some *sake* from a sake cup, and maybe he said something like, ‘Do your best,’ but I don’t really know. Then they all get red from drinking sake. They get that way because they are such serious big brothers. And when they come back there is sand in funerary urns. They left red and came back sand. Ah, that thing which is form emerges as it disappears; form becomes vivid in disappearing.⁸⁹

⁸⁸ (Continuing from the above quote about poetry after Auschwitz:) “But it is not wrong to raise the less cultural question whether after Auschwitz you can go on living—especially whether one who escaped by accident, one who by rights should have been killed, may go on living. His mere survival calls for the coldness, the basic principle of bourgeois subjectivity, without which there could have been no Auschwitz; this is the drastic guilt of him who was spared. By way of atonement he will be plagued by dreams such as that he is no longer living at all, that he was sent to the ovens in 1944 and his whole existence since has been imaginary, an emanation of the insane wish of a man killed twenty years earlier.” *Negative Dialectics*, pp. 362-363.

⁸⁹ Hijikata Tatsumi, “Wind Daruma,” p. 76.

Hijikata's move to Tokyo echoed the earlier movement of all of Japan into industrialization. That move of the late Meiji period, which produced the purity of Zen and its export by missionaries, and culminated in the invasions of Korea and China and then in the rise of the Empire, meant a radical change in the everyday work of large portions of Japanese society. To this slow trauma add the much faster ones of fire-bombings and then Hiroshima and Nagasaki. Hijikata's second wife, Motofuji Akiko, whose father contributed the "Asbestos Hall" where most of the early Butoh performances occurred, understood the darkness of Butoh to be specifically located there, in those firestorms. According to Stephen Barber's *Revolt of the Body*, Motofuji was caught in one of these attacks, walking with her best friend arm in arm. She felt a hot flash, looked to her side, and her friend was gone, incinerated by a burning turbulence.⁹⁰ Friend, no friend. The privacy of obliteration by oven becomes public.

But because in the air above those vortices of fire were the ones today known as victors, lamentation is confused and hushed. That particular incineration is a necessary collateral damage, one of the key moments of the prosthetic history legitimizing our present. It is a notable achievement, in fact, of Harvard-led quantifications of suffering, statistically weighing nationalist feeling against indiscriminate death. They determine that the variation should be inverse, and move to the experimental phase. Injustice here is quieter than Auschwitz, quiet as number. Shiva held his breath but stretched his arm, slid his finger in erasure through the streets.

In 1960, during the beginnings of Butoh, and again in 1970, there were waves of student protest in Tokyo, because in these two years the American military presence in Japan

⁹⁰ "Motofuji, like Hijikata, was preoccupied with death, and had witnessed it at close proximity: during one of the nights of Tokyo's most intensive fire-bombing, in February 1945, she had been walking arm-in-arm with her closest friend, and after feeling the sudden passage of a gust of fire that left her untouched, realised that her friend had been instantly incinerated, and had vanished without a trace. For Motofuji, the darkness of Ankoku Butoh was narrower in conception than for Hijikata himself; she saw its gestures as exposing the black cruelty and obliterating impact of warfare." Barber, *Revolt of the Body*, p. 17.

was continued and continued again by a conservative, business-leaning government. The U.S. launched bombing campaigns against North Vietnam, Laos and Cambodia from the very fields it had cleaned with flame some fifteen years earlier in Japan, flying past Korea on its way. Not only had Japan shifted rapidly into the industrial world, and then rapidly into Imperial expansion and the war-time economy and labor that that involved; not only did its population undergo years both of totalitarian rule and indiscriminate aerial assault; it watched its flattened cities quickly spring back up in a further industrialization now globally intertwined, and its culture, already twice made over (and how many times before?) in the image of the modern and the image of empire, now go awash in Coca-Cola, blue jeans, American movies, and G.I.s.

1960 was a prolific year for La Monte Young. It was a year when J.J. Gibson chased down the organic nature of perception on the tab of the U.S. Air Force. It was a year in which John Cage and Buckminster Fuller energetically discussed the indefinite possibilities of media space, their faces periodically emerging from a cloud of blue cigarette smoke, and in which Donald Broadbent solidified his position as the key translator of communications theory into psychology, while in the same field the prestigious Ewen Cameron produced a document instructing the ranks of the C.I.A. and its various mercenary acquaintances how to destroy the body image and with it the very life of space and time.⁹¹ All these men, in their own special ways, drew from and contributed to the identity of the Western White Male Subject, even as half of them happily called him “Eastern.” For while Young began his pursuit of abstract sound by way of its first weightless concepts—make a straight line and follow it; hold two tones for a long time; build a fire—in Tokyo that transcendent domain was filled with

⁹¹ All you have to do is discontinue sensory input and erase memory. These objectives are easily achieved with isolation boxes and electroshock therapy. To really mess with your subject you can also inject a cocktail of LSD, PCP, and Curare, which, by producing a raging, unmoored experiential stream populated with persecuting demons, on a backdrop of bodily paralysis, constitutes the scientific, testable and repeatable achievement of actual hell. See Naomi Klein, *The Shock Doctrine*, p. 43. Cameron’s findings were shortly to be tried out on V.C. prisoners by C.I.A. officers flown in via Japan.

blackness and with insects. The Easternized Westerner ecstatically expands into an unlimited expanse flowing outward from the frontier. Hijikata makes an art of falling down in the mud, experiments with feinting and swoon, dances the bent peasant. John Cage and Bucky Fuller were busy not looking back, avoiding as pessimism the question of power, while Fuller built the new media space of the war room in the pentagon.⁹² Gibson and Broadbent disagreed about the location of the perceiver in the abstract, but concretely they sensibly acknowledged his presence in the cockpit, and helped him out with his seating, the ergonomics of his switches, sticks and crosshairs. All of which is perhaps just to say that in Tokyo war transitions to defeat, while in the U.S. and Britain it continues merrily onward.

The difference between Hijikata and Adorno has to do in part with the incineration of identity in Tokyo. Who was the Japanese man? Was he rooted in a long tradition? Was he the Meiji businessman? The noble warrior? The Western businessperson or the Leftist objector? So many social shifts in such a short time, and then the enemy moving into the house. So much of Imperial Japan, like that of Nazi Germany or for that matter anywhere else, had to do with the modelling of the ideal man. In the war that was the masculine figure of Zen, the kamikaze subject exploding into freedom. Instead that man exploded into death (which from a materialist perspective is predictable). Afterward there remains neither a hope in the subject nor a belief in the ideal. Words and poetry remain, but these are just a bubbling foam of the mouth; the domain of Butoh for Hijikata is bodily. Functional power, flying whatever flag, vies for the functional body. But the dancer's body vies back in a black seethe, worms away, becomes vagina, wolf, mud, weather.

When I name John Cage and La Monte Young, both of whom were opposed to the VietNam War, in the same breath as torture I do not mean to imply some conspiracy. Rather I

⁹² On this space and Fuller's contributions, see again Beatrice Colomina, "Enclosed by Images: The Multimedia film of the Eamses."

mean that like it or not various elements of the sprawl of power are iterated at all its nodes. What really distinguishes Hijikata's Butoh from Cage's Zen or even from Adorno's lamentation is its material acknowledgement of the continuity of force through everybody's bodies—social force, military force, destructive force, death, natural force, sexual force. The domain of abstract mathematical relation, of cosmic vibration, of open attention or the open work, the domain of science, nature, the supra-material point of the subject or the neural "central executive," likewise the domain of the enemy, all present themselves as special, detached, ontologically distinct. That is, they all pretend to transcendence. It is always in the aura of some such grounding transcendence that escape, hierarchy, purity are discovered, and hence it is always circularly that certain practices or processes are privileged over others and alleged closer to the truth. This is what it means to say, as does Žižek, that a master signifier operates by means of force, and indeed the force of its own stupidity, which as hegemonic is the pure expression of violence. Thought vs. movement, science vs. poetry, music vs. schlock, complexity vs. repetition, etc. On this basis we have the superiority of the European, the male, the heterosexual, or the Japanese over the Korean and Chinese, etc. Hijikata sneers at all of them. If there is protest, it must be the revolt of the body, against the body: habit wrestling motion, gesture gripping gesture in a taut, suspended violence. Hijikata says that dogs and dead sisters live inside him. These enmuscled ghosts are in tension with the everyday world.

For Hijikata, as on the gestural aesthetic model I have offered at the beginning of this chapter, the socius, the environment, surrounding animals, old traumas, memories, rain falling, firestorms, all are in the body. The body is these things, and Butoh, this art, is their direct, not their allegorical expression. Mutual performance is the being of these things. Hijikata was happy to call Butoh whatever performed in this conflicted mutuality, nesting in the mud within, that blackness in seethe behind the shielding blow of the concept, sending the concept

into vertigo, possessing the vital forces, "...a spiritual force that begins its trajectory in the senses and does without reality altogether."⁹³

Becoming Material

Hijikata positions this struggle on the fringe of the functional, useful, everyday "world." Under the influence of Antonin Artaud, he puts that world in conceptual antagonism with "bleeding nature." The inhabitant of the world, prey of a devitalizing thought, loses touch with the dark power coursing through him.

A civilized man judges and is judged according to his behavior, but even the term 'civilized' leads to confusion: a cultivated 'civilized' man is regarded as a person instructed in systems, a person who thinks in forms, signs, representations—a monster whose faculty of deriving thoughts from acts, instead of identifying acts with thoughts, is developed to an absurdity.

If our life lacks brimstone, i.e., a constant magic, it is because we choose to observe our acts and lose ourselves in considerations of their imagined form instead of being impelled by their force.⁹⁴

Hijikata: "The friends I made in Tokyo were, so to speak, inhabitants of the transparent, mechanical 'world,' without any ties to bleeding nature and even without smell. I could not help seeing them as corpses."⁹⁵ These persons need revived: but for revival, they need to realize their objectivity, their embodiment, and their death. The Butoh dancer, who experiments with bleeding nature, who lets herself be run through by it, opposes the world as its enemy: "to a production-oriented society, the aimless use of the body, which I call dance, is a deadly enemy which must be taboo."⁹⁶ Dance or the aesthetic, as for Adorno, are oppositional, negations of the functional domain. As for Agamben, gesture is means without end, non-signifying lateral connectivity, but as in Bataille, in a tissue of blood realized via

⁹³ Antonin Artaud, "The Theater and the Plague," in *The Theater and Its Double*, p. 25.

⁹⁴ Artaud, "Preface: Theater and Culture," in *Ibid.*, p. 8.

⁹⁵ Hijikata, "To Prison," p. 43.

⁹⁶ "To Prison," p. 44.

transgression, uselessness and nonsense.⁹⁷ “I wager reality on a nonsensical vitality that has purged the echo of logic from my body...”⁹⁸

There is a truly interesting opposition here between Hijikata and Adorno, rendering inverse aspects of the aesthetic moment. For each of them, expression in the traditional sense is now insufficient for art. Some extreme, direct, and brutal yielding of the explicit present is necessary. Adorno considers this achieved in Schoenberg, who presses technique to its limits, foregoing all else, while producing the subject in the utmost antagonism to a dissonant, alienated representation. On a solid Marxist ground, the real edge of the avant-garde is still doing technical research, such that the antagonisms of the socius remain traceable to the differing rates of alteration of relations and forces of production. Technique, ahead of production, exerts an oppositional pressure. In this Adorno consciously sees art as compromised, since more or less transparently it develops solutions for technical industry. Technique has to do with the domination and subsumption of the material at those exposed probes of the social body. Butoh is here too, but on the other side of the mimetic/methetic divide. It positions itself in the material, the singular, non-identical and irrational; it is possessed, under the ongoing hypnotic sway of the animal and the wind, the temptation of bleeding space. The aesthetic here, the mean without end, is not the useful in latency, but the distorted face of a matter that is inhuman, writhing with old demons, dead peasants, smelling of perversion and paradox, making animal gestures that do not communicate, an illicit memory of a silenced extermination, this is the other aspect of the aesthetic moment, bleeding nature seen through the lens of death. Not the animal in itself, or sexuality itself, nothing pure at all, but just this distorting hallucination of the others of identity in revolt. But even this is to

⁹⁷ In “To Prison” Hijikata references in particular Bataille’s discussions of sacrifice and transgression in *Erotism*.

⁹⁸ *Ibid.*, p. 45.

miss the point, to fail to “break through language in order to touch life,”⁹⁹ because we are talking about the what and not the how, the name and not the gesture. That the latter is to be sought beyond the former is what is meant in calling Butoh “black.” It is black like night, invisible in its force, a force of invisibility. (And that is the same force at the cusp of image-mediated war, where to see is to kill and be seen to die.)

Initially Hijikata aimed at “human rehabilitation”: identifying “living beings” as his “material.”¹⁰⁰ Where Adorno thought of art, like critique, as moving in the conceptual domain, Hijikata felt it in his muscles. Both the functional world and its asymmetrical remainder occupy this motoric ambience. Language is permeated by their antagonism, but by accident, as the skin shows subdermal events. Hijikata’s Butoh dismembers and rebuilds the body fragment by fragment, in opposition to “runaway mechanical civilization.”¹⁰¹

Amidst a continuity resembling anger, I make repairs to arms and legs, which constantly go astray in an individual organic body. Forgetting the origin of legs and even that of arms. I am a body shop; my profession is the business of human rehabilitation, which goes today by the name of dancer.¹⁰²

This involves making movements and body parts useless: “what’s important are the kinds of movements which come from joints being displaced, then from walking disjointedly for a couple of steps, with one leg striving to reach the other.”¹⁰³

All this occurs in the real materiality of the socius. One way to express this would be to say that there is a vitality and a conflict through and around what Pierre Bourdieu refers to as the “habitus,”¹⁰⁴ that system of repeating gestures which, interlinked, constitute the productive and reproductive pattern of social activity at any given sliver of space-time.

⁹⁹ Artaud, “Preface: The Theater and Culture,” p. 13.

¹⁰⁰ *Ibid.*, p. 47.

¹⁰¹ *Ibid.*

¹⁰² p. 44.

¹⁰³ Hijikata, “Plucking Off the Darkness of the Flesh,” p. 52.

¹⁰⁴ See for example *Outline for a Theory of Practice*.

“Hijikata conceives of dance as the need to break through the shell formed by social habits.”¹⁰⁵

To be more precise, the full sprawl of the habitus is already conflicted insofar as the various postures and gestures within it are incommensurate, the perpetual bentness of the farmer with the scythe¹⁰⁶ preventing his standing to the stature of the aristocrat, the redness of the brother’s face disjunct from his homecoming ashes. Each of the realities of the social body is extant in some gestures, the system of which is fractured. But the field of gesture extends far beyond human practice, into the worlds of animals and wind, which are hidden behind the greatest of divides, the death mask of the concept. The appearance of the vitality of this beyond is therefore demonic. The work that butoh does on its own body, its “human rehabilitation,” involves the bringing into slow implosive contact of these different material/spiritual realities.

“I am chewing on cries and the profundity of esoteric gestures by gazing closely and unceasingly at the mundane.”¹⁰⁷ From the mundane Hijikata plucked one material after another. Each gesture, abstracted from its functional context, made mean absent end, is a dance. “I gave myself up to talking with shirts in dressing rooms and marveled at the many odors of sweat to be smelled from stripped off fibers. From the reverse side of shirts, I picked up a dance of the back.”¹⁰⁸ Or a dance of the back in its mingling with shirt, in its aura of odor and weight, the gestural always a splaying aggregate, an arousal of space into openings of musk. Hijikata says he collected dances of the following sorts: a dance of hair; a dance of sterilization on swaying legs; a dance from the hands and backbones of boys squatting at work in garages; a dance of the springing legs of athletes engaged in vital morbidity or morbid vitality; a dance of hand-warming; a dance of a burned woman living under a porch; a dance

¹⁰⁵ Viala, p. 64.

¹⁰⁶ (Itself a continuation of his gesturing in the field: “Today I do not know anything, in terms of the formation of alienation and the continuity of harshness that work imposes on a body, which ranks with weeding in poor farm land in summer. In the crude energy combined with autonomous rhythm supporting that labor, there is something that almost makes you cover your eyes. Young farmers lose their years inside that energy.” “To Prison, p. 47.)

¹⁰⁷ “To Prison,” p. 48.

¹⁰⁸ Hijikata, “Inner Material/Material,” p. 39.

of the hands of children tied to posts in their homes, pulling on their ears; a dance of carpenter's hands, part intention, part tool; a dance of trees; a dance of icicles; a dance of a straying dog; a dance of silkworms and teeth-grinding. If Whitman collects expansive America into words, Hijikata collects collapsed Japan into dance.

The materials collected, the question then is integration, or alchemy, or whatever process lets the dancer's body change from what it has been produced as, according to labor and habit and those postures built as Bourdieu says by class, tending towards command or subjection, into these other things, into the intensity of vitality in its singular, stinking rebellion.

Under a vivid sign the material and I take our first step to the treatment site for movement while anticipating various things in giving up our lives to a sweaty 'engagement.' This battle is the matrix of my art... The material sweats and the material shrinks. I extend... There is, I always feel, an unfathomable ocean before my body.¹⁰⁹

Because this was the kind of boyhood I had, and because there was nothing else to play at, like a thief I studied the gestures and manners of the neighborhood aunties, my mom and dad, and of course all my other family members. Then I put them all inside my body. Take the neighbor's dog, for instance. Fragmented within my body, its movements and actions became floating rafts. But sometimes these rafts get together and say something, there inside my body. Then they eat the darkness, the most precious food my body has inside it. One time the gestures and movements I had gathered inside my body got connected to my hands and came out. When I tried to grasp something, the following hand held on to the grasping hand. A hand chasing a hand ends up being a senile hand unable to reach anything. It does not go directly to the thing. That is how the body's made up... This struggle with invisible matter has emerged as one theme inside my body.¹¹⁰

Hijikata still has "a" body like the rest of us. That is the body that appears senile as its one hand chases another; that is what is visible in expression. But that body is only a skin; and it is even a skin, as in the intimately-connected living theater of Artaud, which gazed upon causes hypnosis, ceases to be skin because ceasing to be other as object, acting as singularizing

¹⁰⁹ "Inner Material/Material," p. 41.

¹¹⁰ Hijikata, "Wind Daruma," p. 76-77.

methectic lure and thus compelling a mimetic wave across the space of the theater.¹¹¹ This superficial body is an effect of a whole field of invisible, cthonic forces, and its function is to pull us into that writhing dark. Hijikata struggles with “invisible matter;” it is this matter extending like an ocean before his body, and through the bodies of the audience, into which he extends. It is this ocean, passing completely through the objective body and the functional one both, which is the “darkness” the living movements “eat.” Deleuze calls this “asymmetry,” the thickness and motility of a space that is not brought to stasis in representation: “we may temporarily be deprived of our ability to discover these forces, but their energy will not be suppressed.”¹¹² Hijikata “gestures, he moves; and although he brutalizes forms, nevertheless behind them and through their destruction he rejoins that which outlives forms and produces their continuation.”¹¹³

Butoh involves a training. Although Hijikata does not formalize this training in writing, he does identify a few steps which can be organized in an elucidating row. First, the dancer must learn to be naked, or learn that they, and we, are always already naked. As in Levinas, the step toward the other begins with absolute vulnerability. But this vulnerability is not, as in Levinas, a gesture toward the holy or the transcendent. It is a fall into the mud and

¹¹¹ Artaud: “First of all we must recognize that the theater, like the plague, is a delirium and is communicative. The mind believes what it sees and does what it believes: that is the secret of the fascination.” “The Theater and the Plague,” p. 27. “Like the plague, the theater is a formidable call to the forces that impel the mind by example to the source of its conflicts.” p. 30.

¹¹² Artaud, “Preface: The Theater and Culture,” p. 10.

¹¹³ *Ibid.*, p. 12. In the next chapter the clear link between the description Artaud and Hijikata give of this sort of movement to dance music will be shown. Here it is worth citing Norman Bryson, who, writing about Jon Aeon, iterates this exact escape from body image-capture via the darkened expanse accessed rhythmically between strobes in a club. “Paradoxically, the moment of the strobe or flash opens pathways into the body’s interior depths, with their specific emotional regions and thresholds. To dance on the inside is to move from one region to the next, each with its own distinctive range of psychic and affective intensity: dancing on the inside, dancing in the dark, shifts subjectivity toward extremes of sensation and affect that lie way beyond the reach of normalized, regulated consciousness (ask any serious clubber: this is worship). The achievement of *Blue and Black Ball* is to have found a visual language capacious enough to include the full span of club experience: from the absolute capture of subjectivity by the force of spectacle (strobed, clarified, passing from matter into crystal light) to the half-psychic, half-somatic dance with darkness, the dance that is danced on the inside.” “John Aeon’s *Black and Blue Ball* and *Chain of Belief*.”

musk. “Georges Bataille said, ‘Nakedness offers a contrast to self-possession, to discontinuous existence, in other words.’ He also said, ‘It is a state of communication revealing a quest for a possible continuance of being, beyond the confines of the self. Bodies open out to a state of continuity through secret channels that give us a feeling of obscenity.’¹¹⁴ It is “terrifying to be naked, yet in the outside world we are already completely naked.”¹¹⁵ Nakedness is admittance of what I previously called the reality of shock, that dimension of contact constituting the first profound magic and communicating unconsciously at all times. It is a daring, dangerous dropping of representational defense. It is followed by death.

Ono Kazuo, Mr. O., the other dancer involved in the early development of Butoh, taught the “transubstantiation into a ‘dead body’” as a preliminary stage of butoh practice.

The first movement is death. The human body can barely be seen, and has always eluded being written about. It is an infinite mystery that creates its own language, lost at the periphery of vision, while simultaneously grating its movements together from raw flesh. When the gestures of the body are torn and fragmented to the extreme, another body emerges, interrogative of ecstasy, collapse, and human obliteration. And its movements transform or annul the eye, as they transform and annul the body itself.¹¹⁶

For Hijikata, this dying is equivalent with becoming an object, with becoming low and abject. “Somewhere in my lower abdomen stuck there in the mud, that is screaming something. While in the mud, it occurs to me that I could very well end up being prey. At the same time that this unbearable feeling surfaces in my body, something strange takes shape in the mud. It’s as if my body had, from its very core, returned to its starting point.”¹¹⁷

It is necessary to pass through death or to become completely objective, to become abject, because the vital darkness of matter is hidden behind the armored surface of “meaning,” which in reality is a bestowal of death. The dancer, first exposed to the remorseless physicality of the ambient expanse, then must pass into it through the doorway of

¹¹⁴ “In Prison,” p. 45. Hijikata is drawing on Bataille’s *Erotism*.

¹¹⁵ *Ibid.*

¹¹⁶ Stephen Barber, *Revolt of the Body*, p. 5.

¹¹⁷ “Wind Daruma,” p. 73.

his own killing glance. He must be capable of becoming the dead object, and capable of killing the living subject, himself, as both pointed consciousness and as propriocepted, organized body image. The first moment past this death is the demonic.

Speaking in the extreme, there used to be one or two gods in a home and they went screaming mad while holding red-hot metal tongs. But they were not mad; they were looking precisely for themselves. I have watched them, with the feeling that I might be able to understand how to recapture the body rather than the independence of the precision.¹¹⁸

Long, long ago there was a priest named Kyogai, who wrote the *Nihon reii ki*. This priest had a dream about himself, on the night of March 17th in the year 788. In this dream he had died and piled up firewood to burn his own corpse. His soul stood near his body watching it burn, but the body just did not burn the way he wanted it to. So Kyogai broke off some branches and skewered his burning body with them, then turned it over and over to burn it up. Then he told other souls who were also burning their bodies to do as he had done...

On the one hand there is cremation. But the wind daruma is conducting an aerial burial of its own body, its own soul. Aerial burial and cremation get jumbled together and though the wind daruma tries to shout, its voice gets mingled with the wailing of the wind. Whether the wind daruma is shouting or the wind is wailing, it puffs up bigger and bigger and finally makes its way to my door.

...there was a wind daruma, whirled and carried by the wind. Rolled along the footpath between the paddies and burning up its body as it came...¹¹⁹

The demonic power in the dancer is a capacity for transformation. The capacity is premised upon perpetual crisis.¹²⁰ The material must have been mimetically subsumed, so that it can float and feed in the darkness of the body. But then the dancer must be naked, must die and not stop dying. She must be exposed, in the sense that infants were exposed in ancient cultures. She must be exposed to the darkest forces, and further, she must become them. She must yield entirely to the temptation of bleeding space. And this will kill her, and she will rot. Out of this rot, then growth. Hijikata says that he has become: an artificial leg; a wolf; an animal as it shows itself to children, but not to adults; "I have transformed myself again and again into a strange and brutal musical instrument that does not even sweat and I live my life

¹¹⁸ "Fragments of Glass," p. 70.

¹¹⁹ "Wind Daruma," p. 72-73.

¹²⁰ "I am not being visited by a sense of crisis, rather I am demanding it." "Fragments of Glass," p. 64.

turning a stick of silence beating on silence into a shinbone”;¹²¹ an empty chest of drawers; a gasping willow trunk; a baby bleeding at the nose; a squash blossom fading; a horse getting thin; an empty box. And he taught his dancer Ashikawa, who teaches her own students, to become a wet rug, to be bitten by invisible insects which invade the body through every pore, hence to become all insect infiltration. In the end the body becomes its environment, but the environment is alive in completely non-human ways. “The woman who made me eat charcoal came from a farm. Her body half-turned to smoke, she picked a cucumber from the field and ate it in a corner of the earthen-floored room.”¹²²

If you’re covered with dust, then even a fart will be connected to space and you don’t have to think about space being chilly and antagonistic to the eyes. For example, if you turn the skins on things inside out, the hole created there is a space. Things turned inside out like that tightly fill up space and envelop it. A body that is brought up breathing the air in such a place takes up the shape of hiding in space.¹²³

In Akita, or I should say in all of the Tohoku district, there’s something called a ‘wind daruma.’ I’d better explain this a bit. Sometimes when it gusts up north, the snow swirls around and the wind is just incredible. Then a Tohoku person can get wrapped in the wind that blows from the footpath between the rice paddies to my front door and, garbed in the wind, become a wind daruma standing at the entrance.

I once became a wicker trunk, which became a bellows that drove each and every one of my organs outside, then played. At the same time, when I saw a horse standing still, I felt like taking a saw to it, or I felt like chopping the river. You can do that, after all, when it’s frozen; so go chop the river and fetch it and your body will quickly extend. It’s the same with the sky. Think of it as a single plate and you can shatter it. That single plate is a human plate. Smash it and there will probably be some kind of uproar. Such extensions of the body, not necessarily delusions, will wildly increase.¹²⁴

As dark as this all sounds it is not dark; or it is not dark as it seems. Though Hijikata becomes object, becomes dead, becomes hollow, for all the talk about demons, this is not nihilism. To forget all the thickness of this harrowing expanse, to squeeze all of the life out of bleeding nature, or to bestow upon space the petrifying spell of “enlightenment,” of reason,

¹²¹ “From Being Jealous of a Dog’s Vein,” pp. 58-59.

¹²² “Wind Daruma,” p. 74.

¹²³ “Fragments of Glass,” p. 63.

¹²⁴ “Wind Daruma,” p. 75.

number, and identity, which are all the ongoing motor of representation, that is nihilism. The insects entering through every pore are only living matter seen through the veiling idea of death. They themselves are perfectly healthy.

The Other in the Aesthetic

For Adorno, art was determinately negative, expressive critique. So it is also as Hijikata's Butoh. Butoh is determinately negative by means of the abstraction of gesture from function, the detachment of means from ends. All of its elements are derivative of a path cut through concrete ambience. In their conjunction first as fragmented and conflictual, but then as undead, as reborn, as new form and transformation, they constitute a negative rendering of that path. The dance is critical because it renders the everyday domain under the pressure of its other, of what the everyday neglects, lays low. These are both the human abject and bleeding nature, low gesture, animal and wind. It is not an image at all, but a performance, as is the socius itself; it is critical because it renders dominant material actuality, the "world," by the searing darkness of material possibility, in which that world floats.

Peripherality, non-conceptuality, sensation as barely conscious and unconscious sociality as the waving tissue of peripheral sensation: ambient intelligence. Ambient intelligence thinks both industry and Butoh, both function and critique, in the primary tongue of gesture. That tongue flickers and pulses. Ambient materiality, in ongoing conjunctive articulation, twitches in serial shock. That is the energetic current of environing tactility. Each shock is a retreat, which is identification, all at once the identification of a thing as object, identification of subject, and identification of subject as its object. Every representational act is these three moments. It is the subsumption of material gesturality in category (its mnemonic transsubstantiation as repetitious minute gesture, the fine grain of hegemony); the implementation of the death-ness of the object—the painting of its deathmask, the

representational imago—as over against a subject who is supposed to be its life; and the spinning chase of this life after its object, the bad faith movement of consciousness toward its object, of noesis' intentional aim, which is Freudian identification, yielding a seeing from the perspective of the prefabricated category, an enaction of the representational grid. But the moment in which all of these identificatory aspects take place is performed as one in a series of gestures that really are somatic. That is why either the shocks in Schoenberg or those in Hijikata are true if negative renderings. Shock is withdrawal from sensation, performed proprioceptively. It is present motility, as eye saccade, pattern of breath, muscular tension and release, miming past sensation in reiterative logic. Perception is the death of gesture, produced in gesture. Motility underlies its own death, performs it. Language is the complex topography of this physiological twitch. It is not quite that language does not exist, but rather that its signification is the dance of flight from existence. Language is a rigorous shadow. Ideality is the name of its retrospective sheen. Ideality is not thought, it is the death of thought, the serial blockage of tactile intelligence. The symbolic is the striate wake of living ambience.

The cutting cleft or waving cusp at the critical moment of shock is the mnemetic/methectic pulse, the genital front where representation and ambience war. The beat in music has to do with this pulse. The beat is methexis as mnemetic technique. If perception is a self-defeat of motive sensation, the beat is the self-defeat of mnemesis. It is memory turning itself inside out into otherness.

Adorno complained that the brief consolation felt in listening to dance music was false. But in sensation there is neither falseness nor truth. That consolation is simply extant. He complained about the false community felt in the synchrony of body with beat. But that community is not false either; it is real. Reality may oppose truth, but that does not make it fiction. And he complained that in raising emotion over thought dance music stifled critique. But emotion, insofar as it follows from the tension of taut gesturalities, is itself critique. What

remains problematic, and what Adorno could not accept, is that consolation, real community, and real critique could themselves yet be participant in a whole that is not just. He wanted personal extraction from injustice. But that is a moral demand on reality.

The aesthetic function yields a space-time volume characterized by a tautness or intensity. That intensity is a measure of exposure of the one who experiences the volume to material exteriority. The aesthetic volume is materially mobile and critically psychoactive just insofar as it structures a performance in systematic slippage with the categorical. Because identificatory categories are socially-taught behaviors, gestures distributed forcibly via institutions and then mimed across the socius, the aesthetic structuration can be generally taut. It is a socially viable, anti-social or critical machine. The beat in dance music, insofar as it too operates against representation by reiterating methexis against mnemesis, is such a machine. But the simple fact is that neither critique nor resistance are unincorporated or unincorporable. The essential question is what metabolism those living volumes enter into, and what metabolism, what ambience, they engender. (It is possible that this genesis is related to the structure of the volume.) This metabolism need not be thought on the greatest scale; that scale is always abstract. It may and must be thought in its locality, and the whole trick for thought as for aesthetic production is the retaining of that local concretion against a stupefying, extractive violence from without.

CHAPTER 6: AMBIENCE AND AUTONOMY

It is not only from the perspective of the artist or dancer that an “aesthetic” volume of space-time (as also a “functional” one) is gestural in its elementary ontology. As the earlier chapters on perception have hopefully made clear, it is so just the same for the so-called “perceiver,” or more accurately for the body which enters into conjunction with this volume and in that merging establishes the liquid-somatic infrastructure constituting perception’s material possibility. It may be useful to review the concrete ways in which this somatic linkage occurs, so that in considering further the production of shared ambience it can be clear that what is really at stake is a social choreography, the material construction of splays of motion that are larger than individuals, and not reducible either to a logical grouping of their number, but existent rather as the enduring-extending¹ of living ambience itself, including air, light, animals and architecture, from which individuals are linguistically abstracted.

