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Machinic Embodiment and the Cult of Destruction

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MACHINIC EMBODIMENT AND THE CULT OF DESTRUCTION

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by

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Table of Contents

Abstract

Machinic Embodiment and the Cult of Destruction

Michael M. Moeller

This work is an examination of the literary production of avant-garde and modernist writers who ardently delved into the disorienting effects of technologically induced disaster and industrial warfare in the early twentieth century. The reactionary modernist response to the disenchantment of the world and the technological reconfiguration of metropolitan life was manifest in a militant aesthetic praxis, a technological romanticism, and a predilection for destruction. This study argues, first, that the impulse behind the literary imagination of figures like the Italian Futurists and Ernst Jünger, culminated in the attempt to re-enchant the emerging machinic world in terms of an irrational philosophy of vitality, which was often associated with the fascist fantasy structure with which some would come to identify. A psychoanalytic engagement with these texts and aesthetic practices is instructive for an assessment of how reenchantment would emanate from the surface of technology itself, even while this compulsion was part of the reaction against progressive rationalization that established the conditions in which such technologies were conceivable. Second, this project will demonstrate how these literary endeavors, distinguished by the reification of the machine and the euphoria of violence, were forerunners to the cultural disaster novels of J. G. Ballard who exploited the libidinal investments in the technologization of culture as a means of puncturing the narrative of capitalist spectacle. Problems of machinic embodiment,

psychic armoring, and the paradoxical oscillation between the technological prosthesis as a benign extension of instrumentality and its pernicious dismemberment, constitute features of a historical legacy that informs the transformative grammar of Ballard's perverse dystopias. Tracking this trajectory of technophilia and the scopophilic consumption of disaster into the twenty-first century is essential in terms of historicizing an era of spectacular media saturation, violence, and post-rational politics.

Chapter One

Libidinal Machines, Hysteria, and the Euphoria of Destruction

The culture of the *fin-de-siècle* was steeped in themes of rebirth and degeneration, pitched against a bewildering backdrop of frenetic and transformative change. The uprooted and shifting urban masses, advancements in education and literacy, popular sports, new forms of spiritualism, and the scientific analysis of the human psyche, were corresponding features of a world in acceleration. This was the cultural milieu tempered by the polarities of rationalization and disenchantment where technological modernity in its full-unfolding emerged. The increasingly tortuous relationships between bodies and machines were transfigured throughout the Second Industrial Revolution, with its expanding transportation and communication networks, petroleum and fertilizer industries, scientifically prescribed caloric intake, development of metal alloys, synthetic plastics, and electric power. And this dizzying historical trajectory directly followed the radical departure from past cosmologies of which disenchantment was a symptom.

The discontinuity that arose with late nineteenth century industrialism and the advent of technological modernity seemed to anneal this constellation of disenchantment. This was continuously reaffirmed by the encroaching grid of the industrial landscape and the atomization of an urban population caught up in the calculated advance of a bureaucratized lifeworld. The movement of bodies and machines in expanding railway networks left occupants with a new sense of agency, albeit vitiated by the perpetual anxiety regarding railroad accidents. In the latter part

of the century railroad disasters were progressively frequent, so that the thrill of locomotion was linked to the terror of the train wreck. Moreover, the involuntary locomotion of bodies in transit transposed the experience of agency into one of automatism as bodies were driven toward ends over which the occupant had little control. Involuntary locomotion left one with the impression that said occupants were of nugatory consequence, contrivances in a world of machines. The problematics of machinic embodiment precipitated the development of a neuropathological discourse to address the hysteria associated with involuntary locomotion and, more broadly, the physical and psychic trauma of railway travel. These investigations were supplemented with the analyses of animate motion graphically represented through the concurrent innovation of instantaneous photography which was applied in clinical settings. The libidinal subtext of machinic embodiment, involuntary locomotion, and hysteria found expression in the mechanization of bodies and the eroticization of industrial technology.

The trepidation in confronting a disenchanted world populated by increasingly powerful machines was exacerbated by the quickening impulse of irrationalism that flourished since the early Romantic period. The reaction against instrumental reason culminated in a striking ambivalence regarding technology, and a tenacious desire to reenchant the world. The dueling perception of the technological prosthesis as either a benevolent extension or a malevolent constriction of human capacity is a symptom of this ambivalence. And the compulsion to reenchant the world did not constitute a mere rejection of technology, as the state of ambivalence allows one to experience

oppositional urges in a simultaneous, quasi-integrated manner. Thus, one was prone to lurch between the dread and allure of industrial machines. The eroticization of machines, especially the steam locomotive, is a species of reenchantment coupled with the sublimation of the mortal dangers of industrialism. The proclivity to reenchant the world was ingrained in the stories of gothic horror and science fiction wherein the reassertion of the irrational over the rational occurs in situations where instrumental reason is pushed to its extreme limit and inverts into its irrational double. This irrationalist literature mirrored the imagination of disaster, or the desire to see technology run amok. The shock cinema and disaster spectacles of the fin-de-siècle provided a temporary release for this instinct to destruction, and these visual pleasures coalesced with the apocalyptic mood of the time.

I.

The static universe inherited from the seventeenth century was conceived as the work of some master architect whose framework was held together by cause and effect and understood by virtue of reason and the scientific method. René Descartes thought that God had made the human body like a machine. His contemporary, Thomas Hobbes, also likened the body to a machine and before the end of Hobbes' life Robert Hooke's contrivance of a "mechanical muscle" (1670) would confirm the conception of the human limb as prosthesis. Hooke wanted to determine "whether a mechanical muscle could be made by art, performing without labour the same office, which a natural muscle doth," and so he attempted to stimulate muscle motion by applying "heat to a body filled with air for dilation" and "cold to the same body for

contraction."[1] The mechanical muscle was concurrent with other Enlightenment enterprises such as the production of automatons. In 1738, Jacques de Vaucanson constructed automatons in the form of a flute player, a drummer, and a duck, which prompted Voltaire to write that the inventor rivaled Prometheus and "seemed to steal fire from heaven to bring his figures to life."[2] Inspired by these innovations, the physician Julien Offray de La Mettrie, author of *L'Homme Machine*, suggested in 1774 that eventually an industrious mechanic would construct a synthetic human being, and in the same year Pierre Jacquet-Droz exhibited an automaton called the "Draughtsman" that could write sentences like "Cogito, ergo, sum" and "We are the androids."[3] At the end of the eighteenth century Giovanni Aldini was applying the theories his uncle, Luigi Galvani, had developed regarding animal electricity and Alessandro Volta's principle of bimetallic electricity in order to provoke muscle contractions in dismembered animals and the corpses of executed prisoners.[4] And even while the relationship between humanity and technology was becoming more complicated, the teleological conceptions of the bourgeois world still seemed stable and predictable.

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1 From the Minutes of the Royal Society, reprinted in *The History of the Royal Society* by Thomas Birch, 1756, in Humphrey Jennings, *Pandaemonium, 1660-1886: The Coming of the Machine As Seen by Contemporary Observers* (London: Icon Books Ltd., 1995), 131.

2 Horst Bredekamp, *The Lure of Antiquity and the Cult of the Machine: The Kunsthammer and the Evolution of Nature, Art and Technology*, trans. Allison Brown (Princeton: Markus Wiener Publishers, 1995), 4

3 Martin Tropp, *Images of Fear: How Horror Stories Helped Shape Modern Culture (1818-1918)*, (London: McFarland & Company, 1999), 31; Bredekamp, *The Lure of Antiquity and the Cult of the Machine,* 4.

4 André Parent, "Giovanni Aldini: From Animal Electricity to Human Brain Stimulation," *Canadian Jourenal of Neurological Sciences* 31, no. 4 (November 2004): 579.

But the fixity and equilibrium provided by the mechanical conceptions of the universe were displaced beginning in the Industrial Revolution with the shift toward physics and, more specifically, toward theories of heat. The mechanical register was then conceived in terms of *motors*. Circulation, reservoirs, and changes in temperature produced energy and thus ran the turbines, combustion engines, and steam power. As Michel Serres has written, the "second law of thermodynamics accounts for the impossibility of perpetual motion of the second type; energy dissipates and entropy increases" after which he concluded that "from this moment on, time is endowed with a direction."[5] Initially, there was skepticism regarding these theories announcing the movement from order to disorder, from difference to dissolution, a hesitation endowed with the wish that "the motor would never stop."[6] Science was decoupled from intuition with the introduction of non-Euclidean geometry and other strange phenomena like curves without tangents, not to mention electromagnetism, the discovery of radio waves, x-rays, and radioactivity.[7] The mechanical model of the universe was disintegrating into a flux of immaterial forces. There was no "ether." Sigmund Freud aligned himself with these developments and a theory of energy based on thermodynamics associated with both the "the conservation of energy and the tendency toward death."[8] The perception of the world had irrevocably shifted, and these revolutionary transformations occurred not just in the sciences but in the cultural milieu of the fin-de-siècle. As Eric Hobsbawm reports, it

5 Michel Serres, *Hermes: Literature, Science, Philosophy*, eds. Josue V. Harari and David F. Bell (Baltimore: John Hopkins University Press, 1982), 71-72.
6 Ibid., 72.
7 E. J. Hobsbawm, *The Age of Empire, 1875-1914* (New York: Vintage, 1989), 245—249.
8 Serres, *Hermes: Literature, Science, Philosophy*, 72.

is merely a coincidence that "Planck's quantum theory, the rediscovery of Mendel, Husserl's *Logische Untersuchungen,* Freud's *Interpretation of Dreams* and Cezanne's *Still Life with Onions* can all be dated 1900,"[9] but the simultaneity of innovations in several fields is stunning nonetheless.

The expansion of industrial life was driven by progressive rationalization in a world that was becoming increasingly disenchanted. According to Max Weber, the development of science and scientifically determined technology is part of the process of intellectualization and rationalization. Rationalization is the historical process through which activity is directed toward productive efficiency according to decisions based on scientific investigation, and this is followed by disenchantment which is the diminution in the reliance on myth and superstition. Weber emphasized that increasing intellectualization and rationalization does *not* mean an augmentation in general knowledge or that people in industrial societies have a more expansive understanding of the conditions of their material reality than did peoples in pre-industrial times. It is not necessary, for example, for the driver of an automobile to know the specific mechanical operations that sets the thing in motion so long as one can depend on the vehicle to function in a predictable manner. For Weber, increasing intellectualization and rationalization leads instead to the recognition that *"if we only wanted* to we *could*" learn exactly what makes a motorcar run because these things are "controlled through calculation" and not due to some mysterious or unpredictable force.[10]

9 Hobsbawm, *The Age of Empire, 1875-1914*, 256.
10 Max Weber, "Science as a Vocation," in *Max Weber's Complete Writings on Academic and Political Vocations*, ed. (New York: Algora Publishing, 2008), 35.

The organization of modern life through the facilitation of instrumental reason and technical rationalization is coterminous with the disenchantment of the world. As the sociologist Antônio Pierucci explains "science disenchants because calculation depreciates the incalculable mysteries of life."[11] But the acknowledgment that one could come to an understanding of the underlying mechanical processes in a technologically mediated world did not alleviate the trepidation regarding the rapid improvement of ever more sophisticated machines. When the electric push button was introduced at the turn of the century people were skeptical and suspicious of the technology precisely because the forces that were put in motion behind the button were hidden from view, the process was opaque, and people feared losing the ability to navigate the material world.[12] And even while technological rationalization improved the material conditions of existence the subsequent sense of liberation was attenuated by the atavistic and melancholic tone of disenchantment that was common in industrial society. It is worth noting that Weber borrowed the term "disenchantment" from the romantic aesthete Friedrich Schiller.[13]

Weber was not unaffected by this sense of alienation and approached the disenchantment of the world with a somber resignation overshadowing his analysis of bureaucratization and the gradual atomization of modern life. For many, the quickening shifts in the fabric of modernity were enigmatic, for some apocalyptic,

11 Eduardo Weisz "Science, Rationalization, and the Persistence of Enchantment," *Max Weber Studies* 20, no. 1 (January 2020): 9.

12 Rachel Plotnick, "At the Interface: The Case of the Electric Push Button, 1880-1923," *Technology and Culture* 53, no. 4 (October 1012): 815.

13 H. C. Greisman, "'Disenchantment of the World': Romanticism, Aesthetics and Sociological Theory," *The British Journal of Sociology* 27, no. 4 (Dec., 1976): 502.

and there was a general sense that these transformations portended something other than a decisive, teleological progression through contemporary history. The Romantic reaction against the Enlightenment had continued apace throughout the nineteenth century. The preoccupation with the unknown and the mysterious was evident in the vogue for the occult, magic, necromancy, parapsychology, and mysticism, even more popular during the fin-de-siècle than in the early Romantic period.[14] Such proclivities were not merely a rejection of rationalism and instrumental reason but a revelation of the desire to reenchant the world through vitalist, paralogistic conceptions of life forces emanating from nature.

Cultural pessimism was another response to radical change as evidenced in popular publications like German author Max Nordau's book *Degeneration* (1892), which was a polemical screed against the modernist currents of fin-de-siècle culture that he claimed were symptomatic of exhaustion, decadence, and the inability to adjust to the reality of the industrial age. Nordau raged against Nietzsche who was fashionable in the anti-empiricist mood of the times, accusing the philosopher of "ego-mania," licentiousness, and corruption.[15] Indeed, "Nietzsche cults"[16] proliferated in the 1890s and devotees could interpret menacing prophecies in his poetic aphorisms while regarding the pervasive nihilism as a logical outcome of scientific rationality complicated by its own internal contradictions. And while Nietzsche was perennially skeptical of scientific reason and progress his philosophy

14 Hobsbawm, *The Age of Empire, 1875-1914*, 262.
15 Max Nordau, quoted in Steven E. Aschheim, "Max Nordau, Friedrich Nietzsche and *Degeneration*," *Journal of Contemporary History* 28, vol. 28 (1993): 644.
16 Aschheim, "Max Nordau, Friedrich Nietzsche and *Degeneration*," 646.

was nevertheless underwritten by a sort of social Darwinism, especially with regard to *The Will to Power* of the Superman. Georges Sorel discusses Nietzsche in *Reflections on Violence* but was also an assiduous reader of Nordau. In Paris, Sorel attended the lectures of the actionist-intuitionist philosopher Henri Bergson as did Alfred Jarry. As sociologist Julien Freund explained, "disenchantment had "stripped the world of charm" and people endeavored "to make up for it through emphasis and militancy."[17]

The acute sense of alienation that was symptomatic of the disenchantment of the world was of consequence for the development of sociological theory itself, which to a degree emerged in response to the shock of these social disruptions and transformations precipitated by the distinctive structure of modern capitalism.[18] For Weber, the *iron cage* of Western rationalism was most effectively confronted by utilizing rationalization itself so that one could apprehend the forces of bureaucratization that bore down on the individual and thereby adjust one's footing in an age of machines, even when, in Marx's terms, this meant becoming an appendage of the machine. The instrumentalization of the body through the scientific management of Frederick Winslow Taylor retooled human activity to conform with the industrial apparatus, further separating the individual personality from the body as a component in the system of production and consumption. The incongruities in the interaction of bodies vacillating between agency and automation and the increasingly

17 Julien Freund, *The Sociology of Max Weber*, trans. Mary Ilford (New York: Vintage Books, 1969), 24.

18 Greisman, "Disenchantment of the World," 496.

complex machines that were colonizing the disenchanted world ultimately culminated in an approach to technology that was marked with a profound *ambivalence*.