Gibson asserted that the basis of perception was to be found in the sweep of a perceptual system through the ambient field. At this point we might well question whether there really are distinct sensory modalities at all, beyond the performance of them, since significant aspects of the visual and the auditory systems are shared (for example the vestibular system), and since Bach-Y-Rita has demonstrated the existence of perceptual experiences at odds with their sensorial mode (“sensory substitution,” for example seeing on the basis of tactile stimulation of the tongue).² Gibson’s point at any rate is that there exists in

¹ To use Spinoza’s term, the “conative” force.

² Paul Bach-y-Rita, *Brain Mechanisms in Sensory Substitution*. The key experiment to which I here refer: a video camera is attached to a grid of tactile stimulators which can be placed on a tongue. The visual field is roughly transduced into positivities in this tactile register. Now so long as the camera is manipulated by a person other than the subject, the subject feels tactile pressure on the tongue. But when the camera is manipulated by the subject, in the course of moving through a practical space, after a certain learning time period (on the order of an hour), the subject begins to have a “visual” experience. The room begins to appear frontally, in a frontal, circular field. It is literally *seen*, even though objectively the stimuli entering into this visual experience are properly tactile. The conclusion I draw from this, together with all the other considerations we have dealt with so far in this study, is that

the ambient field a material, spatially and temporally expansive and dynamic structuration, the traversal of which in a particular, habituated manner constitutes some variety of perception. Since the invariant characteristics that are perceived as objects and their qualities, or as one's own body (even here the two are constructed in the same moment, through a mnemonic segregation), require a flow of variation in which to become distinguished, perception always requires movement. Both the array and the body of the perceiver move, and it is the habitually-stabilized relation of their movements which establishes felt self, perceived self, object and quality.

This movement is precise and definite. There are fine saccades of the eye, tilts of the neck and head, modulations of breathing, pulse and heart-rate correspondent to attentiveness and dominant perceptual modality. The fluids within the saccule and utricle in the vestibular system move with both the shifting of the head and neck, the acceleration and deceleration of the whole body, and with the frequency and amplitude of the vibration of the surrounding air. The expansion and contraction of the pupil occurs both with the chemical state of the body, which is one aspect of its arousal, and with the structured flux of light at its surface. Smell occurs with the rhythm of the breath, the condition of the nostril membranes, and the movements of breeze in the occupied volume. Touch depends on body temperature, perspiration, fatigue, and then the temperature of the air and, obviously, the distribution and redistribution of hard and soft surfaces.

In fact all of these movements always involve these two sides, in addition to involving one another and the concurrent processes of suppression, augmentation, and linguistic coupling occurring in the production of the body image and perception. Each of the material singularities at this basis of perception are, to use Deleuze's language, "differential." Each

"vision" is something *performed* by the perceiver, rather than a modality of perception correspondent to a particular part of the brain, some particular set of sensory organs, or some objective type of sensory "information" in the environment.

singularity, for example the behavior of a retinal cone in the touch of light, or the fine vibration of the eardrum with its surrounding air, has these two elements, which only according to a later specification regarding internality and externality have distinct ontological status. For perception or for language, the environment is distinct from the body. For sensation, which underlies perception and constitutes its materiality, body and ambience form a rich, positive sheet, the very surface of which is motive and sliding. This surface produces its sides.

At that level which Gibson asserts is the habitat of the human, it is the set of motions occurring on both sides of body and ambience which determine the exact singular structuration of the sensorily positive sheet. Both body and ambience cycle with habits. Many of the habits of ambience are those of human bodies, and many of the habits of those bodies are continuations of ambience (recall the subliminal mimesis in Müller of the ticking of clocks). To be perfectly direct, we need to say that the whole coupling that occurs when a regime of bodily gesture finds a harmonization with some regularities of the structured environment is itself a habit of ambience. In our case, some of these habits, the ones of which we are “conscious,” involve the presence of an “object.” This object is really a selection of certain invariances that conjoin conveniently with our larger-scale regime of movement. The object is the stabilized “reality” of that selected set of sensory positivities which coincide with our conscious, intentional behavior. The object is not at all basic; it is a performed product; and it is only one variety of habit within structured air and light. It is always a limitation of the reality supposedly known and seen. Localized, stable habit-patterns within ambience always have this character: they carve out some gestural helix, with differential line, in a plenum which far exceeds them. They are limitations or figurations in a richness which in one sense escapes, but which in another is the sole material agent, both material cause and, as materiality involved in conjoint singular gesture, formal cause as well.

That the ambient is in indefinite expansive communication with itself or its various regions is made clear in flicker vertigo or the other varieties of entrainment. In these cases, an overarching patterning of the ambient presses infectiously into its local moments. The body of the perceiver becomes in these several ways an intelligible regularity of the space which exceeds it. Ambience is passed through by waves, patterning waves and waves of pattern, mimetic from one perspective, methexic from the other. That dark ocean of Hijikata's, or Artaud's living theater, or Gibson's ambient field—once we have blinked and sensed that it is alive—in its locality performs, in its expanse infects. To say that it communicates is not to say that it passes signals or messages, which would require several abstractive striations. It is impossible to discuss the signal or the message without assuming a sender or a sink. In the material plenum there are neither—their construction is like that of the object, a behavior pretending to denote some other time and place, which in the end is solely a performance of some distinct locality. Sender and sink are hypothetical renderings of the externality of present ambience; they are little diagrams of a third axis on a two-dimensional sheet, or vice versa, a mention of linearity in an indeterminately-dimensional plenum. It is likewise impossible to conceive a signal passing through a medium without abstracting from the medium. We must posit ambience as noise in order to produce some small aspect of it as message. This is not the variety of communication in which ambience is engaged: ambience, like the aesthetic, is means without end. Just as any social formation, in each of its allegedly local signalings, really communicates nothing but its own pattern, the pattern of production, distribution and consumption across time, ambience likewise, as the broader expanse in which this functional patterning occurs, communicates only its own endurance, only its own force, which plays across its numberless surfaces with ceaseless permutation.

Now to the totality of these gesturations, gross and fine, according to James' theory, corresponds feeling. In fact from the perspective of the locality—and there is no other

perspective—this living affective character is primary. What these gestures are is on the one hand determinate motivity, but at just the same moment and indivorcibly, determinate feeling, intuition. This is the primary reason that Spinoza can say that the order and connection of things is the same as the order and connection of ideas³—because for him, as for Althusser, Hijikata or Artaud, ideas are acts. There is one ambience, which thinks by moving and moves intelligently (although always without any goal), and which is feeling, desire, pleasure, fear, suffering, rage, in exactly the same moment.

That one's present gesturality is also one's present feeling is apparent in the cohering bleed of a listener into music. Adorno was not wrong to say that in the sharpest listening the listener gives over his energy to each of the articulations of the sound. We can even think of this giving over as an extremely fine calibration of material patternings, including respiration, heartbeat, head movement, posture, and neural behavior, with the structured sonic volume. The beat compels an alertness, the alertness falls into the beat; and so on for all the nuances of particular micro-volumes of sound, each of which we jointly perform, whether consciously or not.⁴ The music is music only in this conjunction; here only it has its reality, and here only it presses in tension with some larger set of habits, preventing the absolute incorporation of the listener/dancer within it. For Adorno the question then was whether one had the will and intelligence to give over with the whole of the mind, while still carrying out an incessant regime of mnemonic synthesis (Husserl's transcendental syntheses) and representational recounting. He thought that coarser motions, like those of dance, necessarily interrupted these essential mnemetic functions. Yet from the present perspective, we might ask whether the full calibration of person with music, and hence the full development of what music really is, as living, ambient volume, would not be dance: dance as the flower of music, its fruit or its real

³ *Ethics*, 2P7, p. 119.

⁴ In differing ways, of course, as "expert" or "emotional," as ecstatic or objective, etc., depending on the larger system of our performances and the history, the training that has inscribed them.

body. We could note that as finely articulate gesture, playing music is dance in this sense, a tight moving-together with sound. And then we could ask how many elements of ambience really do not dance in this fashion, seeing as sound is ambient vibration. Music that was not dance would be strange; even the fine course of feelings still is dance. Music eschewing both would be something other than music. But there could be no such music, only a wish for it, which might satisfy itself with conceptual art, which in this regard fails too, but very subtly.

Plato recognized music as dangerous because it compels a giving over. It compels mimesis. We have called this capacity to compel, with Nancy, “methexis”: a contagiousness, a lure, a seductive force. Meanwhile there is also a capacity on the part of the listener to give over. Even for Adorno, the listener has attention, which is the appropriate gift to bring to the composition. In drawing this attention along with each sonic gesture, an exact mimesis is possible. For dance music, the mimesis would extend to a much larger scale, requiring a more obvious flow of energy. Thus music always presents an energy, a capacity, and so does the listener. It is the joining of these energies which constitutes the music as really occurring.

This joined energy is in excess over the static form of the body’s habits, coarse or fine, or the discrete patterns of the music. It is rather that genetic, forming form of material behavior which we discussed in the previous chapter. It is a tension that demands something.⁵ It may be that it demands release. But the whatness of the demand is retrospective. Its immediacy is this tension; and so it also might demand augmentation. For now it demands, it is disequilibrium, it presses. The unfolding of music is the dance of this mutual press, which might also be called desire.⁶

⁵ From the semiotic perspective, as we will discuss below in the context of the sonic collective *Ultra-red*, it is only demand.

⁶ Here we would have that foundational dispute about desire, with Freud and Lacan, and the Christians, thinking of desire as lack, something needing fulfilled, but at the same time as inordinate tension, needing in its essence released. Either way, on this side, desire would wish to erase itself. The response of Spinoza, Nietzsche, Deleuze and Guattari, is that these are interpretations and nihilistic ones: desire is just as easily pressure towards greater pressure, conatus, will to power, the sense of one’s own force.

At the end of the last chapter I presented the peculiar force of the aesthetic in the grip of the formed ambience with the listener. In this interpenetration, a more or less functionalized, regularized system of habits is brought into conjunction with a flotilla of gestures distinct precisely in their evasive refusal of the regularized system. A sort of smoothed topple, a sustained asymmetrization then occurs, and the listener hears not only the form, but the tension, or rather, that tension, beyond what in Nancy's sense can be heard, makes itself felt as intensified listening and the affect of opening. Now as it appears that in another respect the work only exists in its unfoldment at this precise gesturality, of ambient space and mimesis, we might also say that, in the limit case where the listener mimes perfectly what he or she hears, the tension shifts, from the line between individual and work, to that between this volume and the rest of the ambience. In practice both tensions would persist.

The tension of the work, its energy, is thus the sustaining of its autonomy in disequilibrium, at each of its various constitutive perimeters. It is only there, at the bleed of sound into other sound at some distance from the speaker, or at the locus of gestural syndication that is the listener, that the music exists; but it is precisely there that it resists. Its resistance, its tension, its energy, is its sustained disequilibrium. The surface which produces its sides is nevertheless the resistance to its sides. As material vibration that disequilibrium enters into a vaster ambience. And we do not know at all how many aspects of gestural materiality in one way or another "listen"—that is, gesture in relation with sonic gesture, or therefore how great or how dense is the sprawl of the music. At the least it extends across everything that vibrates, doing so in exact correspondence with its own material and hence performing its own local resistance. In fact this indefinite perimeter asymmetry is ambience; this is the tissue of space.

Both interpretations start with the same disequilibrium. The direction given this tension is then a question of psycho-political strategy.

The complication at present is that the tissue of space is produced on the basis of mnemonic gesturalities, via media like the recording and the film. There are two questions that I would like to address, given this fact, which I began to answer in Chapters 3 and 4. The first is how a present, asymmetrical, energetic materiality continues itself across time via these media, how means without end continue without meaning, how they communicate themselves without every sending a message, enduring as force, as life, in ambience. The other is how we augment or counter their force.

The Muslimgauze Dimension

If Adorno lived a little later, and ever deigned to identify the musical practice that he found most offensive, he might have gone well beyond Stravinsky to point at Bryn Jones, the sole member of the band Muslimgauze. There would have been a seemingly limitless number of reasons for him to pick this particular offender. Muslimgauze's music is an offshoot of the "motoric" school, and more directly of the "motorik" beat of Can and Neu—it is machinic in its very elements, using drum machines and synthesizers, it is a pastiche far beyond that of Stravinsky, an accumulation formed from tape loops, from broadcasts and discarded cassettes. It is redundant, repetitive; it lacks development. It is all space and very little time (little more time than the phonological loop, repeating and repeating). It is dance music, it is overwhelming noise, playing on the archaic shudder. Further, Muslimgauze are a proponent of violence. They—they are always they, though only Jones is there—are pro-Hezbollah, pro-PLO, pro-Khomeini, Gaddafi, perhaps pro-Taliban. And yet for all that, it would be harder to find another figure in music production who so directly satisfies Adorno's aesthetic model, once that is modified to allow gesturalities in place of the conception.

Adorno's disillusioned artist withdraws from the *socius*, living in a dysfunctional isolation which one might snidely remark would seem typically to require a certain amount of

family money. In this withdrawal, by some means diagrams of large regions of the social formation find their way formally into the artist's work, which when it is strong tautens under a pressure from the material plenum exceeding that social pattern. Behind each form there is something suppressed, which presses. The work, once released into the social circulatory stream, continues to have a critical capacity insofar as it exerts a pressure correspondent to the material reality of what is ideologically constructed as impossible, wholly other, unthinkable. Ultimately it is the demand for justice that presses, injustice, suffering, demanding recompense. There is a beating pulse behind the work which, now suffering, is also potentially rage.

Bryn Jones, who died in late 1998 at the age of 37 of a "rare blood fungus," lived for his entire life in a bedroom in his parents' home in Manchester. Briefly he played in the band E.g. Oblique Graph,⁷ of which he was the only member. By 1983 he had left that band and joined Muslimgauze, of which he was, again, the sole member.

Muslimgauze was an extremely prolific band. It released nearly 100 albums in the 15 years that it produced, and nearly another 100 have been released since, their tracks having been delivered in heaping boxes of DAT tapes to the doors of the various small labels with which the band was affiliated, before Jones' death. At an average of ten tracks per album, this is 2000 tracks (and more are still being released). That calculates out to a track every two or three days, for fifteen years, interrupted only by the blood fungus. As Muslimgauze often recorded their tracks in Bryn's room, and then mixed them with a local engineer, the recording of each track may have taken more like one day, another being given over to mixing. Say the

⁷ The band title seems in one way or another to be a reference to Brian Eno, who produced in 1975, together with Peter Schmidt, a set of cards to be used in musical composition, called "Oblique Strategies." In the same year Eno's record label "Obscure Records" began, distributing recordings including those of John Cage. Many years later, in 1996, Eno would develop the "Koan Generative Music" system and release music produced by its means, for example *Generative Music 1*. Muslimgauze thus fits in the tradition of "ambient music," as well as what is later referred to as "noise music"; and these traditions in turn relate strongly back to Cage, to chance compositional methods and Zen.

average track is 7 minutes (some are quite long), and that each album track has 8 instrumental tracks (Jones said early on this was his favorite format, though later productions involved more tracks). That's one hour of saved, recorded playing per day. Now say each track required a few takes, as well as, of course, set up, experimentation, composition or design time, etc. And say that certain tracks were not completed. And recognize, as Muslimgauze is built in large part from found materials, tapes, tv and radio broadcasts, records, that it takes time to engage these materials, that the engagement with those materials is time.

The entirety of Muslimgauze's every day, for fifteen years, was then lived within this music, within its elements and within their sonic, material intersection. It was "never-ending," "endless," "like an illness."⁸ Through their gestures, Bryn's real gestures, with his hands, pressing buttons, or impacting a percussive surface—most of the elements are percussive—he wove the space-time volume of Muslimgauze continuously for fifteen years, within the bundled hideout of his parents' home, a "cocoon."⁹ It was a real retraction of space from the socius, a real alternative dimension, a heterotopia.¹⁰ The Muslimgauze dimension, knitting itself through time for fifteen years, breathing against its material, inhaling and exhaling sound, lacing sound through sounds with Jones' hands, and throwing off into ambient expanse these parcels, potentialities for re-expansion, structuration of space-time. Just enough to live on. While Muslimgauze sold their music, it was only ever in limited editions of 200-1000

⁸ "Muslimgauze is total, being inspired, thinking about new ideas, listening to new tracks, old tracks, un-released tracks, un-worked ideas, putting CDs together, titles, it's never ending..." Interview in *AmbiEntrance*, March 7, 1998. "I have no time to play other people's music, I have no interest in other people's output. My time is total Muslimgauze, new tracks, new CDs, old tracks, it's endless." Interview with Guillaume Sorge, *Trax - 40 000*, September, 1998. "We work the whole time. It is like an illness." Interview with Erik Bennedorf and Annibale Piccici, *Artefakt #2*, February, 1997.

⁹ "Now, we just like getting in our own sort of cocoon and concentrate on what we are doing." Interview with Aaron Johnston, "The Beat of Revenge," 1995. Reprinted in *Carpe Noctem Magazine*, Volume II, Issue 3.

¹⁰ This term comes from Foucault's 1967 lecture "Of Other Spaces."

units. Each album sold just enough to support the production of the next.¹¹ There was nothing else left over. Perhaps Muslimgauze is the purest example of artistic autonomy that there is, even more autonomous than Milton Babbitt, who famously quipped “who cares if you listen?”¹² while defending the academic habitat of new music. Babbitt of course was nestled snugly within that habitat, which paid for him to live and even demanded certain non-musical, administrative functions.

And yet in this autonomy, in the privacy of Bryn’s childhood room, with his drum machine, his ethnic percussion instruments, his large collection of tapes and other recordings, his television and his radio, Jones always called Muslimgauze “we.” He was careful about this in interviews. He would sometimes correct himself when he said “I.”¹³ Muslimgauze was a collective.¹⁴ Adorno says that every piece of polyphonic music says “we.”¹⁵ It does so just insofar as it speaks ultimately for the utopian possible, for the socius not broken into hierarchy, not suppressive. The “we” that speaks in music is the selective socius plus its

¹¹ “Yes, at the moment we are solely a musician, solely releasing what we do, not really making much money out of it, virtually nothing, and again, you can’t be in this area of music and expect to make music, because you just don’t, it’s just self-financing. If you make some money, you tend to plow it into the next album...” *Bryn Jones Speaks*, recorded answers to interview questions, released 2008, probably recorded around 1987.

¹² See the article by the same name “Who Cares if You Listen?” in *High Fidelity* magazine, February, 1958. The title was given by the magazine, not Babbitt, but the sentiment is his.

¹³ “The only reason we agreed to perform was because we was asked to do so, specifically asked... and one of the bands played with me—us—Muslimgauze. And it was a really weird experience. I don’t particularly want to perform live again actually. It was a detached feeling...” *Bryn Jones Speaks*.

¹⁴ “...it’s a kind of mirage, that Muslimgauze is a band. Because it’s not a band, it’s just me, I do everything concerned with the music and artwork and release, the whole label that the music is released on, everything is me. But I do want to throw up the image that it is a band in itself.” *Ibid*. “I speak of us as a band, that only consists of me however. A CD appears from Muslimgauze, the group. It is not my name. The group however is only me. We are no pop group. we have no image. What should Muslimgauze mean?” Interview with Erik Bennendorf and Annibale Piccici, *Artefakt #2*, February, 1997.

¹⁵ “Polyphonic music says ‘we’ even when it lives uniquely in the imagination of the composer without ever reaching another living person. But the ideal collectivity that music carries in itself, though separated from the empirical collectivity, enters into conflict with music’s inevitable social isolation.” *Philosophy of New Music*, p. 18. There really is a polyphony in Muslimgauze, in a literal sense of there being many voices. Only here the voices are recordings of speakers and other musics, not independently moving lines choreographed in strictly controlled relation. While classically it seems wrong then to call such a repetitious, ambient music “polyphonous,” one might reply that it also seems wrong to call a set of elements all composed by the same man, to achieve or express some one thing, polyphonous.

excluded zone: "... watching over the shoulder is a collective subject that has yet to be realized."¹⁶ Muslimgauze is a "we" that could achieve utterance only through the medium of a retribution, a "we" that expresses the transition of suffering to rage. Behind every track there is rage.

Materials and Combination

Jones says that early on he listened to 1970s German rock, specifically Can and Faust, and that no one had more influence in his early years than Throbbing Gristle (who did quite a lot with field recordings and the presentation of the underside of the normalized socius). By the mid-1980s though he no longer listened to anything except for Indian, Pakistani, Afghani, Lebanese, Palestinian, Egyptian regional musics. Muslimgauze was all-consuming, there was no time left. Only these elements having flown through ambience into this room, old music echoing these places, got a hearing. Everything else that he heard, he said, were snippets from television and radio, captured on reel to reel or cassette, and in addition tapes of Islamist teachers, of radical resistance figures, only the cadence and timbre of which Jones could have grasped, as he seems to have spoken only English. Jones' room was an accumulator of ambient parcels, and an analyzer of those parcels down to gestural elements. Tuned to a particular channel, it captured what was floating by. Jones' hands, those primary implements of the band, cut sonic durations apart and put them together. In this way these elements entered into conjunction. Nothing passing through that space was immune to subsumption within, inhalation by the music. Anything within that room was in the Muslimgauze dimension, which respirated sound.

Each Muslimgauze track, existing through a finite duration, is a compaction of time condensed from beyond that length. It is a collage of clipped durations, each having been

¹⁶ *Aesthetic Theory*, p. 231.

“objectified” in a synthetic collision with a material medium, each reiterating through the energy-consuming playback of that synthesis, now pressing into new collisions (there is no playback without a new collision and a new synthesis). Muslimgauze were the feeling aspect of each of these durations, the affective aspect unfailingly accompanying the gesture. They were also the parsing and the assembling function.

Elements were pared back to less than a second, to a few seconds in length. Rarely, it seems, did the duration of any element extend beyond that 8-second limit of the phonological loop. At least this is true for all the rhythmic elements. Remember that that loop, for the cognitive psychologists considered in Chapter 1, is at one and the same time the temporally-distended, post-filter space of extant perception, and the capacity limit for mimetic reiteration. The grain of construction in Muslimgauze’s tracks is such that any nest of linking cycles sits mostly within the present, as that is jointly performed by the listener. Muslimgauze analyzed duration down to such a sonic presence, from which they constructed a beating music filling space with rage, a music pressing from its present outward, like the child Watson held until it turned blue.

In their nested structuration it is nevertheless not quite possible to make their whole form focal. There are just too many elements, too many gestures within gestures, aspects of timbre, attack, decay, dynamics, densification and rarefaction, collapse into beat, expansion into reverberance, etc. In retrospect, representationally, the complexity might seem to be quite low. (For a traditional harmonic or formal analysis—but not really, not in the real gestural unfoldment). But the music does not operate primarily representationally: it operates as a subsumptive physiological volume, pulsing with methectic sway and mnemetic pull. At this level, in the now of perception, if there is such a thing, the elements extend always into the periphery of focus. (And if there is not such a thing, all sound is periphery). This is just to say

that the music exists in the same manner as the initial appearance of its elements within the space where they coalesced, as peripheral flits, passing by.

Each cut duration constitutes a gesture, with specific articulations, particular timbre, particular affect, particular force. Each is a history of physical action in conjunction with media, of Jones, of processing machines, of the recording, usually of all in complex structuration (a clip of a drumbeat, a snippet of a tape run through a drum machine, a compressor, a reverb unit, ongoing permutations of process). Each track is a stack of gesture, complete with all the noise, the electrical noise, tape noise, the nervous noise, the tiny disturbances of hand and timing coming from thought and from neighbors.¹⁷ The synthesis of one gesture with another constitutes a larger gesture, equally particular, more dense. A new figuration and a new feeling. Each track is an accumulation, both of habit and its other. In listening to each track, we engage those gestures, are lured by them, mimic them, feel their attraction and their repulsion. Our listening re-stages exactly the sort of collision that produced the music in the first place. Our listening is an aspect of that music, and it is, in materiality, an essential aspect of its continuation. Asked what he would like from his audience, Jones answered, “I want to feel that they are listening.”¹⁸ That “receptive” (actually performative) listening is involved in the real material endurance, the expansion, both of the music and the materials composing it. The feeling of a pressure that needs to be expressed is also, necessarily, the desire that what is expressed continue outward, infectiously through the living, sensing ambient.

It is important that none of the gestures is perfectly familiar—they are each, according to the selective algorithm called Muslimgauze, sounds that are “other.” They are not-

¹⁷ “The loop... is made by me the loop contains me, made by me, on tape looped by me not others. Muslimgauze are based on analogue reel loops, with real percussion and cassette bits of real people sounds. Sounds disappear, yes, lots of the tape noise, yes, rough, whatever I feel I need for each track.” Interview with Marc Urselli-Schaerer,

Chain D.L.K. Issue #5.

¹⁸ *Bryn Jones Speaks.*

Manchester, precisely in Manchester.¹⁹ Even the timbre of the voice, and always the intervals of a short duration of song, are other than other Manchester music. It is easy therefore to say that Jones indulged in Orientalism,²⁰ a sort of signifying fetish coding the Arab or Eastern as “other,” and that he fetishistically ascribed a certain liberation or force to this otherness. We will discuss this question at length by the end of this chapter. For now we can say that to some extent, yes, it is so. Even here, though, the ascription of specialness to a certain set of signifying elements is quite different in the case of Muslimgauze than in that, say, of Young. It is not the pure abstract that can be breached by the time-hallowed musical formula; rather the material parcel from beyond these walls is a scream, a plea of suffering or an expression itself of rage. Here there is no pure abstract, no escape from Manchester, no freedom in Palestine. The other important thing to recognize is that, while signification is near impossible to shed, there is another level of operation going on here. It is as sound, as material, as structuration of an ambient array that these materials first work. They do have a real materiality, in excess of meaning; this materiality has the dual aspect of body-spatial performativity and affective, intuitive specificity. With this immediately there is also the sign, but it would be a sort of nihilistic lie to treat this sound only as symbol. That would be to say that the music does not exist. But it does exist.

The structuration of gestures, their stacking, then constitutes a splayed gesturality in excess of the focal, and with a singularity placing the track in a certain, taut

¹⁹ Jones was careful to stipulate that his music did not pretend to be Middle Eastern. It was Manchester music, although he also emphasized that he had no commerce with Manchester. The point was ethical: Muslimgauze did not use these recordings to steal their rhythms. “Old, certainly, we’re listening to a lot of music, very old music from those areas of the world, certainly. And it certainly influences what we do. We don’t copy it, we don’t sample it and pinch it off. We certainly don’t pinch ideas in that way. Hopefully they influence rhythms. But we don’t actually listen to something, oh, I’ll nick that, I’ll pinch that or sample it. I don’t do that. I don’t sample their rhythm in that way.”¹⁹ Rather rhythm, that most important thing, that of which the whole music was constructed, was echoed into his hands; he was infected, just by exposure, and he mimicked, with precisely the tools at his disposal, which themselves constitute one of the key habits of ambience.

²⁰ See Edward Said, *Orientalism*.

incommensurability with the listener. Through the inhabiting of gestures, living with them, feeling out their connections and antagonisms, Muslimgauze enabled certain coalitions. Exactly as Hijikata allowed the gestures he absorbed to float inside his body until they coalesced in a strange undead figure, like one hand chasing another independently of a person, Muslimgauze allowed them to float in Bryn's room, with the same uncanny effect. The aesthetic product, an artifact of gestural coalescence, exerting a force.

Formed and Formative Force

What drove all this? A production like this, for fifteen years, undoubtedly follows from a pressure. In a prepared manner reminiscent of the captured soldier giving only name and rank, Jones repeated in every interview that behind every track there was a "political fact."²¹ The political fact is another dimension, outside of the music. This dimension was the "backbone" of the band.²² In the same recorded interview he used this same term to characterize the usage of drum machine, which in terms of recording is "a first step, a backbone of a piece of music."²³ Two backbones then, one outside the music, forming silently, the other inside the music, forming very loudly, shockingly. Forming and formed. The silent victim and her explosive revenge.

²¹ "Every piece of music Muslimgauze releases is motivated by a political fact, mostly Palestinian, also Iran and Afghanistan are of great interest. Muslimgauze usually take a word or action etc. and from that evolves a basic idea, which is then altered etc. until the finished pieces come to life." Network Interview. "There are no musical influences - only political facts and figureheads (e.g. Arafat, Gadaffi, Bhutto, Khaled, Saddam, etc.). Such things are the starting point from which Muslimgauze's music is taken." Interview in *Industrial Nation*, Issue 9, Summer 1994. "The whole music is politically influenced, before a sound is made. That's the background. I think I would make some sort of music if it wasn't for the political situations, but, they really, um, influence the type of music I do, the sounds I use, the ideas I use, they, they really are affected, by personal beliefs." "Each piece of music is influenced by a certain event. Gulf War. Certain countries like Iran, and Libya, and Afghanistan. There is definite things behind every piece of music... there is something behind it." *Bryn Jones Speaks*.

²² "A different certain interesting music, which has a political edge to it, a political backbone, another area to the actual music itself." *Ibid*.

²³ *Ibid*.

The facts that Muslimgauze encountered took various forms. They could be text, sound on the radio or television, image. Muslimgauze's album covers, which Jones said early on he did himself, but on certain later occasions attributed to the people at labels like Soleilmoon and Staalplaat, may give some insight into the nature of these media items, as also do the titles of the tracks. Especially the early albums had images of figures like Khomeini, Yasser Arafat, Gaddafi, hooded Hezbollah or Islamic Jihad figures. Later ones became more subdued, although certain albums, like *Mazar-i-Sharrif*, still presented shocking images, like that of a Palestinian boy missing both his arms, assumedly as a result of an Israeli explosion. Most of the albums, in a kind of transparent branding, utilized Arabic calligraphy. Much more specifically there was an ongoing presentation of women, veiled, in burkahs or long, flowing black dresses, often armed with pistols, machine guns or knives. Many of these images seem originally to have been photographs by the Iranian artist Shirin Neshat. The most consistent elements were masks, burkahs, the eyes peering out from them, weapons, and hands. The titles of the tracks and albums, which Muslimgauze said were the key indicator as to how a listener might uncover the tension driving the track, were almost entirely Arabic words. They were names of places, particularly where massacres of Arabs had taken place, of Middle-Eastern events on a larger scale, of key political figures, of landmarks. Many were also simple names of basic elements of Muslim life, like "sharia" (Islamic law) or "zakat" (the requirement for 5% alms-giving). And there were references to media and media mechanisms themselves—tape players, minaret speakers, radios.

Whatever form they initially took, Muslimgauze encountered these political facts in exactly the manner permitted by the structuration of the ambience of Bryn Jones' room, or more widely of Manchester, which he rarely left. Through this volume of air, light, architecture, technology, with all its various distributive behaviors, there floated various images, voices, printed words. Muslimgauze gravitated to stories of victimhood, of oppressed

persons and groups, and to those heroes of violence who rose up in response, as resistance fighters. There was something pressing about those images, something to which Muslimgauze responded. Something even to which Muslimgauze was a fifteen-year response, something which was formative of Muslimgauze and all those 2000 tracks. And this response, while it was a response to a signified “other” at an indeterminate distance from Manchester, was also a response to a materially-present “fact,” having a material form, exactly here in Manchester, exactly on Muslimgauze’s eye or ear. The displaced signified and the immanent materiality of its signification, definitively uncapturable, and singularly capturing. One thing this chapter seeks to elucidate is the ubiquitous structuration of ambience in these two registers.

Political events reached Muslimgauze as image, sound and word, entered, they said, their brain, and came out their hands. This was the official process. Jones reiterated it in his interviews, as a part of his mantra. “The starting point for a piece can be a picture of an event, sounds, voices, reports of events, it can be anything Arab, Indian, etc... An image in my mind leads to a rhythm, which flows down into my hands and with Western instruments mainly I create a piece.”²⁴ “All Muslimgauze music originates in my head, from this vacant lot. It travels down and out through my hands, using modern technology and old acoustic instruments, everyday recorded life, odd sounds, old recording machines, in fact quite a lot of different mediums are forged together to produce that quality that is Muslimgauze.”²⁵ “I translate an idea from my mind, through my hands. I create this idea using old analogue equipment and percussion from various countries. Over this I place things from cassettes, which could be voices/instruments.”²⁶ “I never touch the Internet, have never seen it, have never used a computer, don't want to, I make Muslimgauze CD's with my hands, not on a

²⁴ Interview in *Industrial Nation*, Issue 9, Summer 1994.

²⁵ Interview with Nicolas Prevel, *NHZ Magazine*, April, 1995.

²⁶ Interview with Guillaume Sorge, *Trax - 40 000*, September, 1998.

computer keyboard.”²⁷ “My eyes or ears begin the process, my brain takes over and my hands finish it off. Most people don't like the results.”²⁸

Eyes, ears, brain, hands. Eyes, rhythm, hands. Message passed into gesture, passed daily through this route, into knotted densities of beating, raging space, pulling beating hands into itself, rattling the windows. Or might one go so far as to say that the gesturality already materially constitutive of the image, the word, etc.,²⁹ was extracted by an intent to act, even continued through that act? That the idea as act and active continued itself through Muslimgauze, who never ceased moving with sound?

It is worth noting how uninteresting the alternative is. The person rolling their eyes right now is probably thinking something like this. Bryn Jones, a socially and psychologically disturbed person, never moved out of his parents' home. He stayed in the same room in which he grew up, refusing passage ever into adulthood or the *socius* proper. An amateur investigator of certain types of news, and a fetishist of the Eastern, he was prone to conspiracy theories and an oversimplification of political realities which personally he refused to go out and confront. Whatever rage or anger there was within his music was his own, genetically produced or the result of some trauma with his parents. His constant return to the space of the headphones in the space of his room was an attempt to re-enter the uterus, to retreat utterly from shared reality. The chronically repetitious nature of his music reflects this pathological compulsion. That a certain small set of individuals find some interest in his music may show that such pathologies are not unique. At any rate, the fact that he was a willful supporter of some of the worst and most violent characters on the planet, tyrants, madmen and terrorists (people we all know are bad), is a symptom more of his own need to react against some authority than an

²⁷ Interview with Marc Urselli-Schaerer, *Chain D.L.K.* Issue #5.

²⁸ Interview with Dmitry Kolesnik, *Achtung Baby!*, 1998.

²⁹ Which for Agamben, recall, constitutes its politicality.

actual political agenda. A monograph of the present sort misses entirely this sad comedy, and conflates infantile regression with political expression. Etc.

Need one reply? That we all know these figures to be “evil” with such unquestioning certainty is one sign where the (mnemonic) recoil from reality occurs. (It is just that certainty that the titles of the tracks are meant to interrupt.) That a production of 2000 tracks with political titles can be cast as essentially apolitical is another; that such a production, distributed through the world, can be cast as a uterine fantasy is a third. But the real stopping point for a traditional view is the idea that rage could be other than personal. We are very set on the idea that whatever happens in feeling, indeed whatever happens in the individual brain, must be original, stemming only from there. This is the discursive means by which ambient continuity is denied. We are supposed to be a “kingdom within a kingdom,” to use Spinoza’s pejorative phrase. As Althusser points out though, the political is neither public nor private. The political is that which establishes this separation.³⁰ The insistence, then, that a person engaged in an all-out activity, in a material discourse with a conflicted materiality, is named as passive and delusional, is indeed political. And so, beforehand, is this activity.

Eyes, ears, brain, hands. But not just hands. Hands with “western instruments, modern technology, acoustic instruments, everyday recorded life, old sounds, old recording machines, percussion from various countries, cassettes.” That is, hands in conjunction with the exact material structuration of Bryn Jones’ room, hands operating in a certain space and time, with exactly the implements available there. “I use anything I can get my hands on.”³¹ Even those

³⁰ “...the State, which is the State *of* the ruling class, is neither public nor private; on the contrary, it is the precondition for any distinction between public and private.” “Ideology and Ideological State Apparatuses,” in *On Ideology*, p. 18. Admittedly Althusser says “the State” here, rather than “the political.” On the Marxist model that he develops, in fact “the political” is superstructural, as too is the State. The true precondition is always productive relation. But the basic point is that some pre-determination, by infrastructural and property formation, determines the divisions and meanings of “public” and “private.” Rancière’s “distribution of the sensible” covers this key distribution. Recall that Rancière was a student of Althusser’s.

³¹ Interview with David J. Opdyke, *AmbiEntrance*, March 7, 1998.

hands are historically specific, having been habituated through all their previous endeavors, including their listening to Can, Faust, and Throbbing Gristle. This room, in addition to its retraction, its negatively determinant divorce from the socius, is explicitly only on the skin of the socius, this very one, in Manchester 1998. In fact it is only and exactly by means of this exhaustive specificity that it is possible for its negation to be determinant. That pressure that Muslimgauze felt from the daily injustice telegraphed by media (though buried beneath the message) was a pressure demanding realization by the formation of immanent material (that is what pressure demands; that is what force is).

Yet out of all these elements, all these instruments and materials, it is the drum machine that is “the second backbone,” the one that was manifestly formative. Why? Marx always noted the continual feedback process between the individual or the socius and the immanent material with which they are moment by moment confronted. Human activity consists in the working over of material, and the pressure of that material demands work. Hands press on drum, drum presses on hand. In Bryn Jones’ room this cycling system occurred both at the surface of hands and in the air. It was iteration of speaker cone against air, air against eardrum, eardrum into hand, hand against drum, hand on button, speaker cone against air. Each synthesizing collision along the course of this cycle was physically recorded, insofar as it changed the character of the system and then insofar as it was captured on a medium (I mean that it was already captured in a medium, the room, the hand, the memory, even before it was captured as “media.”) Materiality transformed itself furiously for those fifteen years, in that room (whether we want to call its transformation pathological or not).

It always does so differently, and in every locality it does so with a sharpened specificity, a specificity absolute except for the motion or motivity, except for the pressure. That air in that room, like all of Manchester, was humming at 50hz. In it, and throughout the house, and on the street, there were constant tickings, of clocks, of appliances, of cars.

Constant bumps, repetitious tappings and beatings. The repetitive beat was already built into Bryn Jones' soundscape. And it was simply there in the drum machine itself, that material possibility. That particular technology, based on sound synthesis and step programming of triggers, as Jones himself noted, infiltrated most of the studios in England. Technology marched forward, under all the various energies of market and development.

Still, it was just one instrument among many, and one can yet ask why it played such a formative role, as indeed it did for all the dance music in this period, and does to the present. A preliminary answer would be that its inflexible character, its insistence on a squared-off, mechanical time meant that other instrumentation had to be built around it, and never the other around. That is somewhat true, although the step-wise format is shared by samplers, but it seems rather an obstacle than an explanation of its centrality for the genre.

That the Roland machines in particular, the 808s and 909s that appeared just at the time of Muslimgauze, in the early 1980s, were so popular was also related to their totally synthetic sounds. They were beloved just for their mechanism, and particularly for their explosive kickdrums. And here is the better answer. The drum machine forms a backbone because it too possesses a tension, a disequilibrium with the system of habitual gestures confronting it. That automaticity which Adorno lamented sings its own erotic methexis; it pulls bodies and they pull back, trying to dive into its regularity; they fail; this is delightful. They try again. The dance track is fabricated of the reiteration of this delicious, erotic moment, in which, while giving itself entirely over, something is yet held back. Flirtation, a first erotic touch, and each beat again the first. Methexis interrupted by mimesis, mimesis interrupted by methexis. This conjoined with a high-amplitude, rib-shaking shock, once or twice per second. Fear and the harnessing of fear, explosion and its endurance, death and its surpassing. A way of splicing and refurbishing gesture in a dimension beneath representation.

The reiteration of that dimension, and hence freedom from the concept. Then the avenging return of linguistic thought. Multi-dyad pulsation.

Just as there is something compelling about “ethnic” music even beyond its significance as “other” (which certainly may be used to sell soaps or wines or movies or whatever), something having to do with its own materiality, let loose from lips and hands and real places and bearing in gesture their imprint as every product bears the exacting trace of its production, there is something alluring about the mechanical beyond its meaning as “automatic.” I reiterate: dance music is not about meaning (which does not mean either that it is meaningless).

The first claim here, that there is something really, materially “other” about the “other” cultural product, is difficult or dangerous to say. Again it seems to risk “Orientalism,” that failure to recognize that “otherness” is semiotically ascribed from the position of the same, that only within the hegemonic system does what is other receive its valence, and that therefore that valence is a mask. What I am saying is just that, despite all this, the other still is, in its origin and hence in its habituation, other, not in its signification, but in its material reality. It is a strange feature of a discursive climate in a sort of after-party hangover of the sign that we still have such trouble acknowledging that there is anything other than the sign. This difficulty is built into this environment ideologically: ideologically the function of the hegemony of the sign is the exclusion of what is not semiotic, of real gesture, habit, materiality, and violence. In the end, to say that all is discourse is to say that... nothing exists. Such a secret nihilism has a peculiarly calming effect. It prevents “the prolongation of thought into gesture.”³² The culturally-other product, or the technologically-other machine, run counter this calm.

³² Tiqqun, *Introduction to Civil War*, p. 146.

The drum machine is a machine for the further mathematical tautening of a domain already saturated with beats, beeps, clicks and whines. It nestles in that ambience at once as an explication of its own character and as a drive to be even more so. There is a certain rage of the regular. In music like Muslimgauze, that taut drive is given over in an explosive kickdrum beat, a shock which compels a physiological, gestural response. A methectic force in the form of an ambient pulse to the ribcage. Hence the beat is connected with two real material possibilities. The first is the generalizing regularity of the metric, throughout the tissue of ambience. The drum machine presses toward that. But the second is the deathly power within this tissue, its real material power to kill, indefinitely and absolutely—a power extending to each and every of its moments, its measures, even this one now, as we listen. I suggested in Chapter 3, in reference to Can, that the beat itself had something to do with the bomb (it is often named according to this relationship³³). Insofar as beat-driven music is connected with that recurrent shock, even especially as that occurs at a sub-significant level, it musically expresses material possibility to a greater extent than musics rejecting the beat as simplistic or regressive. On a somewhat grandiose scale, this is the possibility of military or environmental catastrophe (which at this point in history are the same). On the local and completely concrete scale, it is the continued material reality/possibility of physical compulsion, violence outside the order of signs, to which the body by its very nature is perpetually exposed. As Hijikata says, we are after all always naked. Indeed, that the beat might be materially expressive of a sort of ultimate material possibility, some suspicion must really fall on sophisticated musics which exclude it a priori, calling it only inarticulate signification or crass physicality. Their gesture of exclusion occurs at exactly the same sub-significant level as what they press outside. In this they perform an ideological gesture painting the academically actual as the

³³ Simon Reynolds has written about this association for example in “Wargasm: Military Imagery in Pop Music,” in *Virtual Criminologies*, v. 6, 1996.

totality of the possible, and hence the real possible as impossible. In this Cornelius Cardew is right, that “Stockhausen serves Imperialism.”³⁴

Muslimgauze, with its two backbones, is the conjunction of two axes of rage: the stream of suffering voices who are also enemy others, their faces blotted out by black masks and their humanity denied by captioning (the real character of the semiotic, as Benjamin and even Roland Barthes knew); and the stream of technical automaticity, exceeding our own regularity and our own violence, entraining us ever more deeply just by this superlative force. Through this bringing to a point of material potentiality, equivalent to the kernel of stupid force Žižek locates within every signifying network, an asignifying diamond bit, inordinately hard and stunningly meaningless, we manufacture ambience and it manufactures us. Both we and it are thoroughly machinic, thoroughly organic, and in our pulsating embrace, thoroughly self-producing.

The first of these axes, the “other” unseverable from the socius, is invisible and inaudible, even and especially in her images (which is why, of course, Orientalism is a problem). The latter is the axis of noise. Insofar as both are rooted beyond the functional social formation and beyond its cloaking ideology, both exert a certain magical or violent force.

The Abraham Mosque in Manchester

Jones says Muslimgauze began as a response to the Israeli invasion of Lebanon in 1982. From its inception, it drew its titles from the figures involved in the complex set of conflicts distributed across the Middle East. The leader of Fatah, Abu Nidal, who was involved on the Palestinian side against the Israelis in this first Lebanese incursion, is

³⁴ *Stockhausen Serves Imperialism and Other Essays*. Published 1974; written perhaps 1971 (the same year that *Tago Mago* was released).

referenced in several tracks. Perhaps the event that exerted the greatest influence on Muslimgauze, however, was the second Hebron Massacre, at the Abraham Mosque in the Cave of the Patriarchs, in 1994. A number of tracks reference this event, including the 25-minute track, “The Hebron Massacre.” The only site receiving more attention is Gaza.

The first massacre in 1929 was a killing of 67 Jews by Arabs, an event bound up in a series of conflicts between Arabs and Jews, both under British rule, nominally over control of holy sites. In this earlier massacre, Jewish people were killed at a number of different sites including Hebron, in circumstances where almost the totality of local law enforcement were Arab, and where British forces stood idly at a distance. The more recent massacre was of Arabs in the midst of worshipping by a Jewish settler named Baruch Goldstein, who by many accounts was granted access to the Mosque by IDF guards (perhaps they took the heavily-armed figure as a fellow soldier), and by some accounts actually aided by an IDF squad in the shooting. In this more recent incident, 29 worshippers were killed and over a hundred wounded.

For a series of perhaps twenty albums Muslimgauze would include in their liner notes the assertion that all tracks were recorded and mixed in the “Abraham Mosque, Manchester.” Physically there seems to be no such mosque, nor a mosque with a recording studio in which a non-Muslim, white local could record industrial-ambient dance music nominally related to the plight of Arab peoples. Rather Muslimgauze’s own room was this mosque. Naming it in this fashion was a way of identifying the force behind the recordings, and even a way of saying that the music itself was a prayer offered to this memory, to the memory of those shot in the midst of prayer.

The track “The Hebron Massacre,” which goes on for twenty-five minutes cycling the same three-second synth phrase, one might say traumatically, begins with a voice saying in English: “the blood of Palestinians.” That phrase recurs through the track. Submerged in its

material, at various depths allowing various levels of comprehension of message by a listener, are voices, also in English but with Arabic accents, recounting in fragments the participation of the IDF in the shooting. “Allowed the settler into the mosque.” “Actively aided the settler in the shooting.” Muslimgauze thus offers a materially-pulsing presentation of the voices which in major media were suppressed, but which in some media form did indeed make their way to Manchester. (These voices are that media). In the dominant story, in that history which tends to be the fashionable wardrobe of the victors, the incident was broadcast as the work of a lone, unbalanced shooter, or of him with a second person passing him clips. The IDF were not investigated.

The voices in the Muslimgauze track are anonymous; their message is usually submerged, often incomprehensible. Because the message recurs, it can eventually be made out. Such in some fashion is the nature of Muslimgauze’s political project, bringing attention to voices systemically unheard. Really though it is not so much about hearing the message, as it is about feeling the trauma. Muslimgauze is the sound of the trauma as it exists in one bedroom in Manchester.

That Muslimgauze do not mention, and may well not feel, the first massacre, siding loudly with the most violent Muslim factions, is undeniable. In that prior event, both British (passively) and Arabs (actively) were aggressors, and Jews, as on such a large scale ten to fifteen years later, were victims. In recurrent waves the victims become the aggressors: the Jews as settlers and as IDF, and now again, the Arabs as Fatah, Hamas and Hezbollah. If there needs to be a defense of Muslimgauze, it may be that still today it is the Israelis who guard all the entrances to Palestine, often with military equipment provided by the United States. From the perspective of Manchester, and Muslimgauze is Manchester music, it is the Arab “terrorist” who is the figure of the “other,” and whose image as such fits him for nothing so much as a crosshairs. To speak for that blotted spot, as in Germany 1941 to speak for the

vermin, is necessarily to encounter a common-sensical resistance. The voice of the other is a moveable silence, an anonymous, erasive focal point in the crosshairs, a blind spot every bit as mobile as that on the eye. Whether it is called Jew or Arab, vermin or terrorist, its sole meaning is exile. But today the name is terrorist. To announce support for Hezbollah is then to call “evil” human. That disrupts the labile behavior of the whole signifying, stupefying system. Because of the essentially obscuring function of the othered name, to present as Muslimgauze does these “political facts” is not so much to engage in a communication of meaningful message, as it is to push directly upon the system of communication. Not to signify, but to testify. In this sense, perhaps (and without any reference to religion), to pray. To pray in a closed and echoing space, nude to the silent approach of violence.

Constricting Space

Eyal Weizman, who is an Israeli video artist and activist, has recently written a book called *Hollow Land*, in which he depicts the architectural-military occupation of Palestinian lands by Israel as a continuation and development of the birth of the disciplines in Europe. It may of course be the case, it likely is, that the Middle East bred its own topology of power in its own very long history, the most recent regional version of which would have arisen during the long period of Ottoman rule. On the other hand, the present patterns, military, political and architectural, owe as much to the West. The British military, which controlled Palestine from the end of Ottoman rule until the creation of Israel in 1948, brought with it centuries of military regimentation, as well as architectural habits and the specific spatial techniques taught in military academies as the art of war, during that period. More importantly, many of the founding personalities of the present Israeli state were European-born and -educated, while figures of contemporary importance for both the military and architecture continue to be educated abroad. They bring back with them strategic thought and spatial planning in

continuity with colonial Europe. They read Foucault and Deleuze. In this respect the antagonistic situation at Israel's extremely complex borders, external and internal, continues to be a colonial one.

Weizman's account, besides attempting to show the nesting of control and disciplinary implementations of power in the occupied territories, in the highways and checkpoint systems, and at the demilitarized border crossings (whose logic have been copied on the U.S. borders with both Mexico and Canada),³⁵ seeks to elaborate a further set of spatial mechanisms in addition to those presented in Foucault or Deleuze. These are techniques which Weizman asserts have been developed in Israel, and particularly in urban warfare in the Palestinian camps, but which have now become standard for urban warfare in places like Iraq. Leaving aside the command of aerial space, for surveillance, bombing, and the pure production of social submission from those on the ground—a perspective which will be more important in the Conclusion—it seems that Weizman articulates two further spatial techniques which are of interest to the present discussion. The first is very much like the pattern of discipline, except that it is outwardly expansive. This technique is architectural expansion, via civilian building and roads, in a manner that is militarily tactical, spatially analytic (it cuts Palestinian land into segregated parts, between which movement may be monitored or halted), and superficially innocuous. By means of this sort, particularly through the placement of

³⁵ In particular Weizman thinks that the border crossing constitutes a new mixture of two forms of social power, what Foucault calls "discipline," and then what Deleuze calls "control." At crossings for example from Jordan into the West Bank, civilian travelers encounter un-uniformed Palestinian civilians who check their papers. No explicit military force is visually present; the mirrors behind the Palestinian authorities seem decorative. Whatever monitoring these civilians engage in is supposed to be self-monitoring, such that the condition of control which nevertheless persists is post-disciplinary. (That is, it is not based on a condition of feeling oneself to be immediately physically monitored). And yet behind the mirrors are, literally, the IDF, and the Palestinian authorities themselves are aware of this. They pass the papers of each traveler through a drawer to those invisible persons, who they know are watching them; it is those persons who make the real decisions as to who enters and who does not. This is a disciplinary or panoptic mechanism, based on the real knowledge of being, always maybe, really watched in a structured and enduring fashion. Weizman takes this explicit architectural-social relationship to be indicative of the general relations between Palestinian authority and Israeli, as those have been codified and implemented after the Oslo Accords.

settlements and their gradual incorporation into the Israeli urban web, Israel has outflanked most of the Palestinian territories, separated them from one another, and by this means effectively laid siege to a population which it can nevertheless claim is outside its responsibility.

While this technique operates through outward-probing expanse, the second works through constriction. Probably the latter would not be possible without the former, which provides staging areas for military manoeuvre and prevents escape and reinforcement of enemy militants; and on a broader scale it is already an essential effect of the former. When Israeli infrastructure in the form of roads and then development along roads expands to connect with settlements on hilltops, etc., whatever is between this road and the next, this hilltop and the next (which Weizman shows were explicitly, strategically selected by Ariel Sharon, as minister of Settlements, for their military value), is effectively cut off from its neighboring region. During Intifida or lesser military situations, Israel may block passage amongst these analyzed Palestinian sectors. In fact it may always do so at its own discretion, and regularly uses this power.³⁶ This is to say that Israeli expansion constricts Palestinian social space. It also means that increasingly, Israeli-controlled ambience is the horizon of Palestinian life. Behind this space here, not God, not Air, but the IDF. Outside Fallujah, the Americans. (Above both, the bomb.)

Weizman shows that the expansion of Israel aggressively into Palestinian land is regularly concealed by architecture. In Jerusalem, for example, an old zoning ordinance, reaffirmed by the British and strongly enforced today, demands that any new construction be sheathed in stone. This covering of new surfaces with “old” material, while in certain cases it

³⁶ “According to the Union of Palestinian Medical Relief Committees, 85 per cent of people in the West Bank did not leave their villages during the Intifada’s first three years due to the curfews and closures.

The security rationale for the checkpoint system is further founded on the belief that the less Palestinians are permitted to circulate through space, the more secure this space will be.” Eyal Weizman, *Hollowland*, p. 147.

simply produces architectural anomaly (for example, when modernist buildings are clad in this fashion), nevertheless has the general effect of rendering the everyday living space of Israeli citizens “normal,” even when that space is newly constructed on contested ground. Weizman considers this normalcy one of the most insidious aspects of occupational expansion. Because whatever new volume of city feels roughly like the old, the general citizenry escapes the feeling of unjust incursion, and the military gains a docile citizenry to buttress its own manoeuvring. The last, small but telling detail to mention here is that the stone ordinance is quite specific with regard to the type of stone which may be used. This “Jerusalem Stone,” used to construct a Jerusalem that exhibits an “authentic” face largely modelled on the Palestinian village, is actually quarried from Palestinian lands, “mainly from the bedrock around Hebron and Ramallah.”³⁷ That is a quarrying economically quite valuable to the Palestinians. Yet their own labor, and their own earth, thus goes to mask and beautify the seizure of both.

The effect of the general expansion of Israeli territory is to surround Palestinian territory and to make movement there, or between the over-200 parcels created by this analytic, pinching thrust,³⁸ extremely difficult. Not only persons going to work or school, but the goods they require to live, are subject to indefinite delay. “In *Checkpoints*,” writes Weizman, “the recent book by the Palestinian-Israeli member of parliament, writer and political activist Azmi Bishara, Israel is no longer called by its name but termed ‘the state of the checkpoints’, the Occupied Territories are the ‘land of the checkpoints’, the Israelis ‘owners of checkpoints’ and the Palestinians ‘the people of the land of checkpoints’.”³⁹ The living space itself derives its character from the limited access to it, the difficulty of moving through it. The local ambience of the space is constricted, and exhibits this constriction. More,

³⁷ *Ibid.*, p. 33.

³⁸ A series of “200 separate, sealed-off ‘territorial cells’ around Palestinian ‘population centres’.” *Ibid.*, p. 146.

³⁹ *Ibid.*, p. 174.

the pressure from without is active—it can and does bring the pressure to new heights—it is a constricting force, one indefinitely invasive. There is no open air around Hebron or Gaza; both are now caves whose stone, dug up, returns collapsing home.

This technique of constriction, of the controlled and discrete implosion of space as a technically complex military manoeuvre, this technique which is the precise one exported with American forces to Iraq, continues well beyond its initial gesture via the settlements. Utilizing the very spatial theory that they learned from Foucault and Deleuze (and from the architectural theorist Bernard Tschumi⁴⁰) in their studies in Europe, Israeli military personnel have begun to turn the space of the settlements inside out, bringing military force into civilian bedrooms. Weizman identifies the 2002 IDF incursion into the Balata refugee camp as the seminal one for the technique of “walking through walls.”⁴¹ Because in this circumstance Palestinian militants had blocked and booby-trapped such a significant portion of the public thoroughfare, as well as the windows, doors and stairways by which buildings might be accessed, the IDF opted to bypass these traditional bodily corridors altogether, instead preferring to blow their way by force through walls. The majority of the fighting that took place in this battle, as also in the famous battle of Jenin and in the larger number of battles occurring under the auspices of “Operation Desert Shield” later this same year, took place in

⁴⁰ See Bernard Tschumi, *Architecture and Disjunction*. See particularly “Violence of Architecture,” pp. 121-139, which is in relatively precise alignment with the general views presented in this present study. The chapter begins: “1. There is no architecture without action, no architecture without events, no architecture without program. 2. By extension, there is no architecture without violence.” (p. 121)

⁴¹ Actually this had been a guerilla technique for some time. The communards in Paris in 1871 used it, for example, as a means to travel and shoot down upon federal forces in the street without exposing themselves to fire. (See Kristin Ross, *The Emergence of Social Space*.) It was already in use in Palestine as well, before the Israeli adoption of the tactic. As Weizman notes, there is a co-development of the tactics of either side. Yet the Israeli adoption of the technique involved a scale and a systematicity, and a technological sophistication, that was unprecedented. The export of the technique to American forces in Iraq includes this full development. The second battle of Fallujah, which forms the key content of the conclusory chapter of this study, is the setting in which this technique was first used on a broad scale by American forces.

private spaces, in living rooms and apartments, with the streets left surprisingly bare. It is right out of *Brazil*, but not so funny: the home become battlefield, interrogation chamber, prison.

For anyone who might imagine that moving through walls constitutes a relatively ‘gentle’ form of manoeuvre, it is worth describing the IDF’s tactical procedures: soldiers assemble behind a wall. Using explosives or a large hammer, they break a hole large enough to pass through. Their charge through the wall is sometimes preceded by stun grenades or a few random shots into what is usually a private living room occupied by its unsuspecting inhabitants. When the soldiers have passed through the party wall, the occupants are assembled and, after they are searched for ‘suspects’, locked inside one of the rooms, where they are made to remain—sometimes for several days—until the military operation is concluded, often without water, sanitation, food or medicine. According to Human Rights Watch and the Israeli human rights organization B’Tselem, dozens of civilian Palestinians have died during the attacks.⁴²

Imagine it – you’re sitting in your living room, which you know so well; this is the room where the family watches television together after the evening meal... And, suddenly, that wall disappears with a deafening roar, the room fills with dust and debris, and through the wall pours one soldier after the other, screaming orders. You have no idea if they’re after you, if they’ve come to take over your home, or if your house just lies on their route to somewhere else. The children are screaming, panicking... Is it possible to even begin to imagine the horror experienced by a five-year-old child as four, six, eight, twelve soldiers, their faces painted black, submachine guns pointed everywhere, antennas protruding from their backpacks, making them look like giant alien bugs, blast their way through that wall?⁴³

Weizman tells how Sharon improved Israel’s military strategy versus its neighbor in Egypt by constructing a new form of defense at the Bar Lev Line, which fronted the Suez canal after the 1967 war. While his superiors, particularly Bar Lev himself, were committed to the construction of a defense which was in fact a line, difficult to penetrate and fully dividing friend from enemy, Sharon was interested in a defense “in depth,” again using the high points of the land, for miles back into the Negev desert. This defense allows an enemy a greater ease of entry, but then it uses that ease and the enemy’s consequent overextension to fall upon him from various points. When one point is lost, the rest may be reconnected in a continually-

⁴² *Ibid.*, p. 193.

⁴³ *Ibid.*, p. 195.

morphing network to oppose both the enemy on the ground and the position he has taken. “Systems theory,” Weizman suggests, has its adolescence in these military applications.

With this approach to defense, the border obtains depth. It is no longer just a two-dimensional segmentation determining separated contiguous zones. It is itself a space of overlap, in which entities from multiple spaces meet, battle, reconfigure, morph into one another. (In the same year as the 1967 war, Foucault referred to such a space as a “heterotopia”⁴⁴). It is a space in which space melts under the pressure of opposing spaces. The occupied territories are such a border in depth. In fact, as the soldiers streaming in through the wall make clear, the occupied territories are all border. There is no private space that is not also a public space; no space which is not a tactical space in which militants of every local persuasion manoeuvre. It is out of such a tactical space, out of this teeming border within which identities and targets appear and disappear, constructing and reconstructing the space around them, that the tapes, the voices, the news stories—those political facts—that reached Muslimgauze, came. It is from within the tightening grasp of a constrictive space, pressing from both its sides with IDF and Hezbollah, upon the fragile bubbles of small sleeping chambers, that the little parcels of ambience are flung out, floating through the materially-structured ambience according to media-distribution infrastructure, ending up as innocuous “messages.” As such, as just more news, neutralized with heading, caption, and the rhetorical namings corresponding to what we all already know, their fate resembles that of Palestinian land under “Jerusalem Stone.” And yet they are not just message: they are gesture, movement, affect, fear and rage, which may be felt. That is what Muslimgauze feels, discerning the material beneath the semiotic by participation in it. He had felt this space. Asked in an interview around 1987 “how the future look[s] for Muslimgauze,” he responded:

⁴⁴ See Foucault, “Of Other Spaces,” 1967.

...If this album, the next album, the album after doesn't sell, then the support won't be there, and we may have to stop. But... those political facts are still there. The political situations that influenced me two to three years ago haven't been resolved and don't look like they will be resolved for years to come. In particular the Palestinian situation, which is a timebomb. It is not going to get better. I can only see it getting worse. Because if, when the people are in their own country and they don't even run it, they're in camps, and in bits of land stuck away in the back parts of town, like Gaza. I mean, the places in South Africa which attain a high level of interest in people in the media, like Soweto, those people are luxury compared to what the Palestinians are living in. I mean, Gaza, the West Bank, are truly dreadful places. And there are now parts of Afghanistan, through the bombing, which are just the same. And these are facts. And these are the facts which influence the work of Muslimgauze.⁴⁵

Capacity for Rage

Particularly though it was the rage in which they participated. The constrictive space, squeezing, produces an increasing sense of immobility, an increasing sense of being ready prey, for those within its grasp. Rage builds as the frenzy of those on the verge of utter destruction. Hezbollah, for example, is an expression of the rage of such a strangled people. Compaction of this sort has the remarkable capacity to push aside all the ambiguities of the semiotic, of ethics, and to render pure directionality. Peter Sloterdijk, writing recently about rage and its notable absence in passive Western culture, where inhabitants occupy a space and time perfectly hollow, equilibrrious, unremarkable, just passing, offers this contrast. "He who is driven by rage... is past the anemic time. Fog arises, yet shapes become more determinate. Now clear lines lead to the object. The enraged attack knows where it wants to hit. The person who is enraged in the highest form 'enters the world like the bullet enters the battle.'"⁴⁶ "Forces of this kind are monothematic... because they take hold of the whole man and demand that their one affect occupy the entire stage."⁴⁷

⁴⁵ *Bryn Jones Speaks*.

⁴⁶ Peter Sloterdijk, *Rage and Time*, p. 10. For the last clause Sloterdijk references Bruno Snell.

⁴⁷ *Ibid.*, p. 9.

Muslimgauze found these instances of escaped ambience from surrounded space everywhere as they looked through the images around them, sorted through the library, captured voices passing through on tape, to play them back. Rage, and the urge for revenge. “Najibullah the Headless” references the second president of the Republic of Afghanistan, who under Soviet control tortured and killed thousands of Afghans, finally to be captured by the Taliban, himself tortured, castrated, then beheaded and his headless body hung in public. In Bryn Jones’ room these bursts of “*thymos*”—Plato’s word for “spirit” in *The Republic*, and hence for the capacity for rage, which Sloterdijk references—were imprinted on media, which Muslimgauze mentioned as well. “Abou Hamza on Cassette Tape” is named after the leader of Islamic Jihad in Gaza.

Another track, “Bandit Queen,” references Phoolan Devi, who Sloterdijk discusses as well:

From the state of Uttar Pradesh, Phoolan, when she was still quite a young woman, was the main actress of a widely watched reality drama that aired across the whole of the Indian subcontinent. After she had been collectively abused and raped by her husband and other male inhabitants of her village (including policemen), she fled and joined a group of bandits with whom she devised a plan to ambush and liquidate those who were guilty of the crimes against her. The corpse of her husband is said to have been put onto a donkey and chased through the village. The simple folk celebrated the rebel as an emancipated heroine and saw her as an avatar of the gruesome-sublime goddess Durga Kali. The photograph that depicts Phoolan Devi’s handover of her weapons to Indian law enforcement officials is one of the archetypal press images of the twentieth century. One can see in the young fighter all the concentrated anger of being given over to her undecided fate.⁴⁸

In every case, it was this force of just anger, with its conviction of the necessity of violence, that Muslimgauze harnessed. We might go so far as to say that Jones himself was an extremist, leaving aside for the moment all the complexity or stupidity that term conceals. He himself said that he could have been a militant; or rather, that music was his form of militancy. He believed that his music was this struggle, in a particular form.

⁴⁸ *Ibid.*, p. 53. This image appears on more than one Muslimgauze album cover.