II.

The assimilation of the body within the industrial landscape of the late nineteenth and early twentieth centuries, through the relays of railways, telegraphs, and transit points, forms the nexus of technological modernity. The precarious imbrication of bodies and machines moving in transportation networks crossing through spaces both public and private, psychic and geographic, obscures the boundaries between these oppositional terms and constitutes what Mark Seltzer calls the *psychotopography of machine culture*.[19] In *Bodies and Machines*, Seltzer theorizes machinic embodiment in terms of the shifting and uncertain lines in the double discourse of the organic and the technological he designates as the *body-machine complex*, which is a manifestation of this psychotopography.[20] In the first formulation of the body-machine complex bodies are replaced by machines in the sense that a biological component is superseded by a technological mechanism just as typewriters were designed in the early nineteenth century to enable the blind and the Victorian period saw the improvement of artificial limbs.[21]

In the second instance bodies are de facto machines, understood as thermodynamic and electro-chemical systems. As chronicled by Anson Rabinbach in *The Human Motor*, the late nineteenth century transformation of bodies through the

19 Mark Seltzer, *Bodies and Machines* (New York: Routledge, 1992), 4, 19, 166.
20 Ibid., 4, 6-7, 103-112.
21 Herbert Sussman and Gerhard Joseph, "Prefiguring the Posthuman: Dickens and Prosthesis," *Victorian Literature and Culture* 32, no. 2 (2004): 618.

thermodynamic model of a rationalized labor power fortified the increasingly elaborate industrial network of the early twentieth century by reducing all human activity to production. Rabinbach considers the factory of the second industrial revolution as metaphorically tantamount to a machine with a human motor.[22] People were becoming machines in thrall to industrial automation. The third iteration of the body-machine complex, that bodies are created by machines, or that "technologies make bodies and persons," is not unrelated to the aforementioned totalizing network although Seltzer specifically addresses the creation of statistical persons in reference to Taylor's "programs for the systematic making of men."[23] For Seltzer, the ways in which these often incompatible conceptualizations of the body-machine complex connect and interact is situated in "the radical and intimate coupling of bodies and machines."[24] The violent and even sensual coupling of fragile bodies and industrial machines generates the paradoxically twinned principles of both agency and automatism, extension and constriction.

The tensions and antinomies between the organic and the technological are modeled in Seltzer's text with respect to various fin-de-siècle discursive modes. This procedure is efficacious because it is through such analysis that one can access the daily grit and material forces of industrial life by dint of the cultural process in which they are embedded. The engineer as automaton is represented in Stephen Crane's 1894 essay "In the Depths of a Coal Mine," where an imaginary engineer is "encased

22 Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (U.S.: Basic Books, 1990).
23 Seltzer, *Bodies and Machines*, 12
24 Ibid., 12-13.

in the machine"[25] over which the worker toils. The trope of a ghost in the machine in this instance is a metaphor for the body-machine complex in that there is a coordination between the worker whose mental image of the faraway engineer is constitutive of a psychic investment in the process of mechanization in terms of "head and hand, body and machine, mastery and the 'mad and unseen.'"[26] The merger of interior and exterior states, of the psychic and the mechanical, informs the psychosocial dynamic of machinic embodiment. For Seltzer, the quintessential portrait of the psychotopography of machine culture is Emile Zola's novel, *The Beast Within*, in which the "logics and its erotics"[27] of the railroad are traversed by characters whose violent desires merge with the industrial landscape. The precarious nature of machinic embodiment is epitomized in the character Flores who is infatuated with railroad disasters and in a jealous rage tries to kill a man and woman by sabotaging the rails in a tunnel through which their train would transit, triggering a deadly derailment. As narrated, "the minute she heard that an animal had been knocked down or that someone had been run over by a train she would come running to see."[28] Violence and eroticism are ingrained in the industrial grid of machine culture whose denizens are "human-machine systems" or "human dolls" whose bodies function as thermodynamic mechanisms.[29] For Zola, machinic embodiment

25 Ibid., 118.
26 Ibid.
27 Ibid., 18.
28 Emile Zola, *The Beast Within*, trans. Roger Whitehouse (New York: Penguin Books, 2007), 66.
29 Emile Zola, quoted in Seltzer, *Bodies and Machines*, 18.

assumes the form of the "steam engine and heat exchange system"[30] and the locomotive-cum-dynamo becomes a replacement for the body.

The metropolis encroaching into the natural world as depicted by a locomotive rumbling through a pastoral scene is emblematic of the juncture wherein the body becomes an articulation between the polarities of organic life and technology. Seltzer alleviates the tension of these countervailing forces by presupposing an "intimacy" between bodies and machines. "Whenever a man and a woman are alone in a nineteenth-century American novel," he writes, "a train goes by."[31] The counter-positions Seltzer posits are useful for interpreting dialectically the antinomies between the biological realm and the world of machines even while he is disinclined to see these counter-positions as oppositions, suggesting that recognizing "counter-position as opposition" is misleading. But "intimacy" connotes familiarity and in this context the lure of freedom associated with locomotion vested by industrial technology is presented without reference to its concomitant counterpart of collision and the body's violent confrontation with alien machines. Seltzer intimates a more nuanced counterpart in the sudden reemergence of a technological *other* that manifests with the awareness that a binding automatism wrought by the involuntary locomotion of the body in transport has stripped the body of agency. The opposing capacities of agency and automatism and the oppositional experiences of freedom and restraint are signified by the occupant who jauntily climbs aboard the railway car just as the anticipation of escape transmogrifies and becomes, in Seltzer's terms, "the way

30 Ibid.
31 Ibid., 177, fn. 26.

of the hysteric" whose body is "set in motion apart from one's intentions."[32] Involuntary locomotion itself is a form of automatism. It conjures a sense of the uncanny by forcing the occupant to confront the repressed notion that said occupant is an automaton, a bundle of nerves trundling down the track.