To me, music is an outlet for an anger inside, the shit I see, hear... I could inflict damage on Elal airways offices or go further, for this I would be put away and then my anger could only be inflicted on four walls.⁴⁹

But he wanted his music to walk through walls, like militants. As indeed, on the fine paths of distributive infrastructure, it does.

Death in Gaza

Bryn Jones died before James Miller did; had he not, he would have found James Miller's "testimony," produced with his wife Saira Shah, *Death in Gaza*, engaged with the sort of "political fact" that interested him. That documentary comes out of just this same militant space, the border in depth, that we have been discussing. It is composed of images shot in Gaza by Miller and Shah in the period of time leading up to Miller's shooting, at night, in a cleared perimeter around a camp, by IDF forces. Aside from further rendering the folded space that Muslimgauze so felt, it also says a lot about the precarity of the "aesthetic function," as I have called it, as well as about the manner in which life in these camps produces the masked men we call "terrorists." With that it also introduces some intriguing problems of identity, or more specifically, problems regarding the overlap between semantic identity and motive tactics. Those problems will carry us over into the last half of this chapter.

Consider the walls in Gaza. They are covered with posters of martyrs. Everyone who is killed, whether militant or innocent, is a martyr, and their face becomes a part of the architecture. For the militants, this may be the first time for quite a while that their face and their actions have met: they manoeuvre, even in the dark, wearing masks, because to be seen, is to be known, is to be killed. Only those who have died become image; life hovers in the shadow, from which it also pounces.

⁴⁹ Interview with *Network*.

Miller and Shah's documentary follows three children living in Gaza. In perhaps the most stunning of the scenes, we follow the 12-year old Ahmed, who is considering becoming a martyr, into a militant stronghold. There four men in pitch black masks, with white, calligraphied bandanas, sit leaning against the walls of a room. One places a pillow on his lap and plays a game slapping hands with Ahmed. He is charming, although his face is absent. Very easily, however, we slide into a precarity. Asked how his school is, Ahmed responds that there is one teacher whom he hates. The response of the militant interlocutor, after a short pause: "let's see how you look with a rocket launcher." Ahmed happily obliges, and is instructed as to how to stand and how to shoot.

The masks that the militants wear in this scene, probably donned for the sake of the camera, are absolutely black, offering a view of neither eyes nor mouth. Just a black blot, at four points in the room, atop slouching bodies armed with rifles. From behind this darkness, in this vacuum of identity, the voice of the militant first plays, then seduces. This room is a real material possibility for Ahmed; through it he can go to meet his death. Everything will be arranged—the end will arrive shortly. This voice is the lure of that particular passage.

In general we might call the "aesthetic function" here something bland like "reporting," and we might debate the details of these reporters' behavior with reference to disciplinary codes of conduct, standards of honesty, rules regarding engagement or disengagement with events. But consider them just as people. Consider the danger of this room, with its armed men, they being British reporters from without. If they are to learn the identity of the militants, they become themselves the material possibility of these men's death. That is why the men are wearing the masks—not just to scare the Western public. Even knowledge of their whereabouts may constitute a mortal threat, and thus just cause for the reporters' elimination. They too are here in the face of death.

Like a friend, they have come into this danger, this depth of embattled border, this tissue in which space folds over identity, rendering the invisible present in circular blots at the head, for Ahmed. They have accompanied him where most people would not. In this room the militants, Ahmed, and our reporters are exposed, each to the other, and all to the unseen forces which do exist at some unknown distance behind the walls. It could be a quarter mile; it could be three feet. James' film or the digital converters within James' camera are one of several surfaces upon which this meeting occurs. The others are these bodies. The event even occurs upon the eyes of the militants, which are shielded from view but still in contact with the space (they see). Risking quite a lot, these emissaries of the aesthetic function have wandered into an ambience of exposure in order to bring something back, in order to testify. And yet they have also allowed Ahmed to walk into this space, where he might decide to die. They too have strategy and tactics, they too are the front of some strategic space extending behind them, whose logic presses them here. And we, and Muslimgauze, in the web of distribution channels falling behind them, occupy that space, or that network of spaces. In another ambient field this tense flirtation, with death, with rage, with truth, sits now upon our eyes and ears. To perceive it, we move with it. The question as always is how much we move, how much we participate. Or rather, the question is how much of our total participation we are capable of registering, and how much we consign to a repeating compulsion to suppress, as both we and Ahmed fall forward in a sprint of self-erasure.

What Muslimgauze would have felt in this perching of these images upon one's body—their possession of the body, really—is the immanence of death, and the violence immanent death justifies or compels. That immanence is there, really, in Gaza. And it is even there, really, in that documentary, insofar as each of those images is a performance of gestures within the present ambience, pulling us into itself. It is not that film is indexical, pointing nonproblematically toward some fact (which is probably how Bryn Jones understood it). Nor

is it that we have here images with a certain significance, which can be decoded. Both of these are the case, to some limited extent. But they are not the whole of the case; they are not the body of the image. The image ultimately is not imago, is not a picture, is not a representation over against a subject. It is not had by some mind; it is not neutralized or objective. The image is a performance by the space in which it occurs. As particularly labile aspects of this ambience, we perform this image, we execute a performance of the image in conjunction with all our other performances, those millions, in a tautness. But insofar as that first embattled space (although in reality there is no first) was also performance, iteration, a system of gestures and movements, hands comfortable on camera, hands comfortable on gun, hands playing a game slapping a child's hands... this "image" in actuality is the continuation of that event. Gaza is here in your living room. You may not be conscious of it, but it enters your body all the same. Gaza is in our habits. We cannot unsee or unhear. We have recorded that luring, that proximity to death. (This is the reason that we are so happy to forget so repeatedly).

An Israeli targeted assassination turns a car into a molten pretzel. It blows bits of flesh in all directions. Militant flesh or innocent flesh? It is impossible to tell. Assuming there is any difference. James, and we, watch children picking through the dirt to recover these pieces of flesh so that they may be buried. They place them in a plastic bucket. The children, their hands and that innocuous red-grey substance, and the bucket, dance through our living room and our whole body dances with them. We have danced that exploded flesh; we have danced the proximity of those children to death. Now Ahmed's hands and his friend's, covered in white gunpowder, press that dust into a reddish cylinder, a bomb for throwing at Israelis. This proximity of the hand to what might explode, this child's hand delivering the explosion, this child's eyes intrigued by this danger and proud of his own courage, which is, incidentally, a real courage and not a filmic one, sits upon the eye and dances, choreographing our motor

centers. We dance the little bomb. Ahmed's friend, dead, martyred, and the wails of the women surrounding him, his grey face and their sustained, glissanding pitches, lay upon our ears and eyes; we cannot hear without singing, we sing their lament. We inscribe it ourselves in our motions. Our bodies are now one billionth this lament.

All via the camera and the microphone, remember, all via their dance, which was part of the dance of James and Saira. Then James shot by Israelis on patrol—despite the fact that he identified himself as a British journalist. A reminder? No, the direct perception, the direct feeling, that the camera and the microphone breathe, that what falls upon them can kill. Though Saira narrates that she requested this not be done, James' picture was placed up on the walls of Gaza. A martyr, a memory, part of the architecture. The memory of space, and the memory of the body, are both these reproduced forms, moving in greater waves that expand and constrict. Muslimgauze, in their room, were deep in dangerous space. We, in our cars on the freeway, where are we?

The Hand and the Sign

Hands, burkahs, masks, guns. These are the key visual elements on Muslimgauze covers, and these, along with the Israeli military machinery, the bulldozers and the tanks, with their masking windshields through which one without cannot see but through which one is seen (on the film, the soldier is erased first of all—all that is there is machine), are the reiterative elements floating through Miller and Shah's documentary. The burkah and the mask on one side, the hand and the gun on the other. Consider that room again, with Ahmed and the militants. Press pause. It is true, and it is very easy to say, that what is depicted in that frame is a visual signifier of the other, of the terrorist. Indeed the masked man is a sign, overcoded and overdetermined. Meanings stream out and slip over that image, grasping and losing grasp. The masked man with his rifle means too much. We have here the Arab, the

Oriental other, the enemy as a visual category, the terrorist, the remnants of Black September as a media event, some vague affiliation with ninja movies, thus with the Asian other also behind a mask; a relation to horror films; a general indication of the “East” via the calligraphy on the bandana; a reference to the frontier of the “West” with the gun. There “are” references in fact to every associative likeness given in our prior perceptual history. That the masked men are images and that the images are signs is tightly linked to Condillac or Locke’s epistemology: the image is a parcel which we place within a network in our minds like little boxes: on its passage into that space it is gripped by a kindred schematic; many kin vye for seizure; the image is multiple upon entry. Of course this is an old and a false model of perception.

The image is sign, it is true, and the image of the masked men in their military garb, right down to their particular, tired-meets-malignant slouches are an overcoded meaning whose end we may never reach, and which veils over any reality we might think indexed. We can pursue this incompleteness in fantasy, and we do. Yet it is also true that the image is a moment in a wave of collisional synthesis, a spray outward from an event in which each element is alive and utterly specific, if not in the semiotic register. The mask is donned precisely because, besides being overcoded semantically, it obscures the face, whose semantics are the material possibility of death. Because the image of the face is perfectly knowable, because it is seized by institutional schematism, even via the automated procedures of machine vision in police apparatus, it is a total liability. For these men to show their faces on camera is for their cars to be hit by guided missile, their flesh scattered in the dirt, their homes and those of their neighbors bulldozed, their relations to be arrested, imprisoned and tortured. That is not an overcoding, quite, it is rather a total syndication of signification with activity. It is the gleaning of signification as choreographed action and the act of signifying as suicide. So while the masked man means these many things, too many things, on the other

hand the mask is a hole in the image where signification bottoms out, where it collapses into material gesture, the very gesture of the obscuring of the sign.

With the mask this erasure of meaning from vision is intended. Hypothetically it is the militant who so obscures himself, as a personal tactic. For the wearer of the burkah it is the society without who ordains her invisibility, her retaining of an excess of meaning in a domain beyond the public gaze. (Again here the veiled woman means an indefinite number of things; nevertheless what is never in her image, and this is the point, is her whole. Any clothing serves, among so many other little dances, a similar purpose.) In either case the sign spirals into erasure. The mask, a specific manner of collision upon a surface of vision, folds that surface on itself, giving both visibility and invisibility. In this it also specifies the function of the sign itself, which makes known at the same time it covers over, or that of focus, which in arranging a visual field about itself dances light into object and hides it as motion, hides even its presence on the eye and puts it at a distance. The mask or the sign are a border in depth, within which forces vye for recruitment, recognition, higher-order linguistic-mimetic synthesis, knowing. What the mask makes visible is the struggle around visibility, or in general, around phenomenal appearance as identity. Visibility and invisibility are the two aspects of a fold that runs through the image and through sound. The same fold is there in the voice, that anonymous voice saying “the blood of the Palestinians”—whose voice? The determination of answers to these questions are themselves tactical manoeuvres.

Versus the mask, the hand. Muslimgauze made music with Bryn Jones’ hands. Through his eyes and ears, into rhythm, out his hands. There are hands on the album covers, hands with guns, hands with eyes drawn upon them. Also remember Hijikata’s hands, divorced from his own body. The hand is a signifier denoting activity, even life as distinct from meaning. Thus the hand that runs away. The hand is an interesting signifier because of its strange relation to the face. My hands are mine in almost the way that my face is my face or

my body my body, but not quite. The classic Lacanian identification takes place in front of a mirror where I look at myself looking at myself, and where I am told, “this is you.” My face is my identity. If I give it over to someone gently I engage in love; if it is grasped institutionally I am arrested. But my hands, though they have their telling prints, are not quite me. To identify myself with my hands is in some sense to step beyond identity to activity, to say with the Existentialists that I am what I do, regardless of the mirror-games of vision. That is what hands signify by way of connotation. On the Muslim gauze covers they ask, “what do we do?” What do we do with the busy silence of our actions outside the domain of words? Because we do so act. There is a space behind the mask, there is an action in invisibility, there is both an activity which is signification, which is therefore distinct from the significance of action or the image of the hand, and an activity which is not signification. The vast majority of action, like the slight contraction and dilation of the veins, or the unconscious adjustment of the calf muscle pressing on the gas pedal, are of this latter sort. It is the vast syndicate of these subliminal activities which is the tissue of the social formation. It is all those unconscious gestures which are the systems meeting in ubiquitous borders in depth; it is they which are crafted as systematic through strategy in these dimensions. The sign is a little boat on this ocean, Hijikata’s hand in the darkened Asbestos theater.

Ubiquity of Depth

All social space is like Gaza. The lethal game of visibility and invisibility, of identification and flight, and the constriction of ambience around ambience, are ubiquitous. So are the various technologies employed in these respects: architecture, the interface, the musical or sound-image volume, the floating image, words. Each of these has a materially expansive being, pressing and passing across some region of space-time; and each of these volumes enacts the two dimensions of gesture and sign, darkness and identity. What I have

been trying variously to say is that in fact even the sign is gestural. What Saussure left out in his distinction of signifier—the string of phonemes, particular patternings of pressure-waves in air—and signified—the “conception” elicited in the recipient of the message (which, taken as it is as the “mental object” of a “mind” may not quite exist)—was the third necessary element, that motor pattern executed in saying anything, in gesturing in any way, which, if comprehension follows upon mimesis, accompanies not only speech but also understanding. All signifying behavior is performative, in the sense that Judith Butler offers, and on a profoundly material level. We perform our comprehension as we perform dance.

Ambience is populated by produced arrays, which striate the air and pattern the light which sit upon the surfaces of the body, through which and in choreography with certain aspects of which these surfaces themselves move, performing the joint patterns constituting the elements of perception and perceived reality. Among these gestures are always the signifying ones, the ones related to identity. These are higher-order mimetic captures, the re-interpretation, re-performance of some extant structure as a mnemonic one. These are the upper levels of what I have called mnemesis. Mnemesis at this level is what Deleuze in *Difference and Repetition* calls “recognition,” the seizure of the sensate by the conceptual, the mnemonic via schematism. It is “participation” not in Nancy’s but in the Platonic sense, as the identification of motive figures as pre-given conceptualities, abstracting away precisely from their motivity. For Plato these categories are always already known. All mnemesis ever does is remember. Mnemesis reduces the present to the past, event to structure. Or, in producing the present of “subjective” perception, the present of a mind that thinks “its” thoughts, in this fashion, it reduces what is moving, incommensurate, non-focal, to presence.

The pattern of signification changes over time. The Marxist theory is that it changes in correspondence with the array of social gestures. Ideas mirror physicality. More specifically, it plays a role in reinforcing just that gesturality which sustains the hegemony of certain social

sectors. In respect of the formation of identities—the names of things, their meaning, their essence—this means that a dominant order of signs is always a signifying system organized from the perspective of the dominating figures, organized as dominating other figures, constituting those figures as dominated. “The ideas of the ruling class are in every epoch the ruling ideas... The class which has the means of material production at its disposal, has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it.”⁵⁰

Being subject to the signification of others means being identified as something one is not, or, since being perhaps exists only at this phenomenal level, it means feeling in opposition to the manner in which one is seen, heard, or known; feeling different than one’s being, feeling being as violence. When Kaja Silverman in *The Threshold of the Visible World* says that the gaze allows a sense of fullness and completeness only for the white male heterosexual, all other identities being an insufficient fit, it is because only this dominant position is significantly determined as active. To be white and male and heterosexual is ultimately not to have a constricting identity at all. It is a free pass. Norman Bryson, in “Gericault and Masculinity”⁵¹ has shown how in fact even this identity is constrictive, violent, impressed and policed. The male monitors the male for any sign of slippage between gesture and identity. The man must be a man. He is held in this role just as is the woman in hers. There is a real question whether anyone ever matches their identity. Lacan, following Sartre here as elsewhere, would say that they never do. There is an incommensurability between identity and being, which is precisely that between the body image, as objective, and the multiple, immanent wash of proprioception.

⁵⁰ Marx and Engels, *The German Ideology*, p. 64.

⁵¹ In *Visual Culture: Images and Interpretation*.

All social space is like Gaza because within it there is continual determination of identity, a continual probing or inquiry, a continual imposition of categories, and a perfect linkage of significant identification and following act. To name is to treat in some particular way. To see a woman is to enact the negative imprint of the woman and thus to produce only a specific pocket in space where the woman's gestures may fit. Every knowledge of others hands them over an attire which they are required to wear. Every name is a flung mask, to which one rattles on speaking. Ambience is therefore a tactical space because within it various agencies manoeuvre to assign, to acquire, to avoid identity, and with these assignations, acquisitions and evasions to achieve or escape some coercion. Everyone who has an identity has a mask that was pre-fabricated and which never fits just right. Awkward limbs and twists of hair may sometimes be seen slipping out from behind. Those completely outside identity on the other hand are either utterly abject or profoundly powerful, snipers in bunkers, or shot dead.

On Adorno's aesthetic model as we have renovated it, each of these regions of non-identity, each force suppressed beneath the blanketing sprawl of the sign, finding no clear expression within it, continues to exert a pressure. Moments of "aesthetic" production, that is, of production that is not fully or clearly "functional," occur at the geothermal ruptures between sign and sign, between sign and sound, etc. The domain of Muslimgauze, for example, cracks open at the incommensurate seam between the "political facts," those felt truths performed under the methexis of certain images and taped voices, and the murderous common sense regarding "terror." Between the idea and the reality arises the shadow. There are cracks of this sort everywhere; every body that is not perfectly normalized in behavior and affect—and is this even possible?—is a jagged system of faults.

The Muslimgauze fault extends from one hot border of the Western social formation to that room in Manchester, where tension erupts as sound. There are other faults

correspondent to internal borders, slippages between identity and non-identity within the nominally-unified social formation. The work of Terre Thaemlitz is of this latter sort. His particular aesthetic bubble balloons out under the pressurized slip of gender identity.

Useless Movement

The Laurence Rassel Show, which Thaemlitz produced with Laurence Rassel for German radio in 2006, is an audio play addressing issues of gender identity and political power. It is now distributed for free via “Public Record,” the online record label run by the Los Angeles sonic activist collective Ultra-red. The *Rassel Show* is a composite of theoretical discussion, readings of portions of classical theoretical text by actors on the topics of identity formation, relations of political visibility and invisibility, and the death of the author, small elements of found sound, and elements of house music, which Thaemlitz has produced for over a decade under his own name and as D.J. Sprinkles.

Thaemlitz is a transgendered person with some celebrity in club and queer theory circles; Rassel is a “cyberfeminist” who up until the *Rassel Show* had performed all of her work, with the Belgian collective Constant, under a veil of self-imposed anonymity. The *Rassel Show* thus marked a sort of coming out for Rassel, since it placed her in a public light complete with her own name. This coming out was performed as one aspect of the theoretical and political area to be explored. On the whole, the *Rassel Show* addresses the problem of political visibility and invisibility, particularly the invisibility of women, both those born as such and those transitioning into or out of that gender role. The initial question raised is whether identity politics, which expended quite a lot of energy on making invisible groups politically visible, with names, legal protections, media and political representation, in fact achieves what it sets out to. Rassel and Thaemlitz select a text from Peggy Phelan suggesting that political visibility, because it depends upon the distribution of a normative presentational

standard across scores of persons alleged to correspond with it, is doomed to failure.

“Visibility is a trap.”⁵² Phelan thinks that what identity politics misses is the fact that it is behind the visible that power actually moves. She (that is, Tina Horne’s voice, performing Phelan’s voice) recounts a West Indian folk tale told by Lorene Cary in *Black Ice*:

A woman drapes her skin across a chair in the bedroom she shares with her husband and slips out a window to enjoy the night. Night after night she leaves their bed. (Indigenous dream interpreters, as against Freudian ones, would say she is walking with The Invisible.) She is always careful to return before her husband wakes. She slips back into her skin and then back into their bed. But one night her husband wakes and sees her skin across the chair. He is distraught. He seeks the advice of ‘an old woman in the village.’ She tells him to take some salt and rub the inside of the empty skin with it. A few nights later, the woman leaves again and the husband applies the salt to her skin. When she returns to her skin it will not yield: ‘Skin, skin, ya na know me?’ she screams. Caught between her body and her spirit, her insides keep her out. The husband who believes he has the right to the entrances and exits of her body can coat the inside of her skin with salt but he cannot keep her home. His failure to hold her in their bed prompts him to make her skin unable to house her spirit. Both exiled, her question hangs in the air: ‘Skin, skin, ya na know me?’ The woman’s voice cannot reanimate her skin. And she remains lost to her own body because of this desire to mark it as his.⁵³

Horne’s performance of Phelan’s voice recounting Cary’s rendition of a West Indian folk tale in which a woman leaves her skin occurs in a thoroughly produced audial volume. Like all of the performed texts on *The Rassel Show*, its position cycles from one speaker to the other. The spoken track is doubled and sometimes tripled, delayed or sped up, such that two or even three lines of voice chase one another, trying to catch up with themselves. For a moment they coincide, then they separate again. All the voice is passed through a tremolo which sculpts it as slightly pulsatile, exhibiting a mathematicized surface texture. The space in which the voice moves throbs with a very subtle bass, a one-pulse phrase, a piano figure of three descending notes, its edges softened, repeating, and every eight or so bars an ascending stroke of synthesized vibes or harp, which drifts. It is a static, pulsing, warm sort of audial space, using tones, patterns and effects typical of house music. But it is taut as well, and the steady

⁵² Peggy Phelan, quoted (without source information) in *The Laurence Rassel Show*, track 5. Phelan is quoting Foucault, from *Discipline and Punish*.

⁵³ *Ibid.*

recurrence of each of the elements, including the fragmenting and returning path of the voice, sustains this tension.

The story, of course, regards identity in its capacity to position within a social space, both relationally, with the husband, and architecturally, within the bedroom. In this center of the marital relation, where the man is supposed most fully to possess the woman, she escapes. In her sleep, perhaps, at night she leaves her identity and exists in some other fashion. She “walks with the invisible,” moves in a darkness beyond her name. This is simply to say that in a real way she exceeds what she is called or the manners in which she is known. Horne’s reading of Phelan’s reading of Cary’s reading of a traditional story presents the Thaemlitz/Rassel dilemma. Being visible is possible only according to the mnemonic categories distributed in a particular socius. But each of these categories corresponds to social tactics, legal, commercial, habitual, etc. To become visible is thus to become controlled. Whatever force remains of the individual, as also the force that named her, remains invisible. Both she and it mingle beyond identity. And yet Thaemlitz says that he is skeptical of the trope of “active invisibility,” the strategy that until this piece Rassel had relied upon, for just this reason, that it makes non-appearance in the representational matrix appear as desirable, when in fact, invisibility may also be a variety of exile. Another way to put this is that invisibility is active only insofar as it operates in conjunction with or upon the field of the visible. Prevented any entry at all, the woman hovers like a ghost beyond her own body. The basic question raised in the *Rassel Show* is then what would constitute a critical or politically strong performance in terms of appearance and disappearance, since visibility is a trap, and invisibility an imprisonment. The sign is a grip for gesture, each mnemesis a complex manner of performance evolved to function with some effect upon other, non-signifying gesture. It is this web of dominating gestures, with the bland face of common-sense meaning, that must be inflected by the invisible, by the unincorporated gesture. The pressure outside the socius must

press upon the socius. Without so pressing, or lacking a tactic by which to press, it is lost. In the recording called *The Rassel Show*, these tactics are theater, parody, and sound.

The story about the skin, like the other discussions in the *Rassel Show* regarding the author and copyright, has to do both with ownership and with voice. Readings of classic texts by Barthes and Foucault regarding the death of the author, in voices other than their own, within audial volumes like that described above, distributed globally in a digital form and recurrent in innumerable rooms, announce this second problematic. The identity of the wife has to do with her being the property of the husband. He owns, she is owned; he owns both his body and hers; he speaks, she is to obey; he is to be seen in public, she, like the woman in the burkah, is to remain out of sight; his voice may command political respect, hers must don a name like George Eliot before it may be heard. Specifically, the question of the author is the question of the ownership of a voice over its words, or of a writer over her voices. It is also the question of the ownership of ownership, of who may occupy the position of the voice that may be a producer of heard words, and that may retain a social connection with those words once spoken. The now-classic pronouncement of those authoritative voices Foucault and Barthes was that this ownership can no longer exist. Whatever is written is pastiche; each text is a border in depth in which various tactics, emissaries of various beyonds, bump and blend. The author is a retrospective codification of the unity of the text as validated, as owned, when in fact it is not owned but common. Rassel muses how convenient that just when it looked as if feminism might push woman into the position of the author, just like that, the author dies. The very target at which the woman aimed, that identity position of activity as opposed to passivity, ownership as opposed to owned, disappears just as she approaches it, like a mirage. In another track Rassel's voice presents this conundrum, but also, in agreement with Thaemlitz and as mixed, pastiched by him, this conundrum as the solution to the question of tactics regarding identity.

When they reclaim the author, well, it's not in fashion any more. It's like, okay, you are too late. You are old fashioned. So that means women are chasing the figure of the author for centuries. Because before it was God. And then it was biology, you know, man as the impregnator of his own work. And then it was the existentialist and the conceptual author. And then it was something else, and then it was something else... So they are always chasing the figure of the author. They are always behind. But at the same time, paradoxically, I think it's nice that we – if we say 'we' as feminists, or we are women now – we will never get this place. We will never catch it. I mean, we'll never get the right location. I think this is nice, always displacing, always chasing, always moving, always chasing after something we cannot have. It makes us have a lot of energy, and useless expectations, or useless movements. And I like it.⁵⁴

Thaemlitz mixes Rassel's words here not within the steady state hum accompanying the other texts, but as a full-fledged house track. Rassel's voice cycles, still from left to right and back, still with its contours breathed smooth by some modulation. But now behind it, there is a deep house beat, 120 beats per minute—a kick drum twice per second. Four to five layers of percussion, and a piano in the background ringing in a large space. The voice is very close at the surface of the speaker. There is a hushed warmth, as with the other tracks, and that same intimate tension. Thaemlitz then snags some of the last phrases, possessed already in Rassel's cadence of a linking metric:

Always displacing
 Always chasing
 Always movement
 Useless movement

These phrases cycle for a minute near the end of the track, which is, apparently, now a favorite in the deep house sets D.J. Sprinkles spins weekly where he lives, in Hijikata's Tokyo.

The ideal Thaemlitz and Rassel thus nominally hold up is one of identity slide, of the refusal of capture. What happens in Hijikata's movements here is offered as a possibility for one's face. One may be today man, tomorrow woman, or somewhere in between; always shifting between. Though the stable position of authority can be achieved neither by transgendered people nor by woman, their oblique position with regard to that position, their

⁵⁴ *The Laurence Rassel Show*, "Bonus Track: Useless Movement."

continuing transversality, may be itself a kind of aesthetic force operating against the signifying matrices of the socius. Authorship or authority, achieved, would at any rate (re)produce the very problems the mis-identified person was fleeing. To be an author is to exert a claim of ownership, to hierarchize relations within the socius or within ambience. Instead, something more slippery, more playful but also serious in its escape.

Such it seems is the message. But a message, again, is a signal sent from a source. Here the source is challenged. As above it is Thamelitz as Sprinkles mixing Horne's performance of Phelan recounting Cary's telling of a traditional story about the loss of identity in a drama about ownership multiplied infinitely and distributed for free, in "Useless Movement," this favorite dance track, Rassel's voice, risen from anonymity and embattled about fame, declares its own failure to achieve ownership over its pronouncements. There is no longer a virtual identity posited outside the phoneme constituting it as intentional meaning. Rassel's voice becomes ambient if signifying material. The source being denied, the signal becomes sensation. The representation no longer owned, no longer the object of a subject, its repetition becomes dance. If Rassel remains anywhere, and she does, for all this she knows what she is saying, she says "I like it," she is there dancing. Like the blot of the militant mask, this track suicides the sign, it falls into itself, into its own gesturality, its own endless means.

First of all the sign points to the sign. It points outside itself, that is its nature; in terms of sensation the semiotic is nihilistic. It endlessly defers; hence those haggard pages of the 1960s to 1980s, despairing of ever finding anything again. It is "always displacing, always chasing." It chases its signified but it cannot achieve it; the semiotic splay signifies only by the totality of its referral and deferral: thus it is structural, and structure is always mnemonic or futural; it is virtual, hypothetical, not here. Think as hard as you might, the passage from sign to sign is "always movement, useless movement." It can't find its end, as the woman cannot find her voice or own her skin. The track "useless movement" is a critique of the sign. So it is

a critique of this signifying element of its own assemblage. But this semantic content also describes its gestural presentation, its material occurrence, in addition to signifying its own signifying behavior. Moving from left to right and right to left, the vocal track announces its passage: always displacing, always chasing, always movement, useless movement. Here it is not a critique, but an affirmation of uselessness. The very uselessness of the sign is its beauty, its deliciousness, its presence, its being not as sign, but rather, being here as singular articulation of ambience.

And yet this coiling cylinder of sign, in its burnished pulsation, still has Russel's voice, this woman's voice with this French accent, a sexy voice; it still signs. It plays in the space between sign and gesture. It performs the tautness of the meaning and its performance, the collapse and the expansion. This beat rides on the other beat: mimesis of methexis; methexis of mimesis.

Tactical Soundscape

The Laurence Russel Show is distributed, as I said, by the Los Angeles sonic activist collective Ultra-red, via their on-line label Public Record. Public Record is the namesake of a previous collective endeavor called Public Space, which was an ambient club in downtown Los Angeles in the late 1990s. In either case the concern, on the largest scale, is the same. Public Space was a singular ambience in which ambient music was played, and in which members of the communities with which Ultra-red members were acquainted—particularly gay, immigrant, ambient music and activist communities in Los Angeles—could meet in a mutually-produced environment. Public Record is a free distribution system through which pass digital parcels expandable into sonic ambience. The essential question as also the essential tactic is the control by the inhabitants of some space over the character, structuration and use of that space. The point regards autonomy. This is not the alleged and admittedly-

impossible autonomy of the artist in his rejection of the social formation, but the autonomy of the production and distribution of space, by the constituents of its locality.

Ultra-red have engaged in theoretical as well as musical production and activist organizing. In this respect, in their “articles of incorporation” in 1996 and 1997, they positioned their own work in the context of soundscape art, tracing their lineage and that of contemporary ambient electronica from Russolo and Cage through Eno, Soundscape and The Orb. Theoretically they reference especially Adorno, Deleuze and in general the Marxist tradition. The key shift that they carry out with regard to Adorno’s theory is that they treat the critical or negative character of the art work in spatial terms. Like Muslimgauze’s room or the dance club,⁵⁵ the determinant-negative abscess is spatial, just as is the homogeneous constellation that it counters. Social antagonisms exist in ambient volumes, structured space-time. But there is also an anarchist tendency in Ultra-red, which they derive most directly from the Situationists and Henri Lefebvre.⁵⁶ Rather than understand the character of resistant spaces or heterotopias as negative (and hence engaged “negatively” in relation to what lies outside their doors, according to a pattern that is essentially logical and therefore immaterial), they think of space in terms of production. Rather than ask what pattern a certain production must achieve in order to qualify as resistant, heterotopic, negative, they ask instead whether some particular physical ambience is produced by the persons who are there, or from without. Is it the users, or the owners, who produce and regulate the usage of some given space? If the former, good. If the latter, then how might this be reversed? Ultra-red’s musical production, both their own and that which they have facilitated via various projects and compilations, as well as their broader-scale activist work and in particular the “Militant Sound Investigation” which underlies both, aims to realize a production of ambience by the local. In good Marxist

⁵⁵ Especially the disco and then house and ambient club. This history is touched on by Walter Hughes in “In The Empire of the Beat: Discipline and Disco,” in *Microphone Fiends: Youth Music, Youth Culture*, and in larger historical context by Anthony Thomas and Simon Reynolds.

⁵⁶ The two key texts here being *The Production of Space*, and *Rhythmanalysis*.

terms autonomy is a question of the seizure of the means of production. In a world where any room, like that of Bryn Jones, may be capable of a production of ambience extending beyond it, there are many possibilities in this regard. Perhaps this is what Jacques Attali meant when he wrote that the present era is one of “composing.”⁵⁷ Even absent music production technology, which in the first world is relatively easy to come by, the very presence of a stereo with a play button means that ambience may be produced in ways that a hundred years ago it could not be. Ultra-red, like Michael Bull,⁵⁸ with a general reference to Deleuze and Guattari,⁵⁹ site in particular the bedroom and the car.

Should we think that sound as a means of territorializing is limited to a bird’s song, we might be reminded of the use of volume and noise in defining a teenager’s room. This is the safe space established in rebellion to the domain of parental supervision. Of course, not all territorializing sounds are limited to the bedroom where, alternatively, other forms of music and sound delineate an erotic space. We turn on a record and say we’re ‘getting in the mood.’ When more accurately, sound produces the space which constructs the desired subject.

Some take their music, their noise, to the streets, claiming a space against its official uses or, conversely, reterritorializing it for its official use. This mode of sonic action can include the car that goes boom, the van equipped with a PAS announcing a political candidate, or even the merchant’s cry – ‘two for a dollar.’ Each practice utilizes sound as a *matter* for territory.⁶⁰

Ultra-red’s close relation to Shafer, Truax and Westerkamp is clear in their usage of field recordings, manipulated by electro-acoustic processing and in particular granular synthesis, of which Truax was one of the early innovators. They like the Soundscape movement have a key interest in the embeddedness of individuals within ambient volumes that are highly structured and within which certain connections, calibrations and choreographies can be made or interrupted. And yet their emphasis here, with Deleuze and Guattari, on the phenomenon of “territorialization” marks them as distinct. Whereas the key

⁵⁷ See Jacques Attali, *Noise*.

⁵⁸ In *Sounding Out the City*.

⁵⁹ The key source for understanding sonic territorialization is the “Refrain” chapter in *A Thousand Plateaus*.

⁶⁰ Ultra-red, “Introduction,” p. 7. All the texts that I cite here from Ultra-red are available on their web site, www.ultrared.org.

concern of these original Soundscape producers was to re-establish a balance posited as lost but somehow within reach, and a communication across produced space with a nature that is not produced at all, in the same manner as the urban, Ultra-red think of ambient space as always already a volume of conflict and tactics. Even the birds, as Deleuze and Guattari elaborate in *A Thousand Plateaus*, engage in sonic territorialization. That is, through their reiterative, materially positive and spatially-expansive behaviors, through modulation of the materiality of the ambient volume, through the air and the light, territorial animals pattern one or another volume as their “own,” as a protection and a habitation (a habitus and a habit distributing spatiotemporally), as a lure and machinery for mating and for predation. So does a child singing to himself as he walks through a frightening darkness.⁶¹ So do the teenager blasting metal in his room, the couple playing music to get in the mood, the cruiser with the car that goes “boom,” the police team with the sonic weapon perched atop their vehicle,⁶² making a space uninhabitable, as in the protests in Seattle or the streets of Iraq; so do the raving participants of the Reclaim the Streets movement, who briefly seize control of functional public space like the London financial district, filling it with very loud techno and dancing. Even the contractors using their powertools, the hawk screaming or the owl cooing to its mate, the crickets and the refrigerator and the fluorescent lighting, striate, populate, territorialize ambience. Any local volume is the joint collision of these material agendas. Ultra-red therefore understand “public space as the way in which tactics are deployed, their

⁶¹ “A child in the dark, gripped with fear, comforts himself by singing under his breath. He walks and halts to his song. Lost, he takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, center in the heart of chaos. Perhaps the child skips as he sings, hastens or slows his pace. But the song itself is already a skip: it jumps from chaos to the beginnings of order in chaos and is in danger of breaking apart at any moment. There is always sonority in Ariadne’s thread. Or the song of Orpheus.” Deleuze and Guattari, *A Thousand Plateaus*, p. 311.

⁶² Steve Goodman has recently written about various military and police usages of sonic weapons, in *Sonic Warfare*.

ambience so to speak...”⁶³ “[I]nterest permeates the full range of perceptual modalities... those modalities are both expressions of antagonism and the field of conflict...”⁶⁴ “With these very basic presumptions, we began to consider how one might think of ambient music as something more than mere audition of the everyday – but its actual and sensual transformation.”⁶⁵ Whether it is critical or not, “soundscape” or not, the playing of music is the production of space. The critical question, and the one that Soundscape music opens up, is in what manner and by whom space will be produced. As the structuration of space determines also the gestural reality of the materialities which inhabit it, including “individuals,” and with that their feeling and the topology upon which rests the obscuring dance of the sign, this production is at the foundation of any materialist politic.

Produced ambience exhibits complex structurations both “sensory” and “signifying.” What I have been trying to emphasize is that, especially in an ideological environment endlessly concatenating the ontological ubiquity of “information,” “signals,” “communication,” and “signifying networks,” the function of these latter, of the sign and of data and of information, all these names for the phenomenon of the name, of semanticized identity, is to obscure the former. No one would deny that the phoneme is phonic. They would however say, either directly or as implicit within the range of their other assumptions, that its phonic quality is accidental. What is startling is that the fact that the sometimes-performance of the phonic as phoneme is ultra-hastily concluded to exhaust its reality. Meaning obscures space and the focal obscures the ambient. As both meaning and the focal are endlessly theorized, there are endless holds by which gesturally to grip what presents itself as such. As what presents as meaning and focal extends into non-meaning and ambience, that too can be seized by these holds, if with a certain stupidity, violence and even ignorance. But the reality

⁶³ Ultra-red, “Constitutive Utopias: sound, public space and urban ambience,” p. 1.

⁶⁴ *Ibid.*, p. 2.

⁶⁵ Ultra-red, “Introduction,” p. 5.

of the ambient reasserts itself when some local collective begins to structure it itself, and the water cannon and the sonic weapon are brought in. The truth may be signal, the pattern even of physical systems may be codified as information, but power still moves through noise.

The basic technique of Ultra-red as a sonic producer involves the field recording. Ultra-red are interested in conflicted ambience. While all ambience is a tactical space, a border in depth, this character is more apparent in some cases than in others. And as the task of the activist is the production of space in the interests of some locality, it is space organized for protest that first drew Ultra-red's interest. Their production is rooted in a feedback cycle. They take part, in whatever capacity, in the organization of protest events. (This is not the only aspect of their practice, as will become clear. They also record ambience like the gay cruising scene in Griffith Park in Los Angeles or condensed public housing in Yugoslavia. But the protest was early and ongoingly of interest). Then they attend those events and, while the podium broadcasts one territorializing voice after another, they circulate through the crowd, bringing their microphones into synthetic collision with various persons, asking them what brings them here, asking, most importantly, "what do you want?"

The microphone becomes a ground-level synthesizer of individual into collective desire. It never synthesizes fully, of course, but it does so really. Moving in a trajectory through the protest volume it positions itself in articulate conjunction with one body and then another. It perceives the protest as Gibson's or Noë's body perceives the ambient field. Except that here the ambience is understood as conflicted, as tactical zone within broader ambience of conflict, and not as some history-free stasis called "nature." To say "tactic" does not mean necessarily to say "violence," but it does mean to say multiplicity, opposition and antagonism. To say that the volume of the protest is a tactical space is to say that it is historical, constructed, and engaged in further construction, pressing along in history. The microphone offers itself over in exposure to these various vectors of force, as a way of continuing them. In

so doing the sound recordist exposes herself, “listens” in Nancy’s sense, extends beyond meaning, into nakedness: “...the one who holds the microphone listens in the space of silence. Silence is the desire of the other.”⁶⁶ What comes through as significance is of course bound by all the rules of syntax and by the rigid if unknown codices attending constructed identity. And yet as always, slipping out from behind the mask is the gesture. Compiled in a whole, the shared interest, the larger collective vectors may be discerned.⁶⁷

But discerning of course, or mnemesis, is a gestural act of its own. Done in solitude it will inevitably reiterate the dominant gesturation of the interpreter. “Hearing” what is “present” in this recorded ambience is therefore necessarily also a collective endeavor. Ultra-red assemble a group composed of representatives from each of the entities who produced the protest. Together they listen to the recordings and, without interruption from Ultra-red, iterate what they hear. Each person hears different things. They select differently from ambience, they move with different gestures through even the sculpted space of the room where they listen to these recordings; their own signifying behavior moves in syndicate with some but not other aspects of this array. As Uexküll or Gibson’s perceiver perceives only those aspects of sensory positivity corresponding to their capacity to act,⁶⁸ which they then construct into a whole, the “object,” pretending to exhaust the ambience, each activist hears just what relates to their own interest and their own activity. But as there are a multitude in the room, a wider perception takes place. The representation of demand that is then constructed from the perceptions of these activists is therefore actually a collective representation of a collective

⁶⁶ Ultra-red, “Some Theses on Militant Sound Investigation,” p. 3.

⁶⁷ Sloterdijk notes in *Rage and Time* that while the era of the esteeming of rage and thymos on the individual level precedes Plato in Greece, valuation of these forces recurs with Rousseau and the French Revolutionaries, on the level of the socius. The eruption of spirit or the active dimension is no longer culturally accepted from the individual; but it is basic to a modern conception of the energetic nature of revolution.

⁶⁸ Spinoza asserts that the capacity of a being to act corresponds exactly to its capacity to be affected; Deleuze follows him in this correlation; Massumi, in *Parables for the Virtual*, works out the conjunction between this immanent line of thought and the line from Uexküll.

demand. That inevitably this passes through the web of the symbolic, through language, poses a certain problem. But that this representation, aside from its iteration of syntactical generality, is otherwise produced locally, and that it is then utilized in the construction of the next protest, means that Ultra-red (under the influence, they have said, of *Colectivo Situaciones* in Brazil, from whom they learned the technique of “militant investigation”⁶⁹) have elaborated a technique for the local production of ambience in a self-sustaining way. I doubt that the importance of this achievement can be exaggerated.

The Sound of Silence = Death

One project that Ultra-red carried out and which is distributed via Public Record as a free download is called *A Silence Broken*. Produced in 2006, the year that Public Record began, the sonic materials from which the album is constructed were recorded at a protest for AIDS awareness and health care during the Democratic National Convention in Los Angeles in 2000. On the *A Silence Broken* CD jacket, Ultra-red write: “On Tuesday, August 15, 2000, activists held a protest for queer visibility in opposition to the neoliberal agenda. Some of us in Ultra-red helped organize the march. Admittedly, we possessed no long-range plan for organizing around our long-list of demands. We had no idea of continuing together after the last bit of tear-gas cleared the air. And, sure enough, the energy consolidated that day – and there was a LOT of energy – dissipated in a month’s time.” The 2006 project was produced as a reflection on this dissipation of energy underneath the new, more conservative agenda for gay marriage. Those voices shouting “silence = death” have now themselves gone silent, and the death toll continues to mount, while the newly-respectable face of gay America tries not to flinch. (This last phenomenon, of the joint becoming-respectable and becoming-silent of the queer community, is the focus of Terre Thaemlitz’s piece on the album, “Hush Now.”)

⁶⁹ They make this acknowledgement in the recent “Some Theses on Militant Sound Investigation.”

Much of the production that Ultra-red carries out is done on the basis of granular synthesis. Granular synthesis is a means of sonic production proceeding by breaking spans of audio recording into very small, short-duration “grains,” and then reassembling these kernels into new audial textures, which may be varied quite widely through control over the manner of analysis, dynamic enveloping of grains (determining the way in which the grain is varied in amplitude through its short duration—which adds a second form on top of the captured one), and subsequent processing. This procedure is interesting for the present conversation for a couple of reasons. One is that the grain is sub-phoneme and hence sub-syntagm. It is a physical, sonic positivity by its very time-scale situated beneath the order of language and linguistic meaning. While the recording may capture and reiterate a symbolic order, its materiality as real⁷⁰ is sub-symbolic, and this meaningless reality supports and even performs this meaning. The second is that working according to granular synthetic techniques means working over material that is received previously via recording, while continuing to carry out an extremely high level of technical manoeuvring. Here we can have both that intensive technicality that Adorno thought essential to the production of any music really possessed of force, but also that explicit carryover of the collisionally-synthesized materiality of the past into present labor. Music based on granular synthesis is present gestural-ness on the part of producer and technology, met densely with past, synthesized materials.

When this technique is applied to a soundscape like the D2K (DNC 2000) protest march, and to the explicit gestural-significant expression “silence = death,” a dance between material and sign takes place. That dance then rides another one, that of the slowly-morphing forms of contemporary dance music: the omnipresent beat coming through Public Space, before that rave, early New York house, Detroit techno, disco, and the funk and soul that

⁷⁰ (Kittler’s distinction)

composed that sneered-upon genre's first, late 1960s material.⁷¹ Here the contemporary dance music tradition, in its erotic and heterotopic ambience, meets the materiality of traditional political protest, where physiological forces elevate a certain sign regarding the backside of the sign into echoes between buildings in downtown Los Angeles. Adorno had articulated this process by which musical tradition interacts with its ambience by saying that "sedimented form" accumulates "content." Here the process of sedimentation becomes extremely fast, the line between content and form blurred, the grain of their interaction extremely fine.

The protesters chant "silence = death" in a cadence that is already a dance beat. Indeed their chant is already a dance. In the electroacoustic constructions done by the artists on *A Silence Broken*, that cadence is multiplied, its various digital avatars fragmented to pebbles and powders, turned into taut kickdrum, midrange percussives. Eddie Peel's track, called "Repetition Compulsion" and produced under the moniker "Death Drive," uses a barely-discernible remnant of the chant as a mid-frequency, quarter-second percussive, a filtered band of noise which is not quite white, not quite uniform, but bears the slight imprint of its origin. It is almost-not-sign. Not knowing the origin of the material, one could not hear it. Knowing it, one can discern that that material is the voice of a crowd, and one can recall what the voice is saying, namely, that to sequester death outside political visibility is to cause it to continue to happen. (Note the overlap here between all three "collective"s discussed in this chapter). But the crowd has passed through a machine; its ambience, the ambience it produced as its protest, that was its being as protesting ambience, is now parsed, reassembled according to the formulas of contemporary dark dub, dark ambient, minimalist electronica. The repetition compulsion here is equally that of the machinery and of its element. The matter presses through the form, as the form seizes upon the matter. On the one hand the trauma, the death the voices protest as socially unnecessary, the material possibility which is suppressed

⁷¹ See Anthony Thomas, "The House the Kids Built..."

but need not be (the health of a hidden minority), reiterates itself. Its message is lost in the ambience, but even as such, its force as sonic, material positivity, and the rhythm chanted by the marchers, continues. The will, the demand exerts itself through the material, through the recording, and equally through Perkins or Death Drive, and through his algorithms, through his technological technique. There is pulse all the way through. And yet on the other hand the material, that expression of energy which brought pulsed, pressured air into collision with the sides of buildings and microphone membranes, into conflict with the silencing majority disinterested to the sides of the parade route, realizing antagonism, is six years gone. “Repetition Compulsion” reiterates it, makes it real again, but at the same time mourns its silence. The sub-phonemic sound saying that silence is the same as death is potentially dead itself. The movement hovers in precarity like the meaning.

Ultra-red’s own production on *A Silence Broken* is called “Break ‘Dis.” In the first appearance of “silence = death” in this track, the material has been split into multiple elements which move like the voice in *The Laurence Rassel Show*, although these elements follow one another much more closely than in the former case. The “swarm”⁷² of sonic elements shifts from side to side, moving in the audial volume like a flag. Eventually it subsides. When it reappears in the middle of the track, it is re-formed. Now it has been granulated and processed in such a fashion that it sounds metallicized. Positioned in the back of the mix, moving toward audibility and then away from it, it is a sort of robot voice, or a human lament that speech is only possible machinically. Pressing literally from behind the audial space (in terms of the mix), forming into message and back again into sound, this element occupies the same

⁷² A technique, incidentally, shared between sound production and other information-technology applications, and military application by the IDF in Gaza and the U.S. forces in Iraq (the troops in the Balata refugee camp were “swarming,” behaving in a fractal manner where each element, moving independently, reiterates the movement of the whole). It is worth noting how widely spread the technical patternings are across the social formation, and how blind we therefore are when we offer some new trope as a sort of transcendence within some specific discipline, as for example the “system,” the “brain” or the “body” in music discourse.

position as does the “political fact” in Muslimgauze, behind the sound composition, but also within it, in a processed voice with a real origin. It is like a fence in the distance at night, separating here from further darkness. “Break ‘Dis” is a score which, followed, can produce another ambience in which this protest, just before 9/11 and all that that trauma achieved for the right, re-occurs. That which is suppressed resurfaces as “aesthetic,” but in real space and real time.

Another Public Record release from the same year bears the subtitle “Soundscapes of Precariousness.” This is the *Blok 70 Translations* album. In this case, Ultra-red compiled field recordings in a shopping center situated in a housing complex in Belgrade, Serbia called “Blok 70.” The shopping area is geopolitically interesting because it is positioned next to a UN housing center. Within the shopping area, shops are mostly owned by Chinese merchants, the shoppers are mostly Serbian, and the workers mostly Romi. The Romi in particular are often between homes, being on their way from one place to another under political pressures. The same is true on a slightly slower scale of the Chinese. One thing of interest about these flows of migrants is that, the numbers being so great, the borders so porous or deep, their movements have become relatively autonomous. They do not move in conformity with national or international regulations. Thus a place like the Blok 70 market is one in which a certain politics, a certain self-determination of a certain population takes place. The echoing walls of that space are the real, material ambience of the self-determination of that population, limited in exactitude within the material possibilities given there, by just those walls and just those distributed products.

The first sonic musical reworking of the material recorded here was called *Blok 70*. When Ultra-red offered the material for re-interpretation by other artists they gave the new project the *Translations* title. One track on the later album, by Eliot Perkins, otherwise known as Phonem, is called “Blok 70 at Noon (Where Migrants Conduct Their Politics)”. What is

strangest about this track, as indeed about most of the tracks distributed by Public Record, is the degree to which beats and patterns lay themselves over the ambient space.

It never was the case that the space existed in a purity. It was only ever upon the ears and eyes of its participants, and then upon the microphone membrane. The reworking of the material by ambient music artists is another collision of gesture with gesture. This collision is such that it renders the whole recording pattern, beat, and pulse. All the hallways, echoing footfalls, voices engaged in an ambi-local politics are now expanding and contracting, moving left to right and right to left, bubbling through time in dynamic envelopes opening them and closing them to hearing.

This is the nature of media. It selects, it forms, it distributes. Not only media though; this is the nature of perception, which does exactly the same. Given an opportunity of exposure, a manner of collision, a system of habitus, it takes up its material ambience as gestural repetition. Distributed media, the real social memory, a gestural, habitual memory and not a “representational” one, is a filling of some one ambience with behaviors of another. What is important about Ultra-red, about Terre Thaemlitz or about Muslimgauze is that they thematize this process, and further, that they aim to act within it politically, through production and distribution. *A Silence Broken*, or *The Rassel Show*, or *Izlamaphobia* do not aim solely to distribute a message, and in distributing a message to render the process of production and distribution, and the pattern of these, and the unavoidable concealment and violence they produce, invisible. The iteration that one is sending a message is the performance of ideology. They aim rather to distribute ambience, the material possibility of the structuration of some real material plenum in some particular fashion, which is not the homogeneous one.

Public Record, even more than Staalplat or Soleilmoon, and Terre Thaemlitz’s Comatonse Records, are materialist political entities changing the material, tactical situation

where their products are played. The distribution network makes the local production possible. The local production, meanwhile, is first of all a conscious exposure to ambience, a sort of befriending of or precarious intimacy with it; then it is a collision of localities at a locality, an ambience, a synthetic and hence productive collision producing the capacity for further collision. It is a collision with the will to continue itself. Through openness and exposure, it becomes a force of desire. Listening to Muslimgauze or Terre Thaemlitz or Death Drive or Ultra-red is a continuation of desire. This is the materialist insight, what makes Ultra-red viable, and ambient music, as Thaemlitz and Ultra-red understand it, not only political but tactical (these musics are direct action as over against representation). The distribution makes other local production possible; local production is already distribution.

The difference between this “autonomous” manner of production and the mainstream is actually quite slight. The exposure is the same, the collision the same, there is still distribution according to the material possibilities of an infrastructure. But mainstream production, that conducted by “private” entities for profit, aims to disable production outside itself. It wants to sustain the scarcity that it “fills.” Really it never fills the scarcity, which is always a scarcity of production.⁷³ It always hollows, producing need rather than demand, want rather than desire. Its chief product is the consumer. But we are never really consumers; nothing is ever consumed; every interaction is collision and every collision is production,

⁷³ This broad formulation is interestingly not completely true for the record industry, which has in large part for the past fifty years consisted in local productions, small labels, upstarts like Motown and Punk and Hip Hop, which eventually came to be siezed by corporate entities. The pattern here is familiar: a local, common production develops itself, together with an alliance of other behaviors like the frequenting of clubs, manners of dress, and so on; then, at some point, the value or intensity developed in this fashion is subsumed and distributed for the purpose I mention above, again to make the locality dependent upon capital. I justify the above broad comment for this reason but also because I am speaking about ambient production on the whole, which includes architectural production, production of optical space through advertising and broadcasting (note that graffiti is legally proscribed), auditory space through the allowance of certain sacred sounds and forbidding of others, and so on. In either case the dominant tendency is I have described. That that tendency can only ever operate, actually, through the force proper to localities is a linked point, and the ground on which an autonomist movement must base itself. The multitude, as Spinoza or Negri say, is the material power in any arrangement, even though these may suppress them.

production of memory and with that production of future production. There is no consumption at all. There is production of toxicity, yes, and the production of death by the performance of silence, and the production of murder by the everyday performance of terror in that word which silences whole worlds. But still this is production. The question is, which production will we have? It is still a question of the splay of gesturality, of what we really do.

Ambient Autonomy

There is a shared, critical desire among these various musical producers, which may be understood to begin with on the classical model of critique. For Marx, the commodity fetish is a habit of focality having forgotten its constitutive periphery. Žižek expresses this by saying that the fetish is an effect of a system taken as an independent entity.⁷⁴ The simplest model of critique from this perspective is the drawing out of context. If normal, consumer perception involves the mis-apprehension of things on shelves as living there, and not being shipped, produced, assembled, extracted, the trick is to make the productive web, which is in reality the social formation in its bent coupling with technology and nature, apparent. When it comes to media or public presentations (and in making perceivable these are exactly the same), the question is again how to show the producedness of the image or soundbyte, how to show that the existence of this sensate positivity here in just this way bears the trace of each aspect of its production, and particularly of those who stand to profit from its being bought. The image of the terrorist is one such product, and probably Bryn Jones thought of his work as bringing this constructive, destructive network of production to light. (It did much more, of course: it expressed the violence of the network arrayed about the image, that periphery which operates on the one concealed behind the focal mask, that blot.) Ultra-red cite Paolo Freire as seminal for their own critical thought; he too was seeking to “help to form critical attitudes”

⁷⁴ See *The Sublime Object of Ideology*.

by bringing people “into a state of awareness” enabling them to “discuss... the problems of their context, and to intervene in that context... to perceive themselves in dialectical relationship with their social reality.”⁷⁵

Yet so long as the bringing-to-consciousness of context is thought as bringing “into consciousness” at all, so long as it is thought as the presentation of a representation, of a series of objects for a subject, of a meaning, or worse, a giving of information, the real immanence of context, this ambience right here, remains perfectly hidden. What these musicians actually achieve is in excess of this conception of criticality. Even Ultra-red, who so intelligently work out a system of local, autonomous augmentation, using a recording device and a person who is willing to throw herself along with it into a conflicted space, into the noise of silence, without herself making a sound, remain focused on the semantic. In fact, finding that their electroacoustic productions did not communicate in the communities from which their materials were taken, they have recently abandoned that aspect of their practice, trying other routes instead, gestural and particularly linguistic. Like Laclau and Mouffe, in their most recent writing, they present a Lacanian-inspired rendition of the political as a web of incomplete or fractured subjectivities. It is very well that it is not Adorno’s self-controlled, impermeable subjectivity which is called upon; but any subjectivity at all, posed as the bedrock of politics, again obscures real materiality. What Ultra-red recognized from the beginning was the fundamental spatiality of social antagonism. This ambience—if one liked and had an unfortunate phenomenological bent, one could call it the ambience of the flesh—is always outside the stream of synthesized foci and the retrospectively produced “subjectivity” whose objects these syntheses “are.” The regime of perception obscures the domain of sensation.

⁷⁵ Paolo Freire, *Education for Critical Consciousness*, pp. 29-30.

The exposure to, collision with, and production and distribution of ambience goes far beyond the raising of consciousness. These constitute direct action, immediate intervention in the field of antagonisms, which are spatial, energetic, gestural, fully and completely real (and the cause of all the other productions carried out). Raising the consciousness of local communities by providing a mnemonic-productive forum in which that community's demands may find symbolic expression and enter into an alteration of the environment is laudable. But words, while materially still they are passion, have this inertial tendency to close down sensation, to pull into the web of "useless movement." All the gestures of speakers, particularly in the academia that Ultra-red rightly criticize, are ambient gesturality defeating the realization of ambience.

Something else happens in music, particularly in this beat-driven dance music, which seizes upon ambience, transforming it and pulling it into pulse. What happens is the synthesis of desire with space, or the production of space as desire. In this there is a higher criticality, an intuitive criticality which does not only know, as Spinoza says "by common notions" or categorical logic, which always abstract from the singular (the obscuration Adorno lamented). Its criticality is higher because it does not only recognize the present focus as engaged with its lateral sprawl in a representation negating that first perception. Rather it senses, directly, in the joint sense of Gibson's "direct perception" and James' correspondence of feeling with gesture, the living hum of the peripheral sprawl. This is the moment at which ambience begins to become autonomous. The autonomy of space requires feeling. It requires the feeling of this space, here, in our gesturality within it and the immediate, true feeling of the continuation of waves of gesturality through this ambience and through our own minutely-rippling, darkly liquid selves.

This is not at all impossible; it is perfectly materially possible, because it is the ongoing tissue of materiality. It is what we are doing all the time, only to have our feelings

turned into emotions by representation, and our habit of representational hegemony reinforced by institutions of truth. What is really politically powerful about all the waves of dance culture, as even of the other practices of proximity, erotics, and sensation, is this, that these various forms of magic, over-gratification, frivolity, involve a real usurpation of diffractive, semiotic form by matter. Sensation, feeling, understood as the very tissue of ambience itself, through which pass indefinite waves of force, even the murderous, the violent along with the conjunctive, are a different expression of the very same energies necessary to perpetuate the sign and to perpetrate the exhausting discourse of the hegemony of discourse and information, which exhaust sensation and feeling, which are their resource and their labor force.

This is the power of the beat: methectically to bring mnemesis to its wavefront; to compel mnemesis to reiterate a new axis of capture which is outside itself, by this subterfuge to open to ambience. The reason that it is flown from, that this pain-pleasure of erotic conjunction is rejected, is that here in ambience are all our acts and the murders they involve. It is easier to think that everything is information, because information claims not be there at all, just indicating some virtual elsewhere. It is this gestural flight from ourselves to which we are so habituated. We would rather chase our own face than feel our own hands. It is this very flight which is silence.

CONCLUSION: AMBIENT POWER

This study began with the opposition between sensation and perception. For Condillac or Locke, and then in a slightly more sophisticated fashion, for William James, perception denotes an aspect of body-ambient relationality occupying a position temporally posterior to sensation, joined with conscious memory as well as dyadically synthesized with consciousness itself. Perceived things are perceived just insofar as they enter into systemic conjunction with the relatively consistent network of prior memory via the bright window of attentional focus. This network involves meaning; whatever enters into it receives, as Benjamin says, a name and a date. Things so captured are indexed so as to fit smoothly together with a regime of signification and a certain, linear order of time, which posits the existence of future and past as ontologically distinct domains. Yet a second memory, an unconscious activity, and even a different manner of time, underlie this perpetual passage into mnemonic mediacy. At this other level, activity and memory are the same, because the variety of memory is habitual, persisting as present gesturation on myriad scale. This level is infrastructural insofar as it conducts the performance of attentional orientation as well as that of the recurrent distribution of proprioceptions together with certain sensations in the ongoing reconstruction called “body image.” In this process it also necessarily performs the suppression of the periphery in perceptual fields and of the large domain of sensations never entering into conscious perception.

The splay of these habitual gestures, these recurrent sub-personal cycles, extends well beyond the person conceived as a linguistic or named subject, and beyond the body as that is delimited either by external visual observation or by personal proprioception (although this expanse does enter in to the experience of affects, particularly those that Watson identified as elementary: fear, rage, love or desire). Both the subject and the body retrospectively

abbreviate and interrupt a continuity. In the second chapter of this study, we have identified this continuity as the ambient field in perpetual conjunction with sensation. In the second half of the study, we have referred to this living spatiality in general as ambience. According to James, Hijikata, Artaud, Deleuze or Massumi, it is via this continuity that waves of motivity flow, across a “phenomenal sheet” that is hyper-personal and pre-conscious. Such force may be retrospectively hypothesized via a conceptual mechanism producing “transcendence.” By this means, and still within an habitual gesturality upon this same surface, the “origins” or “aims” of certain movements are posited as occupying a virtual space in hypothetical exteriority to the phenomenal sheet, and these hypothetical entities may be given whatever name: will, God, subject, purpose, enemy, object, etc.

The distinction between sensation and perception, in general form, exists also for representational thought and for ambience. In the order of representation, the distinction, for example in Adorno, is that between non-identity (the multiple, the moving, the living), and identity (the unified, staticized, and dead concept—Nietzsche’s “mummy.”) In the order of ambience, in post-structuralist language as for example in Deleuze, the distinction is that between event and structure. We have dealt with sensation in opposition to perception at length. Likewise the opposition between motive non-identity and named identity. In conclusion it will be useful to touch on the broadest manifestation of this opposition, and particularly to investigate how in the event all three orders are incorporated. The designation “event” is useful because it names ambience or living space in its aspect as living, as distinct from its capture as populated by discrete “objects” opposed to “subjects,” discrete “environments” as distinguished from “bodies,” etc. The event is the ambient unfolding of a system of “bleeding” gesturations, in a darkness ahead of focal identification.

Problem and Resolution

For the collapse into static unity, whether it occurs at the level of perception, representation, or ambience, there is always a basic stimulus. Focal concentration, representational identification, or functional or military targeting all occur as a reaction to some “problem,” which “draws” attention. Each of these is a “resolution,” or exhibits a resolution, as the means by which some problem may be solved. First, irritation. Some tension, something not homogeneous, something amiss. Then, representational schematism, extraocular muscular contraction and optic focalization, the military manoeuvre. A name is the resolution of a question: “what is...?” (And note that the name does not really answer the question at all, so much as interrupt it or lay it to rest. Resolution is not solution, but willful overcoming according to a particular, centering and systemically integrating formula.) The drawing to sharp focus in perception is similarly a resolution in response to some “what...”. So is the directing of physical force in some social space. “What is the problem?” The identification, focalization or targeting constitute the problem as identity, focus or target, and at the same time they elide the context. Before this the context is simply “problematic,” possessed of a certain tension, or to put it another way, the problem is non-localized, a general property of the context. For this reason Deleuze defines the sensational field and the field of the event as essentially “problematic.” This is not to say that there is something wrong with the field, but rather that being problematic is the nature of its conjunction with an habitual system prone to identification, focus, and targeting. We might say that “otherness” presents to all these varieties of sameness as something amiss in need of resolution. We should recognize here the Freudian “primary process” aiming always at zero. Disequilibrium or tension, which is the nature of the event, of sensation, and of the outside of representation, operates immediately from this opposing perspective as a need for equalization. Identification, focalization, and targeting are the enactment of such an equalization. They erase the problem,

incorporating the “cause” of that problem now as an aspect of mimed gesturality: the articulation of a representation, the poising of the body in attention, the appropriate readying of troops. Perhaps again under the impetus of the “primary process,” reacting now to its own prior movement, occurs the erasive “wholeness” of the outwardly-racing signifying order, an always-terminal gesture denying the order of gesture. At this perpetual moment, consciousness and its objects, whether in “understanding,” in “perception,” or in “society,” are produced, materially, as “immaterial” phenomena. The order of the hypothesis supplants that of immediacy, rendering the latter itself slim and seemingly hypothetical. What was material now becomes imaginary. The reality of the event becomes the “Real” paranoia of structure, the always-fleeing periphery of perception, that strange non-absent refusal of the horizon.