The reference to hysteria is important not just because it was in vogue in the late nineteenth century but for its association with the movement of bodies in railroad machines. The phenomenon came to be correlated with the traumatic injuries (neuroses) sustained in railroad disasters. Freud initially regarded hysteria as a symptom of trauma experienced specifically by women but later altered his theory to include male hysteria and to address the psychic effects of industrial disasters and railroad accidents as well as the stresses and strains of daily railway travel. In the *Report of the Commission on The Influence of Railway Travelling on Public Health* (1862) the train carriage is described as "a framework of bones without muscles"[33] and the passengers are the connective tissue absorbing the jolts and shocks while incurring adverse physical and psychic side effects, an anthropomorphic metaphor grounded in the body-machine complex. The term "railway spine" refers to the deterioration of the spinal cord resulting from railroad accidents but it was later determined that normal railway travel absent collisions had deleterious effects on the nervous system, the symptoms of which were rooted in the external environment rather than the body. Wolfgang Schivelbusch, in *The Railway Journey*, describes the perceptual disorientation resulting from the fact that "panoramic perception" involved

32 Ibid., 17.
33 Nicholas Daly, "Railway Novels: Sensation Fiction and the Modernization of the Senses," *ELH* 66, no. 2 (Summer, 1999) 469.

in railway travel (as opposed to traditional perception) took place outside the space of the apparatus in which the occupant moved.[34] Train passengers experienced visceral confusion as they were paradoxically left in a fixed position while moving, separated from the stationary objects of the landscape that were perceived as if in motion. This psychopathological condition was termed "railway brain."[35]

The output of literature in the late nineteenth century exploring the traumatic psychic experiences of bodies in industrial machines betrays a certain trepidation regarding the conscription of humans into ever expanding networks of machinic embodiment. In their discourse analysis of male hysteria, Ursula Link-Heer and Jamie Owen Daniel astutely observe the history of hysteria as an amalgam of neuropathological discourse permeated with literary allusions, tropes and metaphors that "bring trains, steam boilers and engines, collisions, derailings, and explosions into play."[36] It is a psychotopography of machine culture run amok. The medical literature on "accident traumata"[37] advanced in the 1860s frequently conflated neuropathological symptoms with hysteria. William Camps was known for his articles on hysteria before writing *Railway Accidents and Collisions; their Effects on the Nervous System* (1867). A year previous the surgeon John Eric Erichson published the acclaimed book, *On Railway and Other Injuries of the Nervous System*, in which he frames both physical and psychic concussions in terms of pathology,

34 Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the Nineteenth Century* (Oakland: University of California Press, 2014), 64.
35 Lynne Kirby, *Parallel Tracks: The Railroad and Silent Cinema* (Durham: Drake University Press, 1997), 66.
36 Ursula Link-Heer and Jamie Owen Daniel, "'Male Hysteria': A Discourse Analysis," *Cultural Critique* 15 (Spring, 1990): 211-212.
37 Schivelbusch, *The Railway Journey,* 139.

although he would later concede the condition "is probably dependent in a great measure upon the influence of fear."[38] Freud reached a similar conclusion years later in *Studies on Hysteria* (1895) co-authored with Josef Breuer wherein they use the metaphor of electricity to describe hysteria (an abnormal excitation) as a "short-circuit,"[39] notwithstanding that the psyche functions independently of the nervous system and is not grounded in pathology. Jean-Martin Charcot supervised the infamous Parisian nerve clinic, La Salpêtrière, where research was conducted on a range of nervous disorders with a specific emphasis on hysteria, especially male hysteria related to railway trauma. The phenomenon was described as the "derailment of nerve tracks," a phrase drawn from the language of the railroad itself.[40] German neurologist Hermann Oppenheim averred that railway trauma was intrinsically a nerve condition with "electricity coursing through the nerves as causative agent."[41] That scientists were grappling with new phenomena is evidenced by the motley assortment of theories proposed concerning the psychic effects of railway travel. Moreover, the persistent appropriation of the nomenclature of the very technologies that induced said phenomena with its elusive symptoms bears witness to the incursion of industrial technology into the cultural imagination.

Charcot searched undauntedly for possible correlations between industrial locomotion and hysteria. The traumatic paralysis following a railway disaster, for Charcot, was a manifestation of hysteria no different from the hypnotically induced

38 Ibid., 139-143.
39 Josef Breuer and Sigmund Freud, *Studies on Hysteria*, trans. James Strachey (London: Basic Books, 2009), 203.
40 Link-Heer and Daniel, "Male Hysteria," 194.
41 Hermann Oppenheim, quoted in Kirby, *Parallel Tracks*, 66.

paralysis he provoked in his subjects. Charcot documented the relationship between locomotion and hysteria through visual diagnosis and photographic iconography from which he developed a typology of quasi-theatrical gestures and expressions of hysterics by capturing their bodily movements in visual form. His technique of instantaneous photography was borrowed from the work of British photographer, Edweard Muybridge, whose serial images of humans and animals performing tasks that elicit various movements was an inspiration for Charcot and his iconographic typology of hysterics. Seltzer refers briefly to the decussation between Charcot's graphic record of hysterics and Muybridge's gridding of bodies in motion among other developments in time-motion studies, but provides little detail regarding the cross sections of these practices and their significance in shaping the psychotopography of the fin-de-siècle.[42] The publications of Muybridge's *Animal Locomotion* (1883) and Charcot's landmark *Iconographie Photographique de la Salpêtrière* (1878-1881) in close succession are indicative of the emergence in consciousness of what Linda Williams terms the "*new truths* "[43] of locomotion, especially when compared to the standard photographic portraits of the era. In other words, the mechanical repetition of instantaneous photography or *chronophotography* produces a series of photographs shot at short intervals that reveal the intermediate stages of movement so that movement itself seems "more visible" (i.e., "*true*") than it was before. As Jean-Louis Comolli writes "movement

42 Seltzer, *Bodies and Machines*, 17-18.
43 Linda Williams, *Hard Core: Power, Pleasure, and the "Frenzy of the Visible" (*Los Angeles: University of California Press, 1989), 47 (emphasis added).

becomes a visible mechanics."[44] Machinic embodiment is emblematized in these concatenations of bodies and their diagrammatic representations in gridded superimpositions.

The development of chronophotography is credited to both Muybridge and Étienne-Jules Marey who published a study on locomotion in animate beings titled *La Machine Animale* (1873) which included various drawings depicting the horse's gait. The data Marey used for his study was obtained by attaching pneumatic devices to horses' hooves and then measuring the movement graphically, a method he called "chronography."[45] Muybridge advanced Marey's method through chronophotography rendered by placing multiple cameras along a track and then measuring the horses' movements through a veritable iconography of animate motion. A comparison of Marey's drawings to Muybridge's photographs demonstrate the accuracy of the former and the ineluctable linkage between scientific analysis and photographic evidence.[46] Marey went on to create a photographic rifle that could produce multiple photos from a single viewpoint. Marey's conceit was that through the graphic inscription of motion, whether that of birds, horses, or soldiers, one could decompose animate movement and present for analysis its force and energy.[47] The visual rhetoric of his chronophotographs offers a figure of the human

44 Jean-Louis Comolli, "Machines of the Visible," in *The Cinematic Apparatus*, eds. Teresa de Lauretis and Stephen Heath (Milwaukee: MacMillan Press, 1980), 123.

45 William I. Homer and Aaron Scharf. "Concerning Muybridege, Marey, and Seurat." *The Burlington Magazine* 104, no. 714 (Sep., 1962) 391.

46 Ibid.

47 John W. Douard, "E.-J. Marey's Visual Rhetoric and the Graphic Decomposition of the Body," *Stud. Hist. Phil. Sci*. 26, no. 2 (1995): 186-187.

as machine whose movement can be reduced through graphic notation.[48] Sequential, superimposed photographs show, for example, the trajectory of the laborer's sledgehammer both in flight and at the moment of impact. Marey studied the body as a thermodynamic machine with specific laws of motion while attempting to chart the slippage of time and map the economy of objects, animate and inanimate, moving through space. His chronophotographic data would inform the Taylorist regimentation of industrial labor.