Space as Constrictive and Expansive

Conceptual identification, perceptual focus, and structural capture all operate upon their motive other by means of a sort of collapsive or constrictive delimitation. The concept “defines,” meaning that it gives the limits to the thing thus known. With the name it gives also the account, and in the account the exact lexical extent beyond which any forces of the thing named must not extend. All these forces will now be comprehended as manners of signification. Similarly the focus brings to a crystalline resolution the essence of which is in limits. High-resolution focus is a focus rendering the cut-off between object and not-object sharp. Focalization is a cutting of the visual or auditory field such that “what is” is separated out from its backdrop. But, because the material and motive infrastructure of sensation is the bodily-ambient, this cutting is the behavior of the field itself: it itself presses in upon this one eroticized sector. With this, or with the fine gesturations underpinning the manoeuvre, the object is produced. Focalization is the establishing of figure and ground, by the giving of line; this is how it resolves its sensory problem. The determination of the thing in the ambience, or

of the target in a functional or military approach to a certain space (where the focus is hyper-individual, extending beyond any single subject's field of perception), likewise has to do with identifying exactly what is of concern and what is not. It is the Hezbollah militant, for example, and not the civilian bystander, the particular room and not the hallway, which are the key objective. All functional or military behavior are themselves defined in their orientation toward this target; the target and the plan are mutually defining. Both definitions consist in the delimiting of certain figures on a field. This person, not that one. This building, not that one. In representational thought, in focal perception, and in military operations, a wider space is made to collapse upon some object. The object is constituted as figural or objective, as distinct from some background, precisely through this collapsive gesture. The identified thing, the focal object, the military target are produced through behavior in regard to them, specifically through a collapsive behavior bringing a broader expansive space constrictively down upon this centered region. Identification works by denial of ambiguity, first by denial of non-identity and then denial of any but one name. (Now one is a man, now a woman; now the enemy.) Focalization works by suppression of the majority of a perceptual field, which is now "out of focus," "peripheral." The focus is the constriction of the periphery. Targeting works first through a hyper-personal focalization via an institutional perceptual machinery, then operationally by movement from the ambient periphery, from behind the walls, beyond this space, constrictively inward toward the target, who may thus be captured.

On the whole these three like regimes operate through constriction. Each involves a collapse of the periphery inward toward a point, a resolution of an irritation by means of a centering grip. In increasing degrees of concretion, from representation, through perception, to functional military behavior, each is a manner of the performance of space as constrictive. Weizman says that the IDF bring their space with them as they pass through the living room. They unfurl that space about them, it dilates along the probing cylinders and curves of their

fractal motions. This means that there does exist an expansive aspect even to the identifying and focusing behavior of the soldier; this is the soldier's own energy. But the inertia of this particular tactical space is always to collapse. It is inwardly-prone, it aims in its essence toward the point, that exact spatial figure which does not exist spatially. These three regimes, at three orders of concretion, are the tendency of space to suicide itself. The representational grasp, the perceptual focus, the functional manoeuvre aim inertially toward a perfectly localized nothingness, a nothingness thus hypothesized beyond the local and therefore infinitely generalizable across actual circumstances, because premised essentially upon a virtuality.

But they are stopped. They stop at the identity, the object, the target. Not under their own power, which as I have said would continue indefinitely downward. Rather at a resistance, and at the exactitude of the resistance of some materiality to the collapsive gesture. The thing identified, focused upon, or targeted is then this power-riven threshold, a border internal to the perimeter of the field, the line of points exactly where the collapse of representation, focus and aim is interrupted. Husserl called this, just like the external perimeter, a horizon, a border that exhibits and conceals, that may yet offer up further. The "what" answering to the question "what is..." is in this sense alone indeed the non-identity, the thing over against, and the enemy, but only and exactly insofar as that non-identity, thing, enemy appear in strict, determinant collision with just this regime of collapse, just this lexicon, the muscular habits of this neck and this eye, just this particular manoeuvre.

Terre Thaemlitz is a man, just insofar as some regime of identification seizes hold of him, and just insofar as he is a force opposed to that regime. He has broader shoulders, stubble on his face, he is bipedal and talkative. "What is...?" "A man." Were the order of concepts different, or as Judith Butler would prefer, broader and more flexible, a different answer would appear. Given the present rigidity, Thaemlitz's trans-generation amounts to a

differential tactic with regard to the identificatory grid. She has makeup, long hair, a dress. Her hips move in certain arcs, her arms hang at a certain distance from her midriff. “What is...?” “A woman.” Or on closer inspection, a drag queen. The point is that Terre Thaemlitz is neither man nor woman nor drag queen. S/he is an indefinite flurry of (felt) motions which, impacting this other system of identificatory motions, resolves to this set of captures, which are the exact lines of collision between the two systems. Thaemlitz’s sliding behind identities, his resistant play with the regime of the name, consists in his executing different systems of behavior, different social tactics, which in collision with a dominant lexicon can be depended on to render variable resistant shapes. “Man,” “woman,” “object” are always such a resistance of the non-identical to identity. That is to say that the regime of representation, were it not for a field of material positivity, would just be nothing. Only in naming things that are other than their names can it achieve itself a certain materiality, as static and staticizing form. Every form is the imprint of a battle, between the mnemonic representational grid and the plenum in which it gesticulates.

At the level of perception, in phenomenological language with Husserl or Aristotle, this force in resistance is called matter or “*hyle*.” *Hyle* designates whatever aspect of the focalized entity is not just form: on first glance, its material volume, but in actuality, just and nothing but its sheer force of existing. That this force of existence, this “thatness” as opposed to “whatness” can historically have been identified as “*low*” is a real peculiarity. In Spinoza or Nietzsche “vibrant matter” is rather the very essence of the thing, its force, its pressure outward and expansively: power pressing toward greater power.

My point at present is just that, while representation, focalization, and targeting all consist essentially in a collapse of surrounding space (lexical, perceptual-field, ambient), nevertheless the production they involve of an identity, a focus and a target is not to be attributed sheerly to their own gesturality. The confronted gesturality is a performance of

space in a contrary respect. Whereas the first terms of our opposition are constrictive, the latter terms, non-identity, sensation, event, are expansive. They are space opening out.¹ The constrictive movement collapses space to a point; the expansive movement billows out from each point. Collapse and expanse are completely determinant, singular (not spheres). Each approximate stasis entering by a series of mnemeses into conception, perception or strategy is first the singularity of the juncture of these singular gesturations. The event is the flying tissue of these junctures in their motivity.

We have already encountered the disequilibrating character of the event under the heading of the “aesthetic.” The aesthetic, in its initial historical sense as having to do with sensation, and also in the sense that has since become dominant, as the work of art, are on Adorno’s or Deleuze’s theory both constituted by such a disequilibrium. The aesthetic in both senses denotes a collision whose configuration is as yet incommensurable with conceptual, perceptual, or institutional capture, and which is therefore still in motion. It designates instances where the irritation, the “problem” has yet to be resolved, and hence where local energy is brought to a certain positive tension. In simple physiological terms, the aesthetic is arousing. It is arousing, in a present, which then is presently felt. The aesthetic is “useless” not insofar as it cannot be put to use—indeed it can and it is—but insofar as it does not slip essentially toward its own erasure. It is the functional, whatever is not aesthetic, which presses in that direction, the functional which obediently expresses its own usefulness for some other end as its very essence, and with that hides its own real force from view. Sensation and the aesthetic volume are expansive in their nature; they exhibit a local autonomy, a local

¹ The young Nietzsche would refer to these two tendencies as the Apollinian (the constrictive and form-giving) and the Dionysian (the expansive and form-breaking). The later Nietzsche, in the year or two before going mad, understood the two tendencies as jointly essential to the “will to power;” these were the aspects of a form-giving conflict perpetuating a ripping differential tissue exhibiting now one and now another diagram of power. It is this latter conception from which Deleuze and Foucault both began their work. See in particular Deleuze, *Nietzsche and Philosophy* and Foucault, *Language, Counter-memory, Practice*.

production of the locality. All volumes are aesthetic at base. The ones we call “aesthetic” are the ones not effacing their own character as such.

The opposition between constrictive and expansive space is then a recapitulation of the opposition between functional and aesthetic, between that which is presently-expansive only as accidental and outwardly-referring, a link in a chain whose essence is in some original or terminal virtuality, and on the other hand that which is felt in itself, as affective affirmation of its own present gestural dilation. It is the opposition between means to an end and means without ends. (Both means persist in the same local reality; it is a question though of whether the local or the non-local determine the manner of the local’s production and hence whether the local is felt or not.)

To refer to some domain of space-time as “aesthetic” is therefore not at all to assert that its value is limited, or that it is not to be taken seriously. To say that something profoundly violent, like the second battle of Fallujah, is an “aesthetic” phenomenon is not to say that it is outside ethics, for entertainment value only, or simply enjoyable (although it must be said that it is enjoyed in multiple ways across its fissured face, not least as pain). It is rather to say a number of other, much more serious things. It is to say first of all that the battle occurs within and upon the very bodies of its participants, in whom, I will argue, we are included. It is to say secondly that, like the work of art, it is produced in such a fashion as to hover with an unintegrated intensity, in a fashion not reducible to zero. And thirdly, in fact the battle, as an event occupying space and time, if in a sort of perpetual present ahead of the regime of serial temporal indexicality, is in its patchwork whole constructed of more recognizable aesthetic volumes: architecture, the interface, recorded sound as a patterning of real spaces, streets, the inside of a tank.

Event and Distribution

Deleuze says that the battle is not just any event, but the event in its essence,² because every event is an ambience of tactical conflict, and every ambience is always an event. In the battle the nature of the event is most explicit. I would like to show the event as a recapitulation of previously recorded gestures—all those that we have traced in this study, from the early researches of Müller and Fechner through the designs of the APU, through minimalism, the schizophrenic Ipod, the techniques of Imperial Japan, of the Americans in Viet Nam and the IDF in Gaza—and then the continuity of the event through the circuits of its own distribution. (Past and future are present in the event.) I wish to designate the infrastructure of distribution and the activity of production that it performs as the key site of conflict between constrictive and expansive space, that is, between power as located outside, crashing in, and power located at the locality, surging out. This distributive network is the “public space” that Ultra-red identify, the production of which is the greatest question.

The second battle of Fallujah occurs not only in Fallujah but in the homes to which its recorded fragments are distributed. (The distinctions between spaces is retrospective and hypothetical. Wherever the forces and their collisional seams extend, there they are. The ambience does not cease to be tactical.)

The media event is an aspect of the military event, and further, the media mnemesis, performed under a very particular regime of ownership in some connection with the manufacture of arms and the extraction of energy, etc., feeds back upon the event and determines it. There would have been no second battle of Fallujah as such without a certain media mnemesis of the murder of Blackwater contractors that preceded it. But much more importantly, the second battle of Fallujah is just an aspect of a larger, ongoing event, by which

² “If the battle is not an example of an event among others, but rather the Event in its essence, it is no doubt because it is actualized in diverse manners at once, and because each participant may grasp it at a different level of actualization within its variable present.” Deleuze, *The Logic of Sense*, p. 100.

huge territories are caused to recapitulate a certain, very specific regime of the distribution of ambience.

The broadcast is an aspect of the battle, but the battle is an aspect of the broadcast. To be precise, the broadcast of the battle by a certain distribution system is an aspect of the battle; but at a more significant level, the battle is an aspect of the broadcast of a certain distribution system. Beginning with the very limited sensory fields opened out to “embedded” reporters, and increasing through to outright censorship and the specific selections in corporate news editing rooms, the expansive tendency of the conflicted space is checked mnemetically by a counter-force, an “anti-event” as Massumi will call it, which finally achieves the shiftover from expansive to constrictive spatiality, but which still moves under the very inertia it suppresses, and which still utilizes the very materials that continue the system of forces from out of Fallujah. By this reversal, which occurs exactly in conjunction with control over the aesthetic apparatus, ambience ceases to produce itself and comes to be produced from without, by a wave of sensate positivity coming from all perimeters. Were it not for the blackout, families in Fallujah could watch themselves as Americans see them, from within their besieged living rooms. The hegemony of constriction corresponds to the social position of ownership, which determines the social correlate of perception in conjunction with a certain social gesturality. Ownership is a fold, an inversion, in the self-production of ambience. It is the social equivalent of the transformation of sensation into perception, producing a social “unity” by means of a particular distribution of aesthetic products, and an attentional orientation as fixated upon some shared target.

The technical name for what happens to the production of ambience as a result of this fold is that key distributed aspects of ambience become “ideology.” Ideology on the classical model is always a depiction of the interests of the few as the interest of the whole. Typically we think of this as occurring with regard to information or representations. I would like to

suggest however that ideological selectivity and mnemesis is in fact a distribution of force, even of space, a parsing and structuration of ambience. Private ownership of media is in physical reality the physical production of ambience so as to integrate submerged bodies in only particular regimes of gesture. It compels a homogenizing, and it turns out murderous, methexis.

The collapsive force that besieges Fallujah in a number of ways besieges the American living room as well. The distribution of aesthetic fields is an essential, not an accidental aspect of the event: the event even is nothing but the distribution of aesthetic fields. What I have called the aesthetic product is physically the production of space as tense and disequilibrating. In the battle of Fallujah, the interiors of the tank and the humvee, and the air of the whole of the city, are produced, become taut in just this fashion. They become soundscapes or sense-scapes whose each element is directly bound with instinct, arousal and energy, with fear, rage, and desire. This will be the case in the home as in the fray. The home is still the battle.

The battle of Fallujah is hyper-personal, not just because it involves a number of individuals in a complex arrangement, but because it occurs in that dimension of unfolding that is temporally anterior to the constitution of persons and things. The blueprint of the battle is best discerned by looking at the exact structurings of the air by sonic pressure or at the patterns of reverberations of light. It is in this seething flux that the real conflicts occur, here that the battle and the event have their reality. The (machinic) event has the capacity to pull individuals into itself and hence out of their very individuality. Not only that, but the machinery of the battle, the tank, and the RPG, and the recorded song, just as at home the living room, the car, and the film, are constructed specifically to facilitate this slip of the body into its ambience. That perpetual slip, brought to a high amplitude in Fallujah, is the very moment of power, the motive germ by which physicality rouses itself into intensity, and

according to which energy and destruction are distributed across real space. This is how we murder in Fallujah whether we wish to or not. This is a means of production whose control, as Althusser rightly says, no ruling elite could be without. Its seizure by an increasing number of points of locality, as already occurs in Bryn Jones' room or at Public Record or at Comantonse, would mean an autonomization of space. Such an autonomization, because the production of recording is ultimately the production of ambience, the production of gesture and hence the production of future production, would be a step toward the alteration of other more nefarious recordings and productions, for example the habitual recording of body posture, focalization, and same-other relation that occurs in the manufacture of the weaponry like the gun and the tank. These last are recordings, productions of the means of the production of destruction or of a destructive space, without which the second battle of Fallujah could never occur.

Siege and Terror

Peter Sloterdijk begins *Terror from the Air* as follows:

If asked to say in a single sentence and as few words as possible what, apart from its incommensurable achievements in the arts, the 20th century introduced into the history of civilization by way of singular and incomparable features, the response would emerge with three criteria. Anybody wanting to grasp the originality of the era has to consider: the practice of terrorism, the concept of product design, and environmental thinking. With the first, enemy interaction was established on a post-militaristic basis; with the second, functionalism was enabled to re-connect to the world of perception; and with the third, phenomena of life and knowledge became more profoundly linked than ever before...

If also asked to determine objectively when this century began, the response could be given to the very day. Using the above as reference points, it can be shown that from the outset all three of this era's key features were linked together in a common primal scene. The 20th century dawned in a spectacular revelation on April 22, 1915, when a specially formed German 'gas regiment' launched the first, large-scale operation against French-Canadian troops in the northern Ypres Salient using chlorine gas as their means of combat.³

³ Peter Sloterdijk, *Terror from the Air*, pp. 10-11.

These three criteria are tightly linked, and their linkage is the reason that Sloterdijk chooses the 1915 date. Terrorism consists essentially, he suggests, in the weaponization of the environment, the usage of the environment as a means by which to affect the inhabitants within it. “Terrorism, from an environmental perspective, voids the distinction between violence against people and violence against things: it comprises a form of violence against the very human-ambient ‘things’ without which people cannot remain people.”⁴ Both “environmental thinking” and “product design,” under which heading we must necessarily include the activities of the APU and of J.J. Gibson, are related to terrorism conceived in this fashion. “Environmental thinking” is first of all thinking about ways in which to explicate the weak spots of an enemy’s ambience, so that they may be used to kill him. The environment gets a name as such because World War I powers oriented their own destructive activities toward it. Similarly the product design that is of the most significance here, and that is so closely linked to perception, is that involved in the splitting of the individual off from the environment. Here we might gesture toward the interface, which is a separation, a striation of space determining a certain mechanized focus as distinguished from a “noisy” peripherality. Even before the scientific development of interfaces, though, Sloterdijk points out that there was the gas mask, which established an interior escape from the environment which, as Broadbent put it, had itself become a “harassing agent.” The 1915 gas attacks—not the first attacks, but the first effective ones—are a key moment because this is the point, according to Sloterdijk, at which instrumental reason turns its attention consciously to the analytical manufacture of spaces. Foucault, it is true, located that spatial analysis much further back.⁵

⁴ *Ibid.*, p. 25. That terrorism is a tactic, and furthermore an aspect of a tactical milieu within which, as Weizman says, enemy tactics co-evolve, is the reason that it is absurd according to Sloterdijk to call one but not another side “terrorist.” All contemporary warfare is terroristic.

⁵ In the 18th century with the development of workhouses and Hopitales Generales. See *Madness and Civilization*.

Here however the spatial analysis is attached to the face: here is a striation of space, a fracturing of space structurally, pivoting on the surface of the mask.

Recall the purpose of the Hezbollah mask. In terms of significance, the current mantra is that terrorists aim to terrorize. We might think then that the mask of the Islamic militant is there to scare us, as if we were children. We must recognize, however, the pragmatic necessity of the concealing of identity. In this respect, the mask is a recoil from a killing gaze. The gas mask is this recoil from a killing air, “the effort... of those subject to attack to try to shake their dependency on their immediate milieu, the breathable air, by concealing themselves behind an air filter.”⁶ To be seen means to be killed, eventually. To be exposed to chlorine gas means to suffer immediately, and to die shortly. In either case, a striation of space at the surface of the face occurs under the impulse of fear. Fear compels retraction, but that retraction is then expressed as a spatially-analytic expansion.

Sloterdijk wishes to push this logic quite a long way. The gas mask “involved a first step towards the principle of air conditioning, whose basic idea consists in disconnecting a defined volume of space from the surrounding air.”⁷ The Nevada and California gas chambers, he says, and then the ones at Auschwitz, and then the ubiquity of air conditioning, all have their principle established here. This is the point at which the environment, the very ambient field as a volume of structured air and light, is discovered as a problem. The problem irritates, it presses, it is amiss. In the adjacent entity the problematic occurs as fear. Watson defines fear: “that type of response which we call ‘fear’... which is a catching of the breath, a stiffening of the whole body, a turning away of the body from the source of stimulation, a running or crawling away from it.”⁸

⁶ Sloterdijk, *Terror from the Air*, p. 20.

⁷ *Ibid.*

⁸ John B. Watson, *Behaviorism*, p. 7.

The withdrawal from the ambient expresses itself first of all as a “catching of the breath.” Even this is a cessation of intercourse with ambience, a cessation which, of course, cannot be sustained. Then a suppression of activity, a sort of clutch disengaging from ambient involvement, then a turning away from stimulation, a running away. As one cannot run away from one’s ambience by going backwards, however, one must instead go forward. One builds outward in striate form: one partitions. I am here, but I am behind the divide, on this side. The other is there, on that side, the “outside.” By building forward I move myself back. The construction of inside and outside are on this account the creative acts of fear, rather as Nietzsche says that “evil” is the creative act of slave morality and the insidious passivity that accompanies it.⁹ With evil, the enemy, and with the evil enemy, the justification of any and all violence. With the spatialized outside this conceptual distinction (which Nietzsche already conceives as a real and practical weapon) achieves full materialization.

Recall that Adorno placed the suffering of the other and the rage of the conceptual order in opposition. Here the conceptual order, in the form of practical or instrumental reason, rages forward, as in the occupied territories, with architecture. But it does so as victim. Behind rage, fear. As again in Nietzsche, the rage of a warlike culture is one thing, terrible from below, but possessed of a certain if murderous innocence. The rage of the victim, on the other hand: that is insatiable. A rage fueled on its own fear is the loudest exponent of the rhetoric of evil and the largest producer of completely non-rhetorical weapons. If the gas attack leads to the gas mask, the gas mask passes, well before arriving in the air-conditioned nightmare, into the tank and the cockpit. An M1-A2 Abrams tank is a seventy-ton mask, demonstrating 5 million dollars of fear and exuding a depleted-uranium rage (a rage that is now expressing itself as deformities in children in Fallujah, and as cancer in tank crews). They are masks that swallow the whole body of those they defend before spitting at those they attack.

⁹ See *The Genealogy of Morals*.

The siege itself is first this gesture: a retraction that extends, fear that rages. When the U.S. military surrounds Fallujah, pushing up earthen barricades around its full perimeter with armored bulldozers made by Caterpillar, just like those in Gaza, topping the walls with concertina wire, establishing border gates through which passage is limited and monitored, surrounding the city of 350,000 persons with artillery and 5000 troops, it re-performs the gesture of 1915 on a grand scale. Nominally reacting to a single “problem,” the murder of four “civilian contractors,” (who actually were mercenary soldiers trained extensively in the U.S. special forces, and bringing in their own systems of bodily habits the U.S. techniques of Panama, Grenada, Yugoslavia, Somalia, Afghanistan), in a pantomime of self-defense, the military machinery lurches outward in a choreographed strangulation. Submerged in their steel masks, eyeballs pressing erotically into the heads of figures in streets in magnifying lenses, suppressing the ambience of the target till the target dies, and so also, unnoticed, the periphery, the army rages forward on a wave of secret retreat.

The Space of the Subject of Control

About one Marine in four had an M16 with a three-power scope, which increased kills at three and four hundred yards. The M40 sniper rifles with ten-power scopes reached out half a mile during the day. Inside the city were European as well as Arab aid workers and journalists sympathetic to the insurgents. Describing the fighting from the other side, a British journalist in Fallujah wrote that ‘it is the snipers the people of Fallujah fear more than anything else.’

At night the 7.62mm machine gun with a thermal scope took over for the sniper rifle... Many packs of wild dogs scavenged in the dark... When Iraqis did try to probe, they stood out clearly as black ‘hot spots.’ When hit by a burst of bullets, a hot spot would gradually dim and fade out, at which time the machine-gunner would report another kill on the lines.¹⁰

The sniper is the epitome of focus. The applauding writer of the above passage, Bing West, who was assistant Secretary of Defense under Reagan, describes one sniper waiting seven hours, focused on one spot in space, between himself and that half mile limit of his

¹⁰ Bing West, *No True Glory: A Frontline Account of the Battle of Fallujah*, p. 175.

ability to kill. “To Crane, sniping was like fishing, requiring long hours of patience. The targets were a quarry, like fish. He tried not to think of them as men. One day at dusk he took fire from a house about three hundred yards away. The next day he watched the house for seven hours...”¹¹ Then a target appeared, and he killed it.

Seven hours. The sniper is camouflaged, hidden. A deadly function of vision, he makes himself invisible. Then he lays flat, his eye to the magnifying scope, his finger on the trigger, the safety off. He is fixated on the one region of space where last he saw the movement of a target. He waits for the target to reappear, and he must react immediately when that target enters the center of his crosshair. His attention sits at that center position. He amplifies that region, on the lens of the scope or on his eye, he amplifies the presence, the significance, of what appears there, by coupling his body and his weapon to that spot. In order to collapse his gesturality and that of the rifle upon the spot, he must silence everything else. He must first of all silence his body. He positions himself as he has been trained, so as optimally to stabilize his weapon. His elbows, his arms, the spread of his feet, pointing outward, his cheek on the stock, the downward press of his torso, all are aspects of the proper usage of the rifle. He feels his way through this positioning habitually, and then he relaxes, and forgets. Now the positioned body is the quiet horizon of attention, the immediate proprioceptive ambience of the act of focalization. And this propriocepted body includes the gun. The full syndicate of posturality including the gripped weapon constitute the invisible horizon within which the focalization occurs. That horizon is the living ambience whose behavior produces the focus, and by that means produces the kill. Whatever threatens the stability of that ambience in terms of its task will become conscious, a problem needing to be dealt with. Whatever does not, the ticking of clocks, the passing of traffic, remains unconscious, just another aspect of the breathing ambience.

¹¹ *Ibid.*, p. 174.

Now his breath, too, moves according to training. It is slow, even. It pauses for a second or two between each exhalation and inhalation. When the target appears, the breath stops, the immobile stability of the relaxed body is ascertained, the centering of the target in the eroticized region of the visual field confirmed. Still in this breathless window the linkage between filled focus and depressed finger is confirmed, and the kill takes place. These two, the point of focus and the finger, must be the only positivities. All else must be suppressed, the range outside the cylinder of the scope, the visual field outside the crosshairs, the being of the sniper aside from the target and the motion of the finger in its tautened conjunction with the sprung trigger. That gesture slides like movie sound along the outer edge of the image, dispatching it. The ambience which thus constricted, which arranged and so delicately expended its energy via that one twitch and that one eroticization of that bullet-breadth piece of glass, inhales, stands up. It may again become bipedal, a man.

Here is one variety of the constrictive space of control, at the level of perception. It is a space of invisible, propriocepted training, of regimented habit, descending upon a tiny kernel of visual space, by means of the optic conjunction of that point in the ambient field with some hidden one. The regime of proprioceptive habit is an exact correlate of the weapon that it attends. The sniper's vision is the vision of the sight. Without it he sees 1/10 as far; this aspect of the ambient field exists upon the lens, and only by this means within the sniper's perceptual regime. But his vision is also that of the rifle itself and its intended functioning. It is the rifle that determines the posture. It is the need for stability through the rifle that brings the breath to such a slow and subtle state. The two points of eroticization, those points where attention pools, hovers, waits in a ready tension, the center of the aim and the finger on the trigger, these two highly-produced surfaces of conjuncture aimed at a third collisional synthesis, are surfaces upon the weapon. The weapon is the meeting point of sniper and target. It is the exact articulation of their encounter. The space of control is thus a heightening of arousal, of

attention, according to an exacting machinery. The living energy of the sniper's body courses through this circuitry of control in its achievement of death.

The sniper is hidden. Not only is his own breathing, postural ambience, and the visual form of the rifle hidden from the view of the target, but the exact relation of the movement of the finger with regard to the positivity of the centered cross-hair is one of darkness as against light. The hand is behind, the image is in front. The sniper is behind the gun, and the target before it. More minutely, more accurately, in the performance of his task, he is the horizon itself, he is the exteriority of the visual field. He stands behind his vision as behind a mask, calm and unseen. The scope attached to his eye joins him tightly to his target, but joins him in a striate conjunction, a grip of transcendence mastering its object. He wears his gun like the soldier of 1915 wears his gas mask; he retracts behind it in order to advance. Thus he becomes the perfect subject, the sole noetic reservoir of life as against a lifeless object. His perfect perception performs this relation.

Consider how this space of control is developed in the tank. Now the masking vision or the envisioning mask is multiplied. The M1-A1 Abrams tank, and its more recent updates like the M1-A2, position four individuals in close proximity with one another and with the environment through which they pass, but screens each from the others and all from the street. Each of their senses, except for tactility and proprioception, are mediated; all of their focus is mediated. The driver, who sits in the low nose of the tank, below the large barrel, in a reclining position, drives looking straight ahead into the lenses of a system of periscopes which give him a 120 degree range of vision toward the front. He may shift at night to a night-vision system also operating indirectly, by means of reflective surfaces. The commander, who sits elevated toward the top of the tank, on the right side of the gun turret, also perceives visually via periscopes, but he has six at his disposal producing a total of 360 degrees of visibility. Looking straight ahead, he may see the full area around the tank. Again these

periscopes have the capacity for night vision. Meanwhile the audio communications of all four crew members are mediated by microphones and earphones, through which communications with other units also pass. When things are more quiet, the crew may to a limited degree converse normally within the tight steel space in which they are enclosed. Painted white, this space in the dark glows with red and green luminescence.

Jonathon Pieslak conducted a series of interviews with soldiers involved in the present Iraq war and particularly in the second battle of Fallujah, which he documented in *Sound Targets*. He learned that, especially in the course of the months-long engagement in Fallujah, tank crews, as well as infantry in Humvees, rigged their interior space with speakers attached to iPods or laptops.¹² As they moved into Fallujah, they played hard rap and metal at high volume. The most popular songs were Eminem's "Go to Sleep," Drowning Pool's "Bodies," Lil Jon's "I Don't Give a Fuck," and Slayer's "Angel of Death." The availability of smaller speakers, iPods and laptops, as well as the presence of huge speaker systems mounted on Psychological Operations Humvees, and in opposition, the lattice of minarets each with speakers atop the 200 mosques in the "City of Mosques," patterned this event sonically from beginning to end. Soldiers would listen to these tracks very loudly, chanting along, before

¹² "I used my iPod for when I traveled as well as to put me to sleep at night. Sometimes to cover up the sounds of where I was, i.e. helicopter, mortars, IEDs [Improvised Explosive Devices], etc.' Most soldiers listen to music daily on portable music devices like laptops, CD players, mp3 players, or iPods. Tanks, Strykers, and Humvees are equipped with audio and communication systems that allow soldiers to construct improvised sound systems to listen to music while on patrol; in this context, music is played within the vehicle, not broadcast outside to Iraqi civilians. C. J. Grisham describes how he and his fellow soldiers created a surround-sound system in their truck: 'We took those lansing-type of computer speakers—the big bass-y ones—we took those, we mounted them up. We created this little webbing on the top of our truck out of 550 cord. We tied up in the webbing these speakers, we did four of them, so kind of like a surround-sound system in our truck. Then, we had a laptop and CD player with all my mp3s on it and we just plugged the outlets into the laptop. And then we had a converter that you could plug the speakers into, so that was our power—that was our sound system in the truck. It looked like crap but it sounded good.'" Jonathon Pieslak, *Sound Targets*, p. 49.

entering the city.¹³ Those in tanks and Humvees would keep listening, at high volume, as they patrolled the city, even through firefights.

Imagine what the space of the tank was then for its crew. Inside sixty or seventy tons of steel, surrounded by imaging, auditory and control surfaces, huddled all about the breech and barrel of a large cannon, sitting in front of a sealed compartment full of explosive depleted-uranium shells, another sealed compartment full of fuel, a third containing the 1500 horsepower engine, squatted between and above the massive treads. The sound of the engine whining, of the treads crushing heavily on the ground, telegraph through the steel and through the body. Veiled in low green and red light, surrounded in a halo of glowing buttons and dials, pressing helmet forward into a rubber collar around the periscope, peering intently there, scanning for targets, monitoring a stream of audial signals and commands. All the crew focuses in this fashion. For them the tank becomes invisible; they see the space around it; but they feel it through their bodies. Now push play. All that black space that is the propriocepted body, the space of tactility and that of hearing, already run through with the vibrations of the running vessel even when it is not firing, swells with music. The echoing metal now encloses in its flexless grasp a pulsing, beating volume of air, compacting and expanding with the kick drum.

¹³ “My husband was there with Fourth ID (Infantry Division), which was one rotation prior to mine. They were in the shit a whole lot more than I was. They would go out and before they would go out, he said he remembers listening to a song [Lil’ John’s ‘I Don’t Give a Fuck’]. They would listen to it over and over and over again, and they called it their ‘getting crunked’ song. ‘Getting crunked’ is just getting right with whatever you have to do, and getting in the right mindset. They would play it, and it had a refrain in it . . . and they would just chant that over and over and over again until they were pretty much screaming it.” “Right about when we’re about to go out on a raid or a mission or something, I’d listen to Slayer to get all into it. Its kind of a surreal experience listening to Slayer out there, I can’t think of a, it’s just weird. It kind of got me in the mood for it, it just gets you pumped up for it. The feeling of the music, it’s whatever puts you in whatever mood. . . .” “. . . that Eminem song, ‘Go to Sleep,’ when we got to Fallujah was kind of our anthem and before every mission we’d blare that and we’d all scream the lyrics out.” *Sound Targets*, pp. 50-51.

The Eminem song uses a four-bar loop with processed harpsichord pattern in eighth-notes, sitting low on both sides of the stereo field. In its period elements of synthesizer and subdued guitar appear recurrently. But the song is premised on a single low pad, slowly pulsing in its amplitude, one drone, down there with the engine, in between the crunching of the treads, and the simple kick snare pattern. Kick snare kick kick snare. A particularly explosive, forceful kick, like a clipped bomb. Then the voices: “go to sleep bitch, die motherfucker die, go to sleep bitch, why are you still alive, go to sleep bitch, just close your eyes.” And sound effects of automatic weaponry. Soldiers would chant these lyrics together before entering the streets. Perhaps the tank crew too chanted together.



M1-A2 Commander



M1-A2 Gunner

Now what is the machine of the tank, as a volume of highly intensified ambience? From without, it is a formidable object, a threat. And it is an implacable face, a mask with no expression. What is it in its interior? What is it as a machine of perception, of proprioception, of arousal? The reason that soldiers listen to the music that they do is to produce a certain state. Probably their eyes dilate when the musical machinery works. Their breathing changes, their muscular tension alters, their posture assumes a certain aggressivity. Not only do their bodies change on a physiological level, but in the frame of the phenomenological dimension the body image changes itself as well. It becomes more active, more centered on its weapon. Aspects of weakness, the turning of the stomach, the aching of muscles, disappear from

proprioception, to be replaced by aspects of strength, the clenching of fists, the dilating of nostrils. The body begins to aim; it readies itself to orient toward a target. Attention is heightened, adrenalin rises. Now all the functional surfaces in the tank, like those within the cockpit, are ergonomically designed. The newest interfaces even boast of being “user friendly,” just like the Ipod. They are patterned as they are to enable a habituated surveillance, a regular reiteration of functions on the part of the bodies positioned in their grasp. As the music amplifies, as the kick drum beats, those bodies course through those circuits with increased speed and acuity. The readiness to target, to fire, increases. Arousal seeks a target to destroy. The soldiers are perfectly aware of their function, they are trained for it explicitly, and their listening to music thematizing murder, killing, death, and the demonic is just one aspect of their awareness. The whole point is to rouse one’s self into a state that is not quite human, decidedly not moral, that is intense. What Schilder called the “lability” of the body image, its capacity to change forms, here exhibits itself in the rousing rage within the volume of steel. What he noted as its wish to flee its own determinate confines, that wish of libido to explode its own determination, here achieves a machinery. Libido, the energy of the body, will erupt outward through the whistling air in the firefight. The beating pulse inside the tank is the movement toward that post-human ejaculation. The moment is not even evil. It is beyond good and evil. “Evil” is one signifier operating at a secretly sub-significant level, as a gesture of the despising of the sign, by which to explode its order. This explosion, murderous as it is, is even freedom, freedom from being human. The form it takes is determined entirely by the previous structuration of ambience, by the manufacture of the machine, the training of the body, the production of the beat, and the depositing of the whole choreographed system in this particular street, moving as one among many deathly masks on the wave of some pincering movement.

Object of Control: A Place Out of this World

Fallujah is nearby Abu Ghraib. The scandal at the latter location broke a year after the second battle of Fallujah. Many of the prisoners still held there were likely taken during this months-long operation. If not death, then Abu Ghraib, or some place roughly equivalent, was the future for the militants who were captured. In fact such a place awaits nearly any man of fighting age, if they happen to be detained. Naomi Klein and Susanne Cusick have both written about such spaces. Klein has focused on the use of isolation, sensory deprivation and consequent sensory overload as means by which to break down body image and allegedly to extract information. Cusick has focused particularly on the usage of music in this process.

I turn briefly to these spaces and their attendant procedures because of the strange symmetry between them and the interior of the tank or the cockpit. Both enclosed spaces function at some key point to erupt the body image, if to radically different effect. In the case of the tank it is supposed not to happen (the soldier is supposed to remain a man in a position of enduring control); yet for the tank to function optimally, it must. In the case of the “dark prison,” it is supposed to happen right away; yet when it does, the hope for interrogation is lost. What is at stake in either case is the material constitution and destruction of individuals conceived as manners of organization of sensation. What collapses is a regularity of mnemonic iteration of some localized aspect of ambience. Deleuze would call this radical erasure of structure—the very structure called “human”—a sweep of “deterritorialization.” This sweep is the signature of the “war machine.” A war machine in this sense sweeps indiscriminately inside and outside of the tank, inside and outside of the prison. This sweep is the very movement of the event, moving energy across striations, at the same time as reinforcing some of them. In this particular war machine, sweeping through the tank or through the cell, music plays a central role.

Above we considered the ambience of a constrictive space in its living, raging exterior. The rage there is mustered and freed libido. Here we have to consider the opposing aspect of that ambience, the living, suffering interior of its target. While in the first case the soldier works himself up to a sort of orgiastic explosion, and in the second case the victim is crushed, the same logic is at work, and the same cycle of fearful retraction and raging expansion occurs on either side, if on a slower time scale with the victim. What is compressed inevitably expands. Certainly the indiscriminate pressure exerted in this fashion in detention facilities is one key aspect of the mounting rage driving “insurgent” militants. The interrogation apparatus is not so much a machine for producing information as for conducting violence forward through time.

Klein details how the *Kubark* manual was developed at McGill University by the prestigious psychologist Ewen Cameron, and then augmented by experiments performed by another respected researcher, Donald Hebb. Basically the manual recommends a complete destruction of the psychology of the detainee, beginning with the erasure of sensation. First, one encloses the subject within a sealed space. That space should be as constrictive and insulative as possible, isolating the individual off from others and even from the proprioceptions of his own body. This can be achieved to a significant degree through the use of dark goggles and ear covers, cardboard tubing or other padding over the limbs. Then the subject may be held immobile, by restraints, under threat, or by means of chemicals. The goal in this respect is to deprive the person of sensory input altogether. With the absence of sensory flow, there is no material which may be patterned reiteratively as a body image. The living body, having been to begin with nothing but a particular habit of reiterative organization of sensate positivity, blinks out. The experience for the subject is one of increasing hallucination, of the loss of a sense of reality. The hypothesis at McGill, accepted by the CIA and likewise the School of the Americas, is that in this state, the defenses lowered, subjects are more

susceptible to interrogation, more likely to offer up important information. This is difficult to ascertain, of course, when most of those interrogated are not the right people in the first place.

Much of the drama of the breakage or endurance of the tortured subject occurs in the lattice of the soundscape. It is easier to block off light than sound, which is conducted by most structure and even by bone. In many circumstances therefore overwhelming sound, and repeated music, are used in place of silence. Very high volumes and ongoing repetition are meant to achieve the same dissociation as a lack of sensation. An overwhelming flow of sensate positivity is equally as disorganized as an absence of sensation. In Cameron's laboratory, tapes were actually played over and over, sometimes for 20 hours a day, intended, with behaviorist simplicity, to re-program the subject who was hearing them.¹⁴ Today the intent is just the opposite. Nothing need be retained from the sound: it is there just to prevent an integration with an environment beyond itself, and with that to prevent the recurrence of a patterning which could be called "this" individual. In those cases where subjects at Abu Ghraib or Guantanamo have endured torture of this sort (which bear in mind is always augmented somehow, with beatings, electro-shock, humiliation based on gender and religion,

¹⁴ "In a 1962 paper, he described the state to which he wanted to reduce patients like Gail Kastner: 'There is not only a loss of the space-time image but loss of all feeling that it should be present. During this stage the patient may show a variety of other phenomena, such as loss of a second language or all knowledge of his marital status. In more advanced forms, he may be unable to walk without support, to feed himself, and he may show double incontinence... All aspects of his memorial function are severely disturbed.

To 'depattern' his patients, Cameron used a relatively new device called the Page-Russell, which administered up to six consecutive jolts instead of a single one. Frustrated that his patients still seemed to be clinging to remnants of their personalities, he further disoriented them with uppers, downers and hallucinogens; chlorpromazine, barbiturates, sodium amytal, nitrous oxide, desoxyn, Seconal, Nembutal, Veronal, Melicone, Thorazine, laroctil and insulin. Cameron wrote in a 1956 paper that these drugs served to 'disinhibit him [the patient] so that his defenses might be reduced.

Once 'complete depatterning' had been achieved, and the earlier personality had been satisfactorily wiped out, the psychic driving could begin. It consisted of Cameron playing his patients tape-recorded messages such as 'You are a good mother and wife and people enjoy your company.' As a behaviorist, he believed that if he could get his patients to absorb the messages on the tape, they would start behaving differently.

With patients shocked and drugged into an almost vegetative state, they could do nothing but listen to the messages—for sixteen to twenty hours a day for weeks; in one case, Cameron played a message continuously for 101 days." Naomi Klein, *The Shock Doctrine*, pp. 38-39.

other psychological tactics), they often cite some “soundmark,” as Shafer would have called it, some regularly heard element putting them in contact with the walls behind this “place outside of the world.”¹⁵ That kept them calibrated in some larger system, instead of falling into an isolated vacuity. It reminded them what to repeat.

Cameron tried rather stupidly to produce a new and more desirable subject by abusing the existing one near to death, and fully into psychosis. In this he failed. Using audio recordings of messages, he tried to create the blank recording surface that would absorb those messages and turn them into gesture. What he completely missed was that he was already reproducing a pattern, the same one as in the tank, via his own gestures and those systemically encoded in his isolating architecture and in his siege-like techniques. An important man and an authority, he seems not to have questioned his own “programmed” routines. He trusted that what he was doing was necessary given the communist threat. He was even proud of himself. Thus he recapitulated the threat, and reproduced the energetic response, according to specific patterns. Through the transmission of routines via the *Kubark* manual, which played back reconstructs the isolation cells at McGill, in Iraq, he successfully recorded that position of

¹⁵ “On 10 May 2003, an Algerian aid worker in Tanzania named Laid Saidi was arrested by unidentified men. Taken to an airfield near the border with Malawi, he was outfitted with a blindfold, sound-suppressing earmuffs and an anal plug, shackled, and flown to what he later described as a “dark prison” filled with deafening Western music. The lights were barely turned on. ... [O]ne man shouted at him through an interpreter, “You are in a place that is out of the world. No one knows where you are, no one is going to defend you.” Cusick, “A Place Outside of the World,” p. 1. Regarding soundmarks, Cusick references Moazzam Begg, who wrote *Enemy Combatant: My Imprisonment at Guantánamo, Bagram, and Kandahar* about his time in American “dark prisons.” “In both his memoir and in conversation about his experiences, Begg is remarkably attentive to environmental sound. As he explained, ‘When your senses are removed from you and you’re unable to see anything, sound is what you turn to, to ascertain where you are.’ Writing of his first ‘processing’ by US personnel, in Kandahar, Afghanistan, Begg remembered that from the clammy, stifling darkness of his sandbag hood ‘the noise was deafening: barking dogs, relentless verbal abuse, plane engines, electricity generators and screams of pain.’ 15 The constant ‘noise of generators’ and ‘sounds of talking and shouting [in] Arabic, Pashtun, Urdu, Farsi and English’ combined to make sleep difficult... the call to prayer helped him know ‘dawn, noon, afternoon, sunset and night. They [US personnel] would rather we didn’t know. The call was a spiritual communication, reverberating around the camp.’” Cusick, pp. 16-17.

machinic rage and its suffering correlate. He coded the indefinite reassembly of a machinery of rage and suffering.

Here is one interpretation of the Cameron score, performed in an interrogation space nicknamed “The Disco” at Mosul Air Force Base.

After bagging his head while checking him out of the prison late at night, we threw him roughly in the back of a pick-up truck. ... We drove him around the base for about twenty minutes, [then] we dragged him out of the truck and forced him to stand in the middle of the container. His breathing was heavy after hearing the metal doors slam and the bolt fall into place. It was completely dark. We’d staged it perfectly. In his mind, we were getting ready to seriously mess him up. As Umar knelt, we put the flashing light directly in front of his sandbagged face and the boom box, at full volume, just off to the side. The music . . . consisted of industrial-style guitars, beating drums, and lyrics delivered in a moan/shout style, the singer obviously trying to sound like the Prince of Darkness himself. It blasted out of the speakers and ricocheted around the container. . . . And as Umar knelt, we took turns yelling our questions into his ears. His head twisted around as he tried to figure out where we were. After about a half hour, he started moaning. I imagined he was crying behind his sandbag. We pushed forward, getting harsher with our words. My throat was sore, my ears were ringing, and the lights were disorienting. I realized I wasn’t going to be able to stand this much longer. The music and the lights were making me increasingly more aggressive. The prisoner, still not cooperating, was making me increasingly angry.¹⁶

Cusick identifies the mutual participation of interrogators and detainee in this disco.

Over and over, what he recounts most vividly is his own building rage as he, too, listened to the unrelenting music, his own unrelenting yelled questions, and his prisoners’ equally unrelenting refusal or inability to give him the information he wanted. One night, at nearly one in the morning, he snapped. I left [Khalid] in the container, in a stress position, and went outside. The base was quiet except for the voices of Ben and Janeane bouncing off the wall of the shipping container. It was cold and I was completely alone, except for this prisoner inside, who . . . wouldn’t acknowledge the absolute power I had over him. It was just me and him. No one else was out here, no one was watching. Khalid was right where I left him, calm and serene. When I looked at him, the anger surged, amplified by the flashing lights and the booming noise. A thought flashed through my head: Chop his fucking fingers off.¹⁷

There are just two points that I wish to make here. First, the “disco” dependably produces the same rage as the interior of the tank. It presses the constricting actor past his “human” moral

¹⁶ Suzanne Cusick, “You are in a Place Out of this World,” p. 40.

¹⁷ *Ibid.*, p. 43.

limits, into the domain of his own material capacity for violence, which is limited precisely to the infrastructure of the vicinity. Second, that the struggle, the event, still unfolds here in the disequilibrium dimension of sensation. What raises the rage of the interrogator is the unremitting, deterritorializing pressure of the ambience. It is all presence, no distance, all now, no later. This is the tissue of the event, which in this sense is purely “aesthetic.” For the victim swept up in this machinery in the role of interrogated, breakage and endurance depend on sensation as well. If that person can sustain themselves in terms of some organization of the sensory sheet through which they pass, that sheet of phenomena, they endure. If they cannot, they collapse, no more person. The point is that suffering and rage are aspects of the self-same event. They are front and back sides of the sheet, its tendency to retract and its tendency to expand (and it remains a question which is which). They are vectors both said of the same positivity, actualizations, as Deleuze will say, of the same event. In the event of the second battle of Fallujah, both the contained space of the tank (which may also be a death trap) and that of the cell hover as elemental aspects, among very many others.

The Battle of Fallujah as Event

Never present but always yet to come and already passed, the battle is graspable only by the will of anonymity which it itself inspires. This will, which we must call will ‘of indifference,’ is present in the mortally wounded soldier who is no longer brave or cowardly, no longer victor or vanquished, but rather so much beyond, at the place where the Event is present, participating therefore in its terrible impassivity. ‘Where’ is the battle? This is why the soldier flees when he flees and surges when he surges, determined to consider each temporal actualization from the height of the eternal truth of the event which incarnates itself in it and, alas, incarnates itself in his own flesh. Still, the soldier needs a long struggle in order to arrive at this *beyond* of courage and cowardice, to this pure grasping of the event by means of a ‘volitional intuition,’ that is, by means of the will that the event creates in him.¹⁸

Fallujah is known in Iraq as the “City of Mosques.” There are around two hundred in that city, some dating back over a thousand years. Each has a minaret, and atop each minaret

¹⁸ Deleuze, *The Logic of Sense*, pp. 100-101.

there is a speaker. During the day, even as American forces were amassing around the city and beginning to conduct operations within it, “nasheeds” (a capella songs) and calls to prayer echoed loudly. It seemed to American soldiers that each mosque was competing with its neighbors to draw more worshippers. As more and more troops arrived, U.S. Psychological Operations trucks began to join in this competition from large speakers mounted on the roofs of Humvees: “Thank you for pointing out the insurgents. Do not let them cause you fear.”¹⁹ “May all the ambulances in Fallujah have enough fuel to pick up the bodies of the mujahadeen.”²⁰ The minarets replied with appeals for jihad. As the siege proper was prepared, Psy Ops began playing music at high volume. Many of Pieslak’s interviewees remember that AC/DC’s “Hell’s Bells” was reiterated. The song, extremely familiar to at least certain demographics of the American forces, who would have heard this song at barbecues, football games and parties for as far back as they can remember, begins with an ominous, tolling bell. Then an electric guitar, in a four-bar phrase, soon joined by a kick drum. Then the singer Brian Johnson, identifying himself with forces of natural disaster and the devil himself.

I’m a rolling thunder, a pouring rain
 I’m coming on like a hurricane
 White lightning's flashing across the sky
 You're only young but you're gonna die

I won't take no prisoners, won't spare no lives
 Nobody's putting up a fight
 I got my bell, I'm gonna take you to hell
 I'm gonna get ya, Satan get ya

Hell's Bells...

I'll give you black sensations up and down your spine
 You get into evil you're a friend of mine
 See my white light flashing as I split the night
 'Cause if God's on the left,
 Then I'm stickin' to the right

¹⁹ Bing West, *No True Glory*, p. 124.

²⁰ Jason Keyser, “Troops Blast Music in Siege of Fallujah,” AP, April 17, 2004. Incidentally, American snipers specifically targeted ambulances through the course of the operations in Fallujah.

I won't take no prisoners, won't spare no lives
 Nobody's puttin' up a fight
 I got my bell, I'm gonna take you to hell
 I'm gonna get ya, Satan get you

Hell's Bells...

Themes of Allah from the minarets, identification with Allah by armed men on the ground. Themes of Satan from the Humvees (and inside the tanks), identification with Satan on the ground. These sounds mingled, echoing down the streets, and in their psychoactive volumes men would have felt something: yes, we are the real soldiers of God; yes, we are monsters, your worst nightmare. It is not that either assertion is “true,” or that either side really “believed” either idea. The efficacy of the signifying elements was affective, involving sensations, up and down the spine, a capacity to accelerate the body in its controlled violence. Two hypothetical designations outside the sheet of phenomena that was the ongoing event in Fallujah, two virtualities called upon as names for the “source” of force in its aspect as lived, endured, ecstatically participated, methectic: God, the devil. Rudimentary names for a hypothetical virtuality, operating phenomenally and actually, embodied as sound. Eventually the American contribution to the Fallujah soundscape would be identical to the playlist at the “dark prisons”: babies crying, men screaming, cats and barking dogs. Recorded dogs and real dogs, recorded screams and real screams, recorded babies and real babies freely intermingled in a patterning of ambience that was alleged to be tactical but which had its own inertia and hence was out of control (the battle and the event are always out of control; control is only a local experience in a system that exceeds it), an ambience that drew along heartrates, sweat, adrenaline, fear and desire on its contours.

Closer to the center of the city, sound from minarets would have overpowered that from the trucks. On its edges, that from the trucks would have overpowered the minarets. At any point these two fabrics were woven in a much louder system. Marines shot their M16s so

consistently amidst the reverberant concrete city that their ears would not stop ringing. During the daytime there were regular explosions from homemade rocket-propelled grenades. Then there were the much larger 500, 1000 and 2000 pound bombs dropped by the Americans. In two months in Fallujah, the Americans dropped 700 such bombs, levelling by this means, and with bulldozer and tank, fully half of the 36,000 buildings in the city. (Still writers like Bing West are not satisfied that there really was a tremendous death toll among civilians). Each of these explosions would have been nested in a sonic envelope, beginning and ending with the voluminous scream of jet engines bowling their wake through architecture. The Israelis in Gaza use this sound as a regular means of reminding inhabitants of the proximity of force, of keeping them thereby anxious and afraid. Aside from shaking, sometimes breaking windows, or when the plane is supersonic, actually dislodging masonry, the sound is horrifying because, as in Fallujah, it often augments into a full-fledged detonation before receding into the near distance.

Dogs walked though the streets, day and night. For some reason children were not kept inside. They appeared periodically, threading the streets by bicycle, or holding the hands of women—were they women?—in black burkabs. Bing West describes the movements of U.S. soldiers and insurgents in relation to one another through the streets, while civilians looked on, as if it were a video game. A man with a gun steps out from behind a door, shoots, retires. Another from the other side of the street. A car appears at the end of an alley. Two men shoot. The car reverses with a whine and squeals off. Meanwhile the Americans moved in formation, shooting one target and then the next.²¹ Bullets whistled, ricocheted.

²¹ In the “Winter Soldier” testimonies by disillusioned American soldiers near the end of the Viet Nam War soldiers recounted how one could tell whether a Vietnamese person was VC or not: if they’re dead, they’re VC. Here is the lability of the target and the enemy. It is not even true that U.S. troops shot only targets—there are after all the unfortunate “collateral” accidents. But note the perfect generalizability of the term “target.” The term only designates a certain region of a visual field, which anyone may occupy. From the perspective of a frightened and excited young man who is now on the verge of death, it

In any pause, in the daytime, there were biting flies, buzzing along the little swells and dips of hot air. One American journalist wrote: “Marines burn them, using matches to turn cans of flammable bug spray into mini blow torches. They also try to kill them by sprinkling diesel fuel over fly colonies. They joke about calling in airstrikes.”²²

At night the soundscape changed, but it did not quiet. The RPGs ceased, as the local Fallujah fighters did not for the most part have night vision and could not fight in the dark. The Americans for their part saw the dark as a real opportunity. Overhead a huge C-130 aircraft named Slayer—just like the death metal band—moved in loose circles. The aircraft was a vision and bombardment platform. It housed myriad night-vision cameras with high resolution and high magnification. It had an infra-red searchlight which could illuminate a street or a courtyard for American soldiers wearing night-vision goggles, while leaving the veiling darkness intact for those not so equipped. It had two computer-controlled Gatling guns capable of firing up to 2000 rounds per minute—33 rounds a second, faster than the filmic threshold where a series becomes a unity, a unity of metal then, a hose of steel—and a howitzer cannon. It was the hub of American communications at night. Circling, it would spot clusters of non-U.S. figures, report them to U.S. forces in some proximity, and then, usually, liquidate them with the use of laser targeting systems.²³ In the darkness below, in the midst of the screams of babies, men, the howling of dogs real and recorded, the ongoing throb of death metal and gangster rap (again, exactly as in the darkness of the interrogating cell), beneath the tremendous sound of this aircraft whose engines West describes as “a thousand hammers beating on steel pots,”²⁴ steel filled space and bodies.

probably seems more reasonable to shoot than not to shoot. Having aimed, one finds a target, and the death is no longer collateral. (Therefore, perhaps, the corpse was an insurgent).

²² Jason Keyser, “Troops Blast Music in Siege of Fallujah,” AP, April 17, 2004.

²³ The official thing to say would be that they were liquidated “precisely.” But precision seems to imply that only “targets” are hit. At 2000 rounds a second in the dark, however, that is not possible. The weapons are not “precision,” they are superlative.

²⁴ *No True Glory*, p. 66.

At the beginning of its full-fledged siege, the U.S. severed all power going into Fallujah. This meant that at night the city was dark, except for locations having their own generators—hospitals and some mosques, small islands of illumination—and except for explosions and fires. The white phosphorous bombs that the U.S. deployed were in part used to illuminate, in part to terrify, in part to mutilate. They would have lit up streets, but they also burnt anyone in the vicinity, “target” or not, to a black-husked skeleton (for which reason their usage in the fashion that the U.S. did use them, and as Israel continues to use them in Gaza, is prohibited by the Geneva Conventions).

Because the mosques had power they could continue their calls to prayer, which operated also as tactical signals, via their minarets. “Allahu Akbar,” was broadcast through the air, “God is great,” as the game of visibility and invisibility unfolded, as persons burned and architecture toppled, as shockwaves rippled through the streets and the ears rung. In the darkness U.S. troops were much more organized than Iraqis, because of their communications equipment, their infrared technology, and their training. On the other hand, the Iraqis were at home, they knew their space by habit and touch. The American positions could be carefully regulated and monitored from central positions, and so their movements through the darkness would have been relatively geometrical, while those of the Iraqis would have been more piecemeal, fractal or swarm. Movement by design and movement by feel. Longer lines versus points, arcs versus squiggles. In the droning darkness as this moving geometry swept and wiggled atop the more stable but crumbling architectural geometry, the meeting of dark line and dark squiggle erupted in sound and light. The “escalation” of any local conflict would have been a real escalation of amplitude and of brightness, terminating typically with the air strike (a recourse which of course the Americans always possessed and in terms of which their tactics were organized, but which the Iraqis lacked).

This hard tissue of darkness, in which one geometry is swept through by another, the latter deterritorializing the first, a darkness fully spatial, made of proprioception blossoming into sensation at those joints where it rasps together, this is Hijikata's bleeding nature. It is the truth about that bleeding nature, that it is fully infrastructural, totally articulated, rent with force. This is that other into which the naked body opens out. This is the domain of real force, tactical space.

All Dimensions in the Present as Configured Gesture

The event is its unfolding, not its aftermath, its capture or its meaning. It is the hardened slides of its surfaces crumbling against one another. Fallujah at night is a sort of concrete, steel, air-light-sound cloud saturated with a teeming geometry which will not settle, a geometry where all the lines are contentious, every line is differential—a line of points composed of surfaces of contact—and in a process of tactical/accidental alteration. The event is all noise, but noise is thoroughly articulate or articulating, not just some blanket of static through which coherent signals pass. In it signs float as material entities, clustering about themselves the gestures already prone so to couple by prior entrainment. All motions in the city are like this, all sounds and lights, compelling the flinch of bodies, the cry, the retraction, the advance, the dilated eye, flared nostril (“the terror of the merchant... the gleam of the coin, the child's eye”). Those bodies knowing how to mold themselves to guns do so under the inertia of the event which exceeds them. They do not choose so much as their history floods inertially into their doing.

In the event in fact all the temporal dimensions are present at once. Fallujah is nothing so much as a compaction of the past, of past gesturalities, dutifully articulated through time up to this point by all these various bodies, human, animal, architecture, air, by virtue of and in the medium of their very singular, material endurance. Their conatus has been this memory,

and as habit the memory is present, not past. Not only the song, not only the prayer, not only the posture, but even the gun itself is a recording, as Deleuze and Guattari say an *enregistrement*,²⁵ which concretizes the process of its production (such that the collisional syntheses, the labor that produced it are in some real material sense here) but also patterns present material possibility in the mode of a recording for playback. The gun is the negative space of the shooter. It is a recording not only of past productive gesture but of past use which will now be present use. It is a recording of bodily motion, a turn of the feet, a press of the cheek, above all a manner of seeing, along a sight, of constricting the visual field to a focal point coupled with a trigger finger. The gun is a recording of this linkage of eye, hand, other. It is one piece of the infrastructure of the logic of the enemy, singular gesture behind that general sign.

The white phosphorous bomb likewise rearticulates a particular process of production. The exact chemical structure and the exact mechanism of its igniting and the distribution of its action are recapitulations, recordings of prior military tactic, prior burnings to the skeleton. The manufacture of these weapons, like the manufacture of the gun, is always already the preparation for playback. More, the weapon itself is continual playback, so long as it endures. A reiteration of gesture in the factory, it continues itself by means of its own material structuration as perfectly singular gesture wherever the product is brought. Fallujah in this moment plays back the Viet Nam village, where “Willie Pete” was used indiscriminately, Israeli action in Lebanon in both incursions. The future is here too, that enactment of just this burning gesture that would occur a few years later, again in Gaza. In the event this past and this future nestle together, burrow together in a dance with just this bone, of just this person, just this dog, this cat, this stone. As all targeted weapons of course extend beyond their focus—although military thought on the matter extending from commanders to commentators

²⁵ In *Anti-Oedipus*. See the explanatory footnote on p. 4.

like Bing West seem gesturally incapable of thinking in terms of the periphery (they act there, but they point at the target and only that has a name)—these bones would be majority non-target bones, peripheral bones, bones happening to occupy a darkened ambience, the sort of bones that sleep in rooms at night, any bones.

The Blackwater mercenaries who would be shot, mutilated, burnt, decapitated and hung from a bridge days before the siege brought with them, as did all the other mercenaries and all the other special forces operatives, all their training and their experience in prior operations. These Blackwater personnel had been U.S. forces in Panama, Grenada, Somalia, Afghanistan. In their immediate habits were ways of scanning for targets, a capacity to meld to various weapons, a readiness and ability to kill. Those persons in Fallujah who assaulted their convoy, shot them to death and then burned them, patterning the smoke and bullet-filled air with the warcry “Allahu Akbar!” saw the incursion of these capacities through their street. It was not only the size of the men, their musculature, not only their wraparound sunglasses or the AR15 rifles they carried, that identified them. It was their aura, the slight and subtle contours of their motion, which Iraqi fighters were familiar with. These men, though not CIA, were CIA anyway, because the regime of motions composing the CIA are the same as those composing Blackwater, which is why they exchange personnel freely. When rumors circulated in Fallujah that the men had been CIA, in this material sense if not in the nominal one, they were right. When the residents of Fallujah say that the battle here is the same as the battle in Gaza, in this sense they are right as well.

One of the mercenaries, a Croat by birth and language, had requested specifically to operate on the ground during the civil war in Yugoslavia, performing functions he could not divulge to his mother in preparation for the U.S. aerial bombardment of Belgrade. (The U.S. bombed, even as the migrants, etc., continued their politics below). The history of aerial bombardment was present in Fallujah, that regime of large-scale motion, vertical striation of

infrastructure, usage of gravity as delivery mechanism, that large-scale tactic determinative of war since World War II. Dresden, Tokyo, London, Rotterdam, Hiroshima, Viet Nam and Cambodia, and of course Gaza, were here. The tactics themselves are recordings. Each movement is a reiteration. The persons who murdered the Blackwater men claimed that violence as revenge for the Israeli assassination of Hamas leader Sheikh Ahmed Yassin a week or so before. A blind quadraplegic in a wheelchair, Yassin, who had been central in the development of Palestinian infrastructure, the education system, the health care system, and the system of training and deployment of militants and rockets, was hit by rockets fired from an Israeli gunship as he was being wheeled into prayer. His image appeared on flyers in Fallujah in the vicinity of the Blackwater murders. Note how the tactic of aerial assassination is inscribed in the gunship itself. The gunship is the material possibility of particular tactics. Who has such ships will perform such tactics, is even already performing those tactics insofar as they produce the helicopter and the rocket. The material reality of the gesture persists through time in the infrastructure; the infrastructure is gesture, ontologically the same as the squeeze of the trigger, always a collisional surface both perfectly singular and outwardly syndicated. The real of bleeding nature is aesthetic: means without end. As such the future is present in the event in Fallujah. The drone attacks on Pakistan are there in this way.

The APU is in Fallujah in the interfaces in tanks, the shape of their seats, the placement of controls in helicopters and airplanes, the sound of warning signals. Claude Shannon and Norbert Wiener are there in the communications networks as in their “systemic” function. Whatever is built is recorded; theory is an aspect of such building. The theory of perception is present in Fallujah in the quickness of target acquisition, in the user-friendliness of fire-control computers, which like Wiener’s anti-aircraft batteries calculate out wind, moisture, temperature, the movement of the firing vessel, mathematically to bring the

explosion onto some specific surface (and accidentally, invisibly, namelessly, outward from there through the neighbors).

The schizophonic habits inscribed in the determinantly negative space around the Ipod were here, inside helmets, tanks, Humvees, detention facilities, torture chambers. The strange decision Raymond Williams identifies in his book *Television*, of the developers of that medium to place the media interface in private as opposed to public space, reiterates here as the personalized spaces of listening, the off-duty habits of soldiers retiring to the virtual space pulled like transparent taffy between faces and laptop screens (as well as in the myriad families, those remaining alive once half the architecture is flat, still arranged in their living rooms around tvs silent for lack of power.)

Habits of musical listening, cultural habits regarding the coupling of certain musics with certain bodies, certain erotics, certain patterns of adrenaline arousal, were here too. The identity of AC/DC, Metallica, Slayer with the violent virility of young men, an arbitrary coupling with its own long history, echoed through Fallujah's streets: it was not only the sound, but the coupling of sound and body, particular bodies and not others based on prior history, which thus resounded. This music, the very same tracks played to annoy Noriega in Panama, was supposed to frighten the enemy while quickening the warrior. The same relation with the terms inverted for the nasheed, the prayer call, the warcry "Allahu Akbar!" Warcries on both sides: "Allahu Akbar!" "Die motherfucker die!" Two signifying tactics, one invoking the transcendent as such, the expansion to totality, the other nothingness, constrictive contraction to the nonexistent point. Both citing absolute fictions or fictions of the absolute, as signifying means by which to short-circuit the sign into affect, to push fear round its corner to rage.