The rationalization of Marey's utilitarian modernism encouraged the ideological perception that the subjects of his chronophotographs, horse or human, are machines. Muybridge's chronophotographs also drew attention to the specifically machinic sequence of the subjects' movements as evidenced by the inclusion of detailed analyses of equine mechanics on the backsides of his horse prints. In one sense, the practice of chronophotography was a testament to technological progress, indicating as John Ott writes that "horseflesh and the iron horse behaved in remarkably similar ways."[49] But such technology was provocative in the fin-de-siècle, raising epistemological questions about the merits of mechanization itself or whether nature indeed operated like a machine. There were even questions regarding the veracity of the photographs and suspicions that a hoax was involved in their production. It seemed that the mechanical methods of capturing visual information had been incorporated into the very organic forms exhibited and, nay, that a sort of

48 Ibid., 176.

49 John Ott, "Iron Horses: Leland Stanford, Eadweard Muybridge, and the Industrialized Eye," *Oxford Art Journal* 28, no. 3 (2005): 409, 414.

brutality had been inflicted upon the subjects. A common, albeit irrational, response to the depictions of movement in superimposition was to view these images as grotesques, as if the subject had drawn itself into a heap or slung itself into pieces. Ott argues that the period responses to chronophotography were haunted with "a macabre specter of violence and death," and maintains that "many deemed the vision of instantaneity not wondrous but a kind of gothic horror."[50]

The skepticism regarding the truth content of chronophotography corresponded with the irrationalist philosophy espoused by the vitalist Bergson who was influential at the turn of the century. The vitality and movement of Bergson's vision was in direct opposition to the suggestion that objective, observable truths could be revealed through serial photography. Bergson argued that the attempt to portray continuous movement in space with discreet stoppages of time or "what we call the positions of the moving body, or the points by which it passes,"[51] is itself an illusion. But neither is discontinuity accurately portrayed, suggesting even disillusion in discontinuity. The chronophotographs of Muybridge and Marey present an iconography of bodies in movement not dissimilar from Charcot's typology of hysterics, and for the public it was an exhibition of illusory, abstracted bodies. The sheer fascination, both in terms of dread and allure, regarding the juxtaposition of bodies and graphic representations is illustrative of this moment in machine culture where the confrontation between the natural world and the technological domain takes on irrational hues. The kernel of curiosity and even desire that compounds the

50 Ibid., 409, 418-419.
51 Henri Bergson, *An Introduction to Metaphysics*, trans. T. E. Hulme (New York: G. P. Putnam's Sons, 1922), 47.

public's wariness regarding these technologically produced phenomena is manifest in the enthusiasm surrounding Charcot's live diagnoses of hysterical attacks performed in his packed amphitheater and documented with rapid sequence photography.

A series of images in Muybridge's *Animal Locomotion* features the irregular movements of men and women with physical disabilities. The most arresting figure is an a naked woman with no apparent disability, writhing in convulsions. And while her peculiar movements may warrant inclusion in the series of disabled bodies the woman was not disabled, and neither did she suffer from hysteria. She was an artist's model assuming a position that was alleged to produce involuntary hysterical spasms, especially the dramatic *arc de cercle* (back arching contortion). The influence of Charcot is self-evident. Noting these integral cross-influences, Williams argues that the mechanical representation of bodies feeds off and constructs other technologies for producing a *visible mechanics*.[52] The clinical apparatus at Salpêtrière is one such technology of production and representation. Whether and to what extent the hysteria exhibited at the nerve clinic was performative is unclear, but it is worth noting that the hysterical attacks were often provoked and/or accelerated when Charcot administered inhalations of amyl nitrate.[53] Charcot confirmed his iconography through gross observation, whether the condition was a symptom of neuropathy or the shock of railway disaster. "I am not the type to suggest things that cannot be demonstrated experimentally," he contended, "all I am is a photographer. I describe

52 Williams, *Hard Core*, 48.

53 Michel Foucault, *The History of Sexuality, Volume I: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1990), 56.

what I see."[54] The clinical sense of purpose at Salpêtrière was undergirded by the irrational, theatrical extravagance of its exhibitions even while the facility itself was considered a feat of rationalization. Michel Foucault

described the nerve clinic as a machine:

> it was an enormous apparatus for observation, with its examinations, interrogations, and experiments, but it was also a machinery for incitement, with its public presentations, its theater of ritual crises, carefully staged with the help of ether or amyl nitrate, its interplay of dialogues, palpations, laying on of hands, postures which the doctors elicited or obliterated with a gesture or a word, its hierarchy of personnel who kept watch, organized, provoked, monitored, and reported, and who accumulated an immense pyramid of observations and dossiers.[55]

Following Foucault, Williams contends that the purpose of this immense machine was the quest for data, for truth and falsehood, which supersedes the conspicuous subtext of sexuality. The new "truths" of locomotion in Charcot's case are paradoxically made more visible through involuntary convulsions artificially induced and serially photographed. At Salpêtrière agency is dispersed across these industrial technologies and automatism takes place in a precipitated delirium.

The pairing of bipolar terms like bodies and machines, agency and automatism, for Seltzer indicates intersections of influence rather than diametrically opposed terms. These binaries are inclusive. Seltzer's references to Charcot, Muybridge, and Marey, are illustrative of the nexus of machinic embodiment with its

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54 Charcot, quoted in Jane F. Thrailkill, "Doctoring 'The Yellow Wallpaper,'" *ELH* 69, no. 2 (Summer 2002): 547.

55 "A handwritten note gives an account of the session of November 25, 1877. The subject exhibits hysterical spasms; Charcot suspends an attack by placing first his hand, then the end of a baton, on the woman's ovaries. He withdraws the baton, and there is a fresh attack, which he accelerates by administering inhalations of amyl nitrate. The afflicted woman then cries out for the sex-baton in words that are devoid of any metaphor: 'G. is taken away and her delirium continues.'" (Foucault, *The History of Sexuality, Vol. 1,* 55-56).

libidinal compulsions and psychosocial tensions including both hysteria and ambivalence as reactions to industrial technology. Although Seltzer's pairing of locomotion and agency in market culture with automation in machine culture restricts the dialectical function of these oppositional terms, he draws our attention to the conflict between these imperatives. "But what must be considered is how the uncertain status of the principle of locomotion," he writes, "precipitates the melodramas of uncertain agency and also what amounts to an *erotics* of uncertain agency." For Seltzer, hysteria and ambivalence are framed in terms of crises and appeals to "agency" which he declares is epitomized in "the figure of the railway locomotive" beset with eroticism.[56]

III.

The proliferation of the steam locomotive with its commanding presence, massive size and concomitant noise had an inimitable impact on the cultural imagination of the nineteenth century. The locomotive, as Helmut Müller-Sievers contends, was both "passionately admired and maligned" and the phenomenon "embodied most succinctly what had become of the sublime in the nineteenth century —a sublime that rushed by with great speed" and "inevitability."[57] The imposing and often perilous trajectory of the steam locomotive converges with the perception of steam power as generative. The machine is frequently portrayed in literature as a force of procreation, especially in the American context where the pristine, white bursts from the steam engine are cherished and couched in quasi-sexual terms as

56 Seltzer, *Bodies and Machines*, 17-18.
57 Helmut Müller-Sievers, *The Cylinder: Kinematics of the Nineteenth Century* (Berkeley: University of California Press, 2012), 63..

insignia of fructification and the tacit suggestion that the nation was conceived through this "mechanistic orgasm."[58] Railway travel more broadly involved an erotic subtext the tropes of which still appear in popular culture, especially in cinema. The correlation between mechanical locomotion and sexual arousal was examined by both Freud and Karl Abraham. For Freud, the fantasies of older children regarding the railroad form the "nucleus of a symbolism that is peculiarly sexual."[59] "A compulsive link of this kind between railway-travel and sexuality," Freud remarked, "is clearly derived from the pleasurable character of the sensations of movement." Schivelbusch describes the railroad as a "most powerful agent of that arousal," and he argues that the counterpart to the thrill of riding trains is the consequent fear of derailment.[60] Abraham theorized that the fear of trains was related to a fear of one's own sexuality getting carried away in "a kind of unstoppable motion that they can no longer control."[61]

The steam locomotive itself is animated by a piston-cylinder combination through which oscillating valves push the pistons whose motion is translated through a series of rods and linkages rhythmically pumping the rotation of the driving wheels. The gyrating activity of the kinematic components takes place conspicuously outside the wheels and atop or beside the boiler so that the working components are functional yet dramatically displayed. With rising velocity hot oil and steam erupts

58 Perry Miller, quoted in Seltzer, *Bodies and Machines*, 27.
59 Sigmund Freud, quoted in Schivelbusch, *The Railway Journey*, 77-78.
60 Ibid.
61 Karl Abraham, quoted in Ibid., 78.

from the gadgetry.[62] The erotic potential of the steam locomotive is thus implicated in its forms of motion: the reciprocating movement of the connecting rods, the circular motion of the drive wheels, the combustion and explosion that moves the pistons up and down, and the thrust of the machine through space. Christoph Asendorf intimates that these motions resemble the "back and forth of the legs in human and animal mobility (and the thought of sexual intercourse)."[63] With respect to the eroticization of the locomotive Müller-Sievers reminds us that the machine is "also one that could be entered" and Marshal McLuhan would conclude that humans are "the sex organs of the machine world."[64]

The mechanization of the human form in the late seventeenth century, as evidenced in the preoccupation with animated machines, automatons, and robots, was not associated with a specific gender if gendered at all. Andreas Huyssen argues that the "android builders of the eighteenth century did not seem to have an overriding preference for either sex,"[65] observing that there were a commensurate number of male to female androids. The later literature, he contests, "prefers machine-women to machine-men."[66] There was a shift in the cultural imagination in nineteenth century and its quintessential industrial machine, the locomotive, would become gendered as female just as the premier industrial product of the twentieth century, the automobile,

62 Christopher Harvie, "The Politics of German Railway Design." *Journal of Design History* 1, nos. 3-4 (1988): 238.
63 Christoph Asendorf, *Batteries of Life: On the History of Things and Their Perception in Modernity* (Berkeley: University of California Press, 1993), 105.
64 Müller-Sievers, *The Cylinder*, 63; Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: The MIT Press, 1994), 46.
65 Andreas Huyssen, "The Vamp and the Machine: Technology and Sexuality in Fritz Lang's *Metropolis*," *New German Critique* 24/25 (Autumn, 1981—Winter, 1982): 226.
66 Ibid.

would be so gendered. Zola described the "imposing yet delicate beauty" of the locomotive and one of his characters who was an engineer named his locomotive *La Lison* "as if it were a woman, because he was so attached to it."[67] In the classic, decadent novel *Against Nature*, Joris-Karl Huysmans elaborates an eroticized locomotive gendered as female. The "supple cat-like movements" of the locomotive whose "long slender body" is "imprisoned in a shiny brass corset," the "thick-set loins" of which are "squeezed into cast iron plating," are compared to and indeed surpass the sensual beauty of nature's "most perfect and original creation—namely, woman."[68] In this novel woman is judged "from the point of view of plastic beauty" to be inferior to the dazzling "animate yet artificial" locomotive, which exemplifies the theme of nature's exhaustion and the technological world bearing down on the organic.[69] The substitution of the mechanical for the natural, in Charles Bernheimer's terms, "involves the creation of simulacra, or artifacts that simulate nature without having nature's organic interiority."[70] The simulation of nature without interiority is depicted in *Against Nature* as the idealization of feminine beauty in the form of the locomotive, and it is a specifically "plastic beauty" of surface representations. But Huysmans' anthropomorphisms extend beyond the human form as the locomotive also assumes equine features such as the "disheveled mane of black smoke"[71]

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67 Zola, *The Beast Within*, electronic.
68 Joris-Karl Huysmans, *Against Nature*, trans. Robert Baldick (New York: Penguin Books, 2003), electronic.
69 Ibid.
70 Charles Bernheimer, "Huysmans: Writing Against (Female) Nature," *Poetics Today* 6, nos. 1-2, "The Female Body in Western Culture: Semiotic Perspectives" (1985): 320.
71 Huysmans, *Against Nature*, electronic.

although in this case the descriptive term "disheveled" still connotes domesticity. The iron horse was apparently a mare.

In his *Panorama of the Nineteenth Century*, Dolf Sternberger characterized the steam engine as a "'copulation' or union of a natural and an artificial element" noting in particular the "disturbing factor of relative unpredictability" or the tendency toward derailment that he "attributed to nature."[72] The inclusion of nature in relation to the locomotive is germane as nature was deemed to be inconstant, uncontrollable, dangerous, and consequently gendered as female. Borrowing from Müller-Sievers, the term *locomotive sublime* became constitutive of the ambivalent vacillation between dread and allure with which people regarded powerful machines. The ascription of the female gender to industrial technology is coeval with this shift in perception from the locomotive as a triumph of rationalization to having the potential for railway disaster. The notion that anxieties proximal to increasingly powerful machines, gendered as female, are indicative of the male trepidation confronting female sexuality is hinted at by Abraham in the correlation between the fear of railway disaster and sexuality going out of control. In other words, the anxieties regarding industrial machines are translated, in Freudian terms, into a sort of castration complex. The gendering of machines suggests a male ambivalence constitutive of the bipolar wavering between fear and desire when confronted by the female form, which is alleviated through the mechanization of bodies.[73] But with

72 Dolf Sternberger, quoted in Seltzer, *Bodies and Machines*, 176, n. 13.
73 Huyssen, "The Vamp and the Machine," 226; Hal Foster, *Compulsive Beauty* (Cambridge: MIT Press, 1995), 134; Yoshiki Tajiri, *Samuel Beckett and the Prosthetic Body: The Organs and Senses in Modernism* (New York: Palgrave Macmillan, 2007), 22.

regards to machinic embodiment author Yoshiki Tajiri concludes that the project of dehumanization in technological modernity is *not* gender specific in the sense that it is not just the "woman's body but also sexuality itself (and so the man's sexual body)" that is subject to mechanization.[74]

At first blush, the eroticization of industrial machines appears as a consequence of the cultural sublimation of the ambivalence concerning technology, especially with regard to the destructive potential of the railroad, which leaves the collective imagination lurching between technophilia and technophobia. The anthropomorphism and eroticism of machines are manifestations of this technological other. The escalation of railroad disasters in the middle of the nineteenth century increased anxieties to the point that the palpable fear of train wrecks was inherent in the very idea of railway travel.[75] Sublimation is a protective measure and a division of repression. It is through sublimation that the energetic (as opposed to ideational) components of repression are released and then aimed toward an object unrelated to the original target of repression. But in the case of the railroad sublime there seems to be something in excess of the process of redirecting libidinal energy toward a more productive activity because the drive undertakes to subvert the progressive rationalization that was requisite for the construction of such technological wonders in the first place. Inconsequential for the purpose of functionalism or rationalism, eroticism is a form of enchantment or, more specifically, *reenchantment* in a disenchanted world, and it provides a release from the strictures of rationality. In

74 Ibid.

75 Lynne Kirby, "Male Hysteria and Early Cinema," *Camera Obscura* 2, no. 17 (1988): 116.

Weber's terms, eroticism is an "inner- worldly salvation from the rational," bureaucratized society and constitutes the only force which "still bound humankind to the natural source of all life."[76] It is from the organic, animal world that eroticism draws its vitality, straddling the domains of biological life and social existence, and in technological modernity becoming implicated in the nexus of machines and physiology. But the eroticization of powerful locomotives might also serve to blur the distinctions between bodies and machines, dissembling the very likelihood of railroad disaster, just as the upholstery in the simulated domestic interiors of rail cars insulates the occupants from the shocks and jolts of locomotion.

IV.

The oscillations between animate and inert forms of motion in machine culture, between the panic and exhilaration of transport technologies, and between the prosthetic extensions and psychic constrictions of technological modernity, all define the grinding moment of conflict between bodies and machines that Seltzer phrases the *double logic of prosthesis*. The nodal point between the disparate epistemological registers of bodies and machines is indicated by the incorporation of the technological prosthesis which is the site of inevitable antinomy. The counterpoint to prosthetic extension is dismemberment, a fantasy that Seltzer interprets from the circumstances of Henry Ford's factory as reported in *My Life and Work*, consisting of a rationalized production line employing disabled workers among those without disabilities, each operating with comparable efficiency and commensurate pay. Ford classified all of

76 Lawrence A. Scaff, "Fleeing the Iron Cage: Politics and Culture in the Thought of Max Weber," *The American Political Science Review* 81, no. 3 (Sep., 1987): 749.

the jobs at the factory according to the kind of machine and type of work and determined that of the 7882 different jobs "670 could be filled by legless men, 2,637 by one-legged men, 2 by armless men, 715 by one-armed men, and 10 by blind men."[77] For Seltzer, this industrial management is illustrative of the double logic of prosthesis that projects a "violent dismemberment" of the body correlative to the "emptying out of human agency," and conversely the "transcendence of the natural body" as projected through forms of technology that *extend* agency.[78]

The structural dichotomies of extension and fragmentation are rendered as mobility (freedom of movement) and incarceration (involuntary locomotion) with regards to machines like the railway or elevator.[79] These twinned principles in recreational forms like the Ferris wheel and rollercoaster are experienced as panic and exhilaration. That the rollercoaster is a fantasy reconstruction of the railway system enhances the sense of danger associated with the frequently deadly daily transit of the railroad, especially in the nineteenth century, when rollercoasters were first constructed. Technologies of mobility create a sort of psychic prosthesis in that there is an extension of agency in terms of the exhilaration of the thrill ride even while the pleasure of movement is tinged with panic, hinging upon the involuntary locomotion associated with automatism and hysteria. Siegfried Kracauer's description of the roller coaster at Luna Park in the 1920s details the zooming cars with passengers who are "horrified at the edge of the world" and scream "out of the fear of being smashed

77 Henry Ford, *My Life and Work (Expanded and Annotated)*, eds. Samuel Crowther and William A. Levinson (New York: CRC Press, 2013), 94.
78 Seltzer, *Bodies and Machines*, 157.
79 Ibid., 18.

to bits."[80] But even within this "railway brain" of the amusement park, hysteria is supplanted by the sense of contentment as the material world is temporarily suspended, no longer threatening, and it seems instead that these are screams of bliss, "a shriek of triumph," as they race "further and further along."[81] "This racing can mean death," Kracauer observes, but "it is also at the same time salvation."[82] As Schivelbusch reports, railway occupants in the early nineteenth century described their experience of train travel in similarly ecstatic terms as akin to "flying" even while it was impossible to divest oneself from the "notion of instant death" that could occur with the slightest accident.[83] In either register, the thrill ride provokes a dialectical reversal of death and salvation, and of resistance and acceleration.

Hal Foster borrows Seltzer's formulation of the double logic of prosthesis, referencing also McLuhan's *extensions of man*, in his essay and eponymously titled book, *Prosthetic Gods*.[84] He describes a contrast between the utopian and dystopian valences of machinic embodiment. For Foster, the new machines of acceleration and representation produced during the Second Industrial Revolution, the trains and automobiles, radios and telephones, were still constitutive of a technology regarded as a "demonic supplement, an addition to the body that threatened subtraction from it."[85] Not dissimilar to the aforementioned amputation imaginary of Ford's factories, Foster

80 Siegfried Kracauer, "Loitering: Four Encounters in Berlin," trans. Thomas Y Levin and Courtney Federle, *Qui Parle* 5, no. 2, "Distractions" (Spring/Summer 1992): 59.
81 Ibid., 59-60.
82 Ibid.
83 Schivelbusch, *The Railway Journey*, 129.
84 Hal Foster, "Prosthetic Gods," *Modernism/Modernity* 4, no. 2 (April 1997): 5-38; Hal Foster, *Prosthetic Gods* (Cambridge, MA: The MIT Press, 2004).
85 Ibid., 5.

characterizes the dark side of the double logic in terms of a "Frankensteinian dismemberment" as pronounced in Marx's *Capital*, in direct opposition to the utopian vision of the body extended, "even subsumed in new technologies."[86] Foster sees this dialectic mirrored in McLuhan's assessment of technology as "both amputation and extension."[87] Moreover, he locates this double logic in the cultural politics of the early twentieth century in which the utopian, technophilic dimension is most conspicuously evidenced in the Italian Futurist fantasy of phallicization and the metallization of man.[88]

The increasing rationalization of labor through Taylorist techniques in the early twentieth century imbricated ever more methodically the human body and the technological apparatus of which it was a component, yet bodies and machines remained persistently as separate entities, the one alien to the other. "The two could only conjoin ecstatically or torturously," Foster writes, "and the machine could only be a 'magnificent' extension of the body or a 'troubled' constriction of it."[89] This is a reference to the oft-cited fragment from *Civilization and Its Discontents* where Freud describes the spectacular achievements of humankind through science and technology, nearly attaining the ideals of "omnipotence and omniscience," which were formerly only attributable to gods:

> Man has, as it were, become a kind of prosthetic God. When he puts on all his auxiliary organs he is truly magnificent; but these organs have not grown on to him and they still give him much trouble at times.[90]

86 Foster, *Prosthetic Gods*, 109.
87 Foster, "Prosthetic Gods," 6, n. 3.
88 Ibid.
89 Foster, *Prosthetic Gods*, 109.
90 Sigmund Freud, *The Freud Reader*, ed. Peter Gay (New York: W. W. Norton, 1989), 738.

The ambivalence Freud articulates regarding the technological prosthesis is apparent not only in the admission that the new organs are troublesome but also in his shift between addressing the constrictive features of technology and expressing his hopeful conclusion that "this development will not come to an end."[91] Foster's dialectic of torture and ecstasy is attenuated by the recognition that there are ideological limitations to either of these cultural and political polarities, but such a sentiment doesn't resolve the anxiety pervading the historical trajectory of technological modernity. Again, Freud would remind us that "man does not feel happy in his Godlike character."[92]

Echoes of the double logic of prosthesis tempered with Freud's foreboding message about prosthetic gods appear in Tim Armstrong's characterization of the technological prosthesis in binary terms signifying enhancement or compensation. For Armstrong, the prosthetic interventions between bodies and machines (including Freud's gestures toward a theory of "organ extension") are framed in terms of *lack*.[93] Armstrong contends that Freud "writes of technology under the sign of mourning," as writing itself is a prosthesis framed in terms of loss, the origin of which Freud calls "the voice of an absent person."[94] The technological development of eyeglasses served to correct a *defect* in vision. A microscope overcomes visibility's *limits*. A house is compensation for the womb for whom humankind still longs and where one

91 Ibid
92 Ibid.
93 Tim Armstrong, *Modernism, Technology, and the Body* (Cambridge: Cambridge University Press, 1998), 5, 77.
94 Ibid., 77; Freud, *The Freud Reader*, 737.

used to feel safe and at ease. These observations by Freud in the 1920s are consistent with the earlier sense of crisis felt during the fin-de-siècle regarding the unstable category of the body as a source of anxiety. Armstrong maintains that by the end of the century the body had begun "to harbor and reveal secrets and ambiguities" and with a Charcotian gloss suggests that the body was "becoming the site of obscurity and experiment."[95]

The fascination with representations of the body in terms of either a compromised integrity or a prosthetic extension is manifest in the literature of machine culture. The incorporation of *mechanomorphism*[96] in these texts attests to an obsession with the interface between bodies and machines, although this convergence of the animate and the inanimate is usually rendered in the dystopian register of bodily fragmentation. Armstrong elucidates the double function of the prosthesis as either the "positive" prostheses of organ-extension and a utopian technology through which human capabilities are expanded; or the "negative" compensatory prosthesis that replaces a defective or amputated component, covering a "lack."[97] With regards to the *negative* prosthesis, Armstrong determines that human components can be replaced providing that the integrity of the body is sustained, although this is complicated with the case of psychic prosthesis of phantom limbs.

Nineteenth century neurologist Silas Weir Mitchell studied the phenomenon of phantom limbs, a notion that was considered fanciful to his colleagues. But the

95 Armstrong, *Modernism, Technology, and the Body*, 4.
96 "Mechanomorphism" is a term coined by Gerald Heard that refers to the attribution of machinic features to the human body. (Armstrong, *Modernism, Technology, and the Body*, 78.)
97 Ibid.

concept was later articulated in 1906 by C. S. Sherrington and termed "proprioception," which means the body's awareness of itself.[98] Armstrong notes that it was in the wake of Mitchells' work that artificial limbs became more versatile and complex, subsequent to the dramatic increase in the development and manufacture of prosthetic limbs following the American Civil War, which is considered the first "modern" war just as the Great War would be considered the first "industrial" war, the aftermath of which also precipitated the production of prosthetic devices. Mitchell's first account of the phantom limb was crafted in the form of a gothic short story published anonymously in the *Atlantic Monthly* in 1866 and titled "The Case of George Dedlow." The protagonist, Dedlow, is a doctor who has suffered multiple amputations during the Civil War and has been diminished to a mere torso "more like some strange larval creature than anything of human shape."[99] The descriptions of the symptoms and sensations that haunt Dedlow's body provide a ghostwritten account of Mitchell's actual experience as a battlefield physician (although in the story Dedlow takes part in a séance during which his limbs are momentarily returned). Mitchell would publish his findings a few years later in an article titled "Phantom Limbs."[100] As evidenced in Mitchell's short story and thesis, the idea of bodily prosthesis was already in the cultural imagination of the nineteenth century and in the case of artificial or phantom limbs decidedly "negative."

98 Debra Journet, "Phantom Limbs and 'Body-Ego': S. Weir Mitchell's 'George Dedlow,'" *Mosaic: An Interdisciplinary Critical Journal* 23, no. 1 (Winter, 1990): 92-93.

99 Silas Weir Mitchell, "The Case of George Dedlow," quoted in Aura Satz, "'The Conviction of its Existence': Silas Weir Mitchell, Phantom Limbs and Phantom Bodies" in *Neurologhy and Modernity: A Cultural History of Nervous Systems, 1800-1950*, eds. Laura Salisbury and Andrew Shail (New York: Palgrave Macmillan, 2010), 113.

100 Satz, "The Conviction of its Existence," 113.

Armstrong begins his investigation of the negative prosthesis by summoning Edgar Allan Poe, who was perennially interested in the current science regarding the human body, and whose fiction frequently involves bodily fragmentation. (Incidentally, Mitchell's father was Poe's personal physician.)[101] In the 1832 short story, "Loss of Breath," a man finds body parts in his wife's drawer including "a set of false teeth, two pairs of hips," and "an eye."[102] "A Predicament," (1838) is based on the radical disruption of the human form, as the narrator describes her own decapitation by the excruciatingly slow hand of a clock. She observes her detached eye uncannily look back at her contemptuously before watching her head roll out into the street. The phenomenon of the phantom limb in this scenario takes on multiple forms. Armstrong specifically frames the story in terms of Poe's "doubles" in the sense that the body is fragmented and different "selves" are distributed across various "bodies."[103] A human-machine hybrid appears in "The Man That Was Used Up" (1839) whose narrator becomes increasingly suspicious of the legendary general John A.B.C. Smith, a perfectly sculpted human form who exhibits conspicuously wooden behavior. Ultimately the narrator realizes that the general is comprised entirely of prosthetic parts, bodily substitutions that have consumed the human entirely and transformed the body into a veritable automaton. This theme of the human-machine impostor is reminiscent of E. T. A. Hoffman's story "The Sandman" (1817) in which the protagonist falls in love with the beautiful Olympia who is utterly passive and mysteriously taciturn, but lapses into a destructive tantrum when he recognizes her

101 Armstrong, *Modernism, Technology, and the Body*, 91.
102 Edgar Allan Poe, quoted in Armstrong, *Modernism, Technology, and the Body*, 91.
103 Armstrong, *Modernism, Technology, and the Body*, 91.

mechanical construction. The figure of the automaton or human-machine in one register signals Enlightenment rationality as represented in manufacturing where workers are "living automatons….employed in the details of their work"[104] but quickly shifts into its destructive double. It's not just the uncertainty regarding whether a figure or character is a human being or human-machine but the uncanny recognition of the automaton as a demonic cipher (in Hoffman coded as female) that represents in these tales the intrusion of the irrational in an age of invention.

The positive register of the technological prosthesis refers to the expansion of the limits of perception, the fortification of mechanical function, and the enhancement of energy levels. For exemplifications of the positive prosthesis Armstrong turns to the work of H. G. Wells, both his essays and science fiction (or *scientific romance* as the genre was known at the turn of the century) through which Wells frequently explores reconfigurations of the human form. Wells' essay titled "The Man of the Year Million" (1893) is written in the style of a book review for a fictitious work in which a civilization experiences the gradual hypertrophy of the organs of the intellect coinciding with the diminution of the rest of the body so that people evolve with massive heads.[105] And perhaps in response to anxieties surrounding Darwinian evolution, Wells published "The Advent of the Flying Man," (1893) an essay portraying the primate and the human along an evolutionary line of flight between two extremes of development while projecting the hypothetical condition of a winged

104 Dugald Stewart, quoted in Karl Marx, *Capital: A Critique of Political Economy, Volume One*, trans. Ben Fowkes (New York: Penguin Books, 1982), 481.

105 Gordon S. Haight, "H. G. Wells's 'The Man of the Year Million,'" *Nineteenth-Century Fiction* 12, no. 4 (March 1958): 324.

body or superman transcending its contemporary limits.[106] In Wells' short story, "The New Accelerator," (1901) an experimental drug is developed that accelerates the metabolism to one thousand times its normal speed which leaves the characters with the sense that the rest of the world remains perfectly still. The fictional stimulant, Gibberne B Syrup, is guaranteed to provide one with the power to "do twice as much work in a given time as you could otherwise do."[107]

Sarah Cole astutely observes that "The New Accelerator" represents the literary correlative to late nineteenth-century chronophotography.[108] The positive form of the technological prosthesis is corroborated analogously as she points to the rapid-sequence photographs which reveal