The training of pilots in simulators, hence the ecological theory of perception, was there overhead, both in the sustaining of helicopters and airplanes in their verticality, and in

the calm of those pilots with regard to the periphery of their explosions, which remain so easily nameless, invisible, and denied. The hollowness of Gibson's nature, which was already a video game, is repeated by the certainty of the young man in his helmet, wearing his masks of interface, that he shoots only his target. The history of the depiction of the Arab other, the Asian other, the history of the terrorist in movies, on television and the news, is there in the certainty that the target is an enemy, is qualitatively distinct, is some real thing in perception. The belief that the enemy exists is a habit sustained in these many articulated gesturalities and replayed with trigger fingers. Nature, this tactical, pincering bleeding nature, is nothing but such habit. Gibson's nature or for that matter Cage's were always a fiction or the smoothed-plane product of a bomb, Tokyo prepped for capital.

The tactic of walking through walls was recorded in Paris 1871, remixed in Deleuze and Guattari's *A Thousand Plateaus* and Bernard Tschumi's *Architecture and Disjunction*, replayed in Gaza and then again here. The technique of the naturalization of occupied space that in Palestine works by the placement of "Jerusalem Stone" here recurs as the identification of mercenaries as "civilian contractors [who] work side by side every day with the Iraqi people to provide essential goods and services."²⁶ That is an identification perfectly useless for the occupied people, but perfectly effective from the perspective of those who occupy. It is a superficial facing walked through in living room ambience which makes the occupation otherwise, which turns a local resistance into an "insurgence" rising up in rebellion against nature. So it becomes, and as such it is met with the same force as preceded the makeover.

And running up to the siege: the invasion, the first massacres in Fallujah, the massacre of the Blackwater agents. The invasion, remember, which introduced American forces into Iraq behind an aerial campaign of "shock and awe" killing unnumbered and unnamed persons

²⁶ From a publicity memoranda released by the Republican PR firm the Alexander Strategy Group, hired by Blackwater in the immediate wake of the massacre. Quoted in Jeremy Scahill, *Blackwater*, p. 176.

and dogs, under suspicious auspices quickly determined moot. The invasion was still in Fallujah, of course, the forces there still were invaders. The war, won a year earlier, clearly continued on. And the machine-gunning of two protesting crowds by flustered marines in Fallujah less than a year before. That was here both in the readiness of the marine with his weapon and the readiness of the Iraqi with his, and also in that hard-to-name thing, that fluid motivity dilating eyes and quickening breath, that readiness to run through the narrow eyelet of death, that rage, not a thing but a cascade.

When ex-special forces contractors rolled into Fallujah escorting a catering truck, in unarmored jeeps, wearing their wrap-around shades and toting their AR15s with their muscular arms, that rage, waving photos of Sheikh Ahmed Yassin, ran to greet them. It is possible that Islamic Jihad received intelligence of their coming and prepared an ambush for them. It is also possible that they were murdered by a vigilante crowd, a sort of flash mob corresponding only to this micro-event, a little macabre party. They were shot, drug from their jeeps, set on fire, hacked to bits, drug behind their burned vehicle, set aflame again, hung from a bridge, cut down, burned a third time, hung again. For American marines entering Fallujah, those bodies were still present. It was in their rage, that was the memory they raised up as they chanted together “let the bodies hit the floor, let the bodies hit the floor, let the bodies hit the floor, let the bodies hit the floor.” That was the moral reason they gave for their manufactured lapse into a post-human murderous fury. That was what they gave a fuck about as they chanted themselves into that post-moral state: “I don’t give a fuck, I don’t give a fuck, I don’t give a fuck.” Those were the names they repeated at intervals, perhaps, as they aimed, shot, and aimed again, and chanted “go to sleep bitch, die motherfucker die, go to sleep bitch, die nameless bitch.” Those were the meanings last glimpsed as through the repetition of words they forced words to descend into sound, into immediate sensate disequilibrium, immediate

adrenal tension, exiting significance and pressing forward in their columns into tactical, bleeding nature, where masked men awaited them.

This last memory is typically offered as the reason for the siege of Fallujah. It is presented as the cause. In a way it is the cause of the siege, but only insofar as Fallujah extends through corporate news into our living rooms, and insofar as that media event veils all the other histories, insofar as it obscures the continuity of that event with all those events preceding it and unfolding from it, conceals the fact of the ongoing war, of the event that will not stop, of the perpetuity of a bleeding nature patterned in this particular way. As “anti-event” the Blackwater massacre is the cause of the siege of Fallujah; but that anti-event is also what shows Fallujah to be a battle in a much broader war, both over and by the material production and distribution of space.

Space as Expansive

People, even targets, did escape Fallujah in the months of the U.S. presence there. A few even escaped in the course of the siege proper, over the mountains of raised earth that turned Fallujah into a camp, eluding the fire of snipers, bypassing the internment camps on the perimeter, going in some direction other than Abu Ghraib. They went to neighboring towns and they spoke to the people there. By this means a spreading “knowledge” about Fallujah seeped through various cities in Iraq, and protests began. Perhaps it is not quite correct to say knowledge, as what is “communicated” by these means is, even if at first quite accurate, immediately subject to distortion. At any rate it is not the spread of knowledge that is important; it is the spread of force. Force, the counter-force of the “insurgents,” at least insofar as the insurgent is defined as a class over and against another particular group, the U.S. military and all its affiliate mercenaries, that counter-force spread to other towns. Protests there had to be put down by U.S. force.

The event thus expands of its own tension. It expanded also via media. But this expanse was already controlled. The expanse, the forceful dilation or dilation of force in the event, only ever occurs through the circuits of materiality, through the real material infrastructure. To be quite concrete, its expanse follows the sensitive routes of the aesthetic function, it moves via media. The body is one media which takes an impression and produces some other ambience in the manner of its mnemesis. Cameras and microphones are others. In Fallujah, those cameras and microphones not attached to tanks or airplanes were distributed in two key fashions. “Western” media were “embedded” with Western troops. This positioning was itself a recording, a perpetuation and replay of the harnessing of the press occurring in the first Gulf War, at which time press were sequestered into “pools” whose membership was determined by American and British military and whose information was fed strictly from those sources. Here, incidentally, occurred the shift of CNN from minor to major cable network; this is the public birth of Wolf Blitzer. The “embedded” system is an improvement on this older one, from the military perspective, for two reasons. For one, it creates the illusion that the press has a significant access to events. This is not necessarily the case, of course, because a journalist moving with a squad goes only and exactly where the squad does—not where the event might otherwise take them, under its own inertia. They can never simply “go investigate” as to some degree they seem to have done in Viet Nam. Secondly though the embedded reporter is now both dependent upon and linked with fellows in the squad, he becomes one of them, he too feels the pulse of the music as he rolls into town, he is in that machine of the subject who targets, he is swept in precisely the same affective waves, which again follow infrastructure exactly. Even before the consideration that a reporter is unlikely to speak poorly of the persons who defend her life, there is the preliminary fact that she becomes very like those persons because she undergoes what they undergo, and nothing else.

There were other journalists in Fallujah, however, who were not embedded. The most well-known of these were an Al Jazeera reporter, Ahmed Mansour and the cameraman Laith Mushtaq. These two remained in Fallujah through the heat of violence. Mansour asserted that his sympathies were with the people there, the people undergoing the siege as the bombs fell and with them one building after another. “If they die, I’ll die with them... I only think about those people.”²⁷ It is not so much a question of who is biased and who is not—both sides it is clear are biased in this simple sense—as of what position in space the camera and the microphone occupy, which aspects of the ambient field they slide through. The receptive media of the embedded reporter sweep through space behind a mask of force, and capture the quelled space behind this mask. They capture the space in which there exists a target, the space which produces and shoots that target. As such the perpetuation of the gestures so recorded repeats the production of this target. The receptive media outside this mask on the other hand records its fearsome approach, and more importantly, the area outside targeting attention. The images that Al Jazeera broadcast of dead babies, burnt bodies, destroyed homes were distributed across the Arab world. Mushtaq’s camera swept through an ambient periphery, that which was not the focus, and that which therefore seems not to have been seen by embedded reporters, however concerned they may have been. That periphery was simply absent, empty, erased, as a key aspect of the ambience they occupied. Outside the phalanx, however, it was all periphery, all waste, all the sidelong blast of white phosphorous, huge bombs, massive expenditures of ordinance, perhaps even napalm. When writers like Bing West assert that there is no proof that any significant numbers of civilians were killed in Fallujah, it is probably not even that they are liars, although they may be. The deeper reality is that, as is always the case for focus, the periphery simply does not exist for military vision. That vision lays it flat before it ever bombs. There is only the target, all else is absent. A direct

²⁷ Scahill, *Blackwater*, p. 203.

hit on the target is the perfect exhibition of force; it is surgical, it is safe. How it is possible for a 2000 pound or a white phosphorous bomb, or 2000 rounds a minute only to hit their target—how it would be possible for physical systems whose very being is to expand to remain concentrated on a point—is never asked, cannot be asked. The question is systematically suppressed; it is nonsense. Everybody knows that we aim at targets.

The spread of a space outside of focus constituted a tactical difficulty for the American forces. Accordingly the U.S. military targeted the reporters themselves, and the homes where they were staying, destroying the houses along with their owners (though missing the targets). Eventually the reporters were forced to cease transmitting. In the meantime, stateside spokespeople had to be content just to insist, over and over, “Change the channel. Change the channel to a legitimate, authoritative, honest news station. ... The stations that are showing Americans intentionally killing women and children are not legitimate news sources. That is propaganda, and that is lies.”²⁸

The event also perpetuated itself through U.S. media space, finding its way into American living rooms. But the aesthetic function, on the social scale as on the individual, is always mnemesis. The camera describes a gesture in conjunction with a specific ambience. There is the methectic sway of the event, but also the mimetic sway of the systemic repetition. Every new ambience in which the material repeats is a new order of mnemesis, a new moment of repeating the new as the old. Just as the sensation at the level of representation becomes the word, which hides the sensation, the recorded ambience at the level of media distribution becomes “the battle of Fallujah,” a noble and stolid reply to merciless and subhuman violence against innocent contractors delivering food. With the announcement of name, origin and aim, the “battle” hides the event.

²⁸ Brigadier General Mark Kimmitt, quoted in Scahill, *Blackwater*, p. 204.

The mnemesis begins with the physicality of the camera and microphone, the camera's responsiveness to light, for example, such that it sees something different than what the U.S. troops see through their night vision goggles, or the forms of warmth extinguished by machine gun with the aid of a thermal scope. The camera and the microphone exclude and select just by their singular function. They perform very specifically. Then there is the mnemesis corresponding to the habits of the photographer or recordist, who turn on the camera or microphone only at certain points and not at others, who move in certain ways, shifting field of reception. Then there is the mnemesis compelled by the positioning in the squad and in the Humvee, from which position some things occur and others do not (each point in an ambient field is a point of conjunction of very specific rays of light and waves of sonic compression). Then there are the mnemeses of the editing room and the selections of editorial staff. Then there are the verbal and graphic mnemeses framing some small gestures of light and sound, which pretend by caption to exhaust their significance. Here an ideological character is glibly obvious. Then there is the mnemesis of distribution, placing these images in contexts of other media (ultimately as entertainment), in particular positions in space, the living room, the office, via television and internet. Then there is the mnemesis of the spectator, who has seen terrorists before, and who performs Americanism with his car, his flag, his barbecue and his AC/DC, even with his posture and the local social mechanizations of his anger. By this point a solid job has been done of transforming the event nearly entirely into a sign which is already known. Still the sign has a non-signifying aspect, the capacity to rouse a certain response. Insofar as there is anything, a tension on the television, a repetition of some nonsense phrase, there is a problem, an irritation. Something needs to be done. The irritation must be erased. In Washington there is a cry for blood. What this shows is that the news remains aesthetic, although its aesthetic aspect is hidden under its being as information. That Muslimgauze was capable of feeling the news image, of finding in it rage and gesture, affirms

this ongoing presence. Nor is it any surprise: whatever occupies ambience exists as gesture with gesture; perception is movement with ambience. It is simply that the regime of names (presently the regime of information) denies both materiality and its continuity, from the irritable frontier, through the monopolized digital railroad, to the light-sound cloud hovering in this room.

At each stage in this arduous route, by which the whole body of the event is hidden, but by which also the event will be perpetuated, the specifics of the mnemesis depend exactly on the material structuration of the contact and on that of the distribution system (the first being only the nerve-end of the last). The relation of reporter and squad is the material reality of an institutional relationship between “press” and “military.” That is to say that in is this moment they are the same. The aesthetic upsurge acting collisionally with the lens is that at the focal tip of the phalanx, which in one more way now sees and shoots. But the relation between distribution and ownership is the clearest at the editing room, where most footage is simply censored. As in the maintenance of an intact body image, which is the means of production of subjectivity, most sensation must simply be unconscious, in the maintenance of an intact social one, most aesthetic products must be censored. When Marx says that the ruling ideas are always those of the rulers, the simple argument he gives is that rule has to do precisely with the control of material production and distribution, including that of ideas (which are ultimately, as we have said, actions and not objects). What is produced and distributed correspond to this interest.

What is even more important though, in tracing the route of the event in its outward material explosion, through the precise routes of infrastructure, is that the system of distribution is itself a system of production, of one and not another perception. Televisions, speakers, and recordings, are all elements of fixed capital. If they are consumed, they are consumed as are the cogs of machines, in the course of outputting a worked-over reality.

Distribution is not an adjunct of the product, a terminus just before consumption. (There is no consumption.) As Marx points out in the *Grundrisse*, distribution to begin with is a distribution of means of production.²⁹ Such is certainly the case for media apparatus, which produce ambience the moment they are turned on, thereby working over the very air of the locality, that which the body traverses, the event through which it passes and which methodically sweeps it up, rendering affect and further motion.³⁰ The energy of the indignant American is in this respect the energy of Fallujan rage washing through the American living room, but now turning that fateful corner, by means of a clean forgetting, back into a movement of constriction in this case strangling that city with concertina wire and beating it flat with bombs. That forgetting, a careful and prudent mnemesis, is the joint productive act of the various stages of working-over the recorded material. While the material still “objectifies,” in the Marxist sense, the labor of collision at the aesthetic function, it also objectifies that action of the institutions behind it, who are in the business of erasure.

Brian Massumi follows the event through these circuits in terms of the football match and the Superbowl. The game itself is an event pure and simple, where the structuring conditions lift the motion of the players into itself, pulling the players toward the ball and the ball towards the goal. The broadcast of the game is another event entering homes and acting there in the specific tensions of force particular to that locality. He notes that during the Superbowl domestic violence in the United States spikes. This event, so heavily gender-coded, brings to a peak the relations of violence usually subsisting at a sub-expressed level. On the

²⁹ “But before distribution can be the distribution of products, it is: (1) the distribution of the instruments of production, and (2), which is a further specification of the same relation, the distribution of the members of the society among the different kinds of production. (Subsumption of the individuals under specific relations of production.) The distribution of products is evidently only a result of this distribution...” *The Marx-Engels Reader*, p. 233.

³⁰ Raymond Williams notes in *Television* how peculiar it is that in the case of broadcast media, the distribution network is the primary product, what is produced first, the content coming only afterward.

energy of the distributed event, the gestures of the locality achieve a higher amplitude. What was a harsh word now becomes a physical blow.

Anti-Event as Aspect of Event

In the second battle of Fallujah, and via the rhetoric of certain mnemonic figureheads like Bill O'Reilly and Tucker Carlson, the expansive event becomes constrictive event feeding back and augmenting event. The mnemesis of the indignant American in relation to the violating foreigner, the terrorist, becomes an outright demand for further violence. "I don't care about the people of Fallujah," said O'Reilly, "You're not going to win their hearts and minds. They're going to kill you to the very end. They've proven that. So let's knock this place down." "...use maximum force in punishing the Fallujah terrorists... Fear can be a good thing. Homicidal terrorists and their enablers must be killed or incarcerated. And their punishment must be an example to others." Carlson added, "I think we ought to kill every person who's responsible for the deaths of those Americans. This is a sign of weakness. This is how we got 9/11. It's because we allowed things like that to go unresponded to. This is a big deal."³¹ In the "Chaplain's Corner" of the Blackwater newsletter, the *Blackwater Tactical Weekly*, which takes part in the reproduction of group identity in that particular organization, the enemy was reiterated in its elementary form: "They are brainwashed from birth to hate all who are not with them... And especially us!!!... And the Israelis!"³²

Everything about the event, except for this rudimentary logic, recapitulated, between the focal enemy and the good perceiver, is erased. American forces in Iraq are not invaders. They are not an occupying force. Their illicit entry to that territory did not happen. There were no previous massacres of Iraqis by Marines. There is no relation between Israel and Iraq,

³¹ *Blackwater*, p. 172.

³² *Ibid.*, p. 177.

except for some Muslim Extremists. The contractors were not Blackwater men. Blackwater men were not special forces. U.S. forces had not already been shooting people in Fallujah for months. Everything devolves to the murder of the innocent by the enemy. The fact that the innocent are not innocent, and the enemy perpetually reconstructed in this dance of the armed victim, becomes heresy, nonsense, anti-common sense.

Everything is, as Marx says, inverted as in a camera obscura. And yet this functionally-necessary reproduction of the means and relations of production which Althusser identifies is not only performed at the level of the sign and for the purpose of sedation. The sign is rather a veil for the mustering of affective energies in the perpetuation of the event. These energies fuel this very event for the most part by going back to work.

The sign is the elision of the aesthetic, of the affective now (which persists now as unconscious, still motivating, still channeling event). The sign makes its own materiality accidental: that is its nature and its function. "Look over there!" it says, and in quickly looking we forget the quickened breathing meeting the command. Yet the feeling of the indignance at the target produced by a particular system of mnemesis and mnemetic suppression is just as real as that of the finger on the trigger. This feeling through time will reproduce the soldier, marching off to war with his Ipod blaring, feeling the surge of his own righteous rage. It is involved in the perpetuation of the present siege, but within its action are many future sieges, sieges carried out by TV viewers who now are even pre-verbal, but already feel the meanings of "innocence" and "enemy." The signifying dimension of the whole system, the claim that what occurs in the physical patterning of the domestic space is "only information," is a way of hiding the real violence both of Fallujah and of the home. That hiding is an essential aspect of that function. The reason that a theory of ideology is still necessary, even in the wake of the Foucauldian and Deleuzian sophistication of the theory of power, is that in this respect there still exists a superstructure, a superstructure of the sensory moment itself. Identity, perception,

structure are this dimension, that of the mnemonic striate meaning, dislocated from its production (its production as effect and its production as cause, which materially are continuous). Everything else that Foucault alleges about the theory of ideology may be correct. Yet still there is this key inversion, this veiling, today codified as information and message, whereby the so-called “subject,” with its hypothetical freedom, purpose and privacy, and the so-called “object,” in its hypothetical inert isolation, are produced. No ruling regime, no military-industrial habitus, as Althusser rightly says, may perpetuate itself without this basic amnesiac reproduction of its own relations and means of production.

Conscious and Unconscious Music

Three different U.S. soldiers in Iraq, who listened to music in their vehicles:

When shots started firing, we didn't hear anything. It's like it stopped for a little while.

As soon as guns start firing and you're fighting your way out of an ambush, or those tanks starts going off, or those RPGs... start going off, you don't fuckin' hear that music. It's all just instinct, man. It's all what you got inside of you that starts coming out.

In combat? No. You know why? Because the explosions and the machine guns, and the shooting that's going on, that's the music. It's kind of like listening to Slayer, like that sort of shit. Listening to a 240 [machine gun] fire off rounds, or a TOW missile hit something, that's music to your ears kind of.. And that sounds all twisted and wrong, but that's music in itself.³³

Eminem's “Go to Sleep” involves an increasing amount of sampling (or staging) of automatic weapon fire. Even absent those samples, during verses, the kick drum sounds like an explosion; it operates sonically in just the same way: a percussion of the air is a percussion of the air. As the tanks rolled through the streets of Fallujah, the eyes buried within them scanning over fields drawn in by periscope, their treads crunching and their engines whining, this beat rung within. Kick snare kick kick snare, in a cycle within the duration of the

³³ *Sound Targets*, p. 56.

phonological loop. A perpetual present inside the tank, machinically operating to draw up adrenaline, heart rate, dilate nostrils and eyes, to get these boys ready. Or shift this scene to the Humvee, and let the eyes scan through 3x scopes out the windows, or just over the old-fashioned bead. Let the eyes just scan through the frame of the window, looking for targets.

All these soldiers in their attentive vigilance, that vigilance of such great concern to the RAF in the second world war, that vigilance of the utmost importance in getting the drop on the target—in not becoming target, in killing before being killed—take part in the same procedure. Tautening of focus, heightening of attention, contraction and quickening of the body for the fight. And the contemporary machinery for this arousal is this beat. Kick snare kick kick snare. “I ain't gonna eat, I ain't gonna sleep, ain't gonna breathe till I see what I wanna see, and what I wanna see is you go to sleep in the dirt permanently... we are just going to be enemies as long as we breathe... you going to see a demon unleashed in me... now go to sleep bitch, die, motherfucker, die...”

And then—what? A shot maybe, somewhere over on the right. Or a movement by a doorway. A quick filling of a window, in some field of view, on a screen or on an eye. An accidental press on the trigger by a nervous 19-year old, of whatever persuasion. With that the shift from one field of percussives to another. Just a shiftover in amplitude, but with that also a shift from perception to sensation, identity to non-identity, conscious to unconscious, structure to event. The street, ringing with rounds, explosions, screams, becomes the total ambience. The soldier, with his name and his self-control, is left back at the interface. Now moving through that, outward on top of bullets and echoing blasts, flying through the flying tissue of the event, bleeding the event through the street, that unconscious energetic adrenal ecstasy. The music just goes away. The machine gun is the music. The kick drum is gone, the explosion is the kick drum.

Lapsed. The soldier lapses into the event. This is the moment that the tense space prepared for, or if not, if that tension was means without end, this is the immanent end nevertheless, the broader endless field of means seizing that high potential, distributing it through itself, living on it. The event “incarnates itself... in... flesh.” He moves with the “will that the event creates in him,” a “will of anonymity,” a motivity in the tactical, public space perpetually outside of names.³⁴

“It’s all instinct.” The sphere of tactility, the shock channel, the dimension of sensation, of perpetual contact opens itself out or pulls the body in. Like the beat the battle methects, with a violent delight. The soldier, via trigger finger, with a respiration and a chemical production now integrated with this vibrating common air, this steel din making the ears ring, this air ripping flesh and flecked with blood, this bleeding nature, tumbles into total instinct. He is seized upon by the event exactly in his material construction. His habits, his training, his muscular ability, his metabolism, his innate dexterity, his predatory lineage, ascend into the event like a raised demon. His demonic aspect, all those motivic physiological powers in their unmediated propriocepted aspect, mustered by music, compressed by steel, now turns the gun one way and the next, targets, shoots, targets, shoots, placing figures in circles and dancing the grasp of the circle. The training, the music, the jolting shock of the shot or the explosion or the motion or whatever this time marked the tipping doorway of the event, are aspects of this ritual invocation. Invoked, the demon performs. In the event, all his gestures are necessity. Aim, choice, reflection, thought and names are all left in that posterior dimension, they all travel behind like a crystalline shadow. Glancing back, structure may be seen as the perpetual product it is. Freedom and necessity here coincide. The soldier is liberated, on either side. “Allahu Akbar!” and “Die Motherfucker Die” trail in the air as the

³⁴ Deleuze, *The Logic of Sense*, p. 101.

nearest lines of structure, still behind. Only the periphery hears them. The event knows no such perception, it is only motive sensation, coupling sight, sound, gesture, street.

This theme of leaving the human domain behind recurs in the testimony of soldiers. It is there repeatedly in Stephen Crane's *The Red Badge of Courage*, which Deleuze cites as the essential book of the event. It occurs over and over in the testimony of the "Winter Soldiers" protesting the war in Viet Nam, which they took part in, throwing prisoners from helicopters, torturing them with hot irons, raping their daughters, burning their villages, spraying white phosphorous, ripping torsos open end to end by knife, and so on. What they regret the most is having become "animal." Crane's "young soldier" is always catching up with himself after the fact. In the event, everything is crystalline, fluid, mindless, beautiful, inescapable liberty.

It seemed to the youth that he saw everything. Each blade of the green grass was bold and clear. He thought that he was aware of every change in the thin, transparent vapor that floated idly in sheets. The brown or gray trunks of the trees showed each roughness of their surfaces. And the men of the regiment, with their starting eyes and sweating faces, running madly, or falling, as if thrown headlong, to queer, heaped-up corpses—all were comprehended. His mind took a mechanical but firm impression, so that afterward everything was pictured and explained to him, save why he himself was there.³⁵

He is adrift in this voluminous toppling anonymity. Only afterward, perpetually afterward, writes Crane at various points:

... Since much of their strength and their breath had vanished, they returned to caution. They were become men again.³⁶

The impetus of enthusiasm was theirs again. They gazed about them with looks of uplifted pride, feeling new trust in the grim, always confident weapons in their hands. And they were men.³⁷

He had been where there was red of blood and black of passion, and he was escaped... He saw that he was good... He felt a quiet manhood, nonassertive but of sturdy and sound blood... He was a man.³⁸

³⁵ Stephen Crane, *The Red Badge of Courage*, p. 78.

³⁶ *Ibid.*, p. 79.

³⁷ p. 85.

³⁸ pp. 98-99.

It is not sufficient to say that war makes men inhuman, although of course it does, because this inhumanity was always the backside and the constitutive moment of their humanness to begin with, “humanity” always the product of a war. The dimension of representation and perception, with its subjectivity and objectivity, its decisive, controlling subject, its identity, its “man,” was always the performance falling flickering back from a moment of tactile encounter. Humanity is always a production of transcendence occurring on a field of immanence. The event of battle occurs not only in Fallujah, but in the living room. The inhumanity of the human perpetually flies in front of the human repulsed by the idea of his inhumanity. Morality therefore is not the answer or the point. Morality is that indignant capture of inhumanity which makes inhumanity flicker bright, it is that saying of “evil” which bottoms out the sign into instinct, that always-present motive aspect of the sign that hides itself. No, the point is not that this is immoral. Morality itself is immoral or amoral, as the sign itself is gesture. Even the “will” that moves through the person, through their limbs, as Nietzsche writes in *Beyond Good and Evil*, through their multiplicitous proprioceptive joints, only afterward to be captured by language and hence to become the doing of some subject, even this “will” was always already event. The sweeping up of the gunner in the firefight just renders this clear. The will, and God, are hypothetical renderings, according to the logistics of the dominant language games, those signifying networks moving like crystalline shadows behind the fluid infrastructure which produces them and which they reproduce.

No, the point is that the event moves by this infrastructure. The soldier becomes the demon that he always already was. This is why there is something honest about the Eminem song and something moving, even though of course it is immoral. He knows it is immoral, that is the intent. The point is not that Eminem with his careless immorality takes part in immoral events, and that we, the enduring subjects in touch with truth and the transcendence of regulative ideals, must reign him back, scold him, ban his cds. The teenagers and the rest of us

who listen to this music and are moved by this beat which so easily gives way to real explosion, just because it is real explosion to begin with, writing itself in the air, are so moved because by nature we are disposed towards such movement. "Nature," fully patterned, sizzling with electronics, is just this movement. We are always already demonic: the demon flies ahead of the saint, or the saint is his shadow. Or every saint has its guardian demon. Or whatever.

But in Fallujah, and in the living room, the demon, which is after all no supernatural being at all but real energy in real conjunction with real energy, the roused motivity flies into the event of the infrastructure. There still are very simple facts with regard to the event: were there no tank, there would be no tank firing. Were there no training, there would be no choreography of trigger fingers. Were there no Fox News, there would be no "punishing the Fallujah terrorists." Were something other than guns recorded, some recording other than this would play back in those streets and pattern that ambience. Were there no white phosphorous manufacturing, there would be no burning to the bone.

It is never a question of morality, but of production. Production is always, as Deleuze says, the production of recording, and the production of recording is the production of production, the laying down of material infrastructure, the distribution of means of production. The question is whether production takes place from the ambience out, whether it is autonomous production, or whether it sweeps in from the periphery, overwhelming the present in a structuring siege which erases both itself and its other. Will the production of space be a production of constriction or a production of expansion? Will it be Gaza, or Muslimgauze, will public space be manufactured by its owners or its users? Ownership, as Marx never tires of saying, is a social and not a private relation.

Recording is Producing

Audio recording, producing and distribution is not different in kind from the military practices above, which extend back through the channels of media distribution, such that those channels, as military strategists well know, are aspects of the military machine, the distribution network constituting the infrastructure of our present social formation. The very act of recording, of the field recording made by the soundscape artist, the sonic activist, the news reporter is an act of production. Through the staging of a particular collision it synthesizes a new syndicate of gesturality, which is a productive force. The recording as a product is not the alleged product for consumption, which as Marx shows clearly in the *Grundrisse*, does not exist as such, since consumption reproduces labor, produces production as further demand, etc., etc. The recorded product is always an ongoing performance, of itself as singular material configuration, and it is a means of production of ambience. Ambience is life in its eventful unfolding; there is no life in the abstract. That independence of the organism, along with its alleged tendency to homeostasis and its predilection for names, is another ambient production; this local whole always exists on the same plane as its parts. It is smeared out on that plane, exploded into that ambience. This is always already accomplished. The production of recording is thus the production of the material possibility of the production of everyday life itself.

That openness, that taut beyond into which the keen intuition of La Monte Young is erotically, methectically drawn, as was the lust of John Cage, of Eliane Radigue, and then of Murray Shafer and Hildegard Westerkamp, but equally of Antonin Artaud, Hijikata Tatsumi, Throbbing Gristle, Muslimgauze and Ultra-red, that open beyond is no pure mathematics, no pure chance, no pure open, no bucolic balance. Sticking a microphone into the air proves it.

This exposure, though, the aesthetic exposure is daring and dangerous whatever words accompany it. And the “aesthetic product” performed at some point in the process is

dangerous too, is political, is infrastructural and real. Music, movies, etc., just as architecture and occupational incursion, are the production of space, the production of life, and the training via life of further life. All the identificatory, methectic and mimetic machinery, all the physiological prods both rough and fine, take part in this synthetic collisional event perpetually occurring on the surfaces of the body, beyond which or more accurately behind which there is only a manufactured hypothesis.

The notion of Ultra-red, that the aesthetic product may be fed back at the site of its production as a means by which to augment the autonomy of that site, as a means of raising its demand and its force, of sharpening the forces already there, is the most critical of insights. It is critical in the proper sense, because it discerns the material possibility, the materiality existing in actuality, in actual space, still beyond the dominant regime of names. The local production of recording for the augmenting of local production is a machine for real autonomy. This, not some indignant academic withdrawal, is the real autonomy of the aesthetic, an autonomy aimed at expanding the self-sufficiency, the felt immediacy of the so-called aesthetic throughout the breadth of space, of making space living, expansive, not constricted and self-effacing. Life does not have to become art; it is already aesthetic.

The tactic is not exactly political, because it opposes representation.³⁹ As Todd May has shown in *The Philosophy of Poststructuralist Anarchism*, in this respect it is properly anarchistic. It is direct action, the performance of the goal it wishes to achieve. All aesthetic function is this direct action, consisting in these three key moments, exposure, production, distribution, which in reality are the same moment. The opening out to ambience is the social act of trust, is the existence of solidarity and the phenomenon of social action—and it needs to be recognized that this socius is not human, but properly spatial—is the recording. Ambience

³⁹ This is the reason that the recent shift of Ultra-red toward a practice based on representation and language, it seems to me, loses something important.

records itself along this tactical clasp. The recording is already the production, the collisional synthesis of a gesturality already engaged in its own repetition. And the production is already a distribution, of a particular means of production of space. Further distribution is the ambient seethe of this means of production, though there is the key question here which distributive infrastructure is really augmented through a particular distribution. Corporate distribution gives out the means of the production of the ambience of rooms, hence a local production of space. But it also augments a distributive network that constricts and prevents, by its very nature as profit-seeking and market-sustaining and -expanding, further local productivity. The question is which distributive networks, like for example Public Record, take part in a production of distribution of an expansive, locality-enabling sort, which networks really self-erase. The further such an expansion is materially realized, the greater is the material force of autonomous production. Such production is the autonomization of ambient power.

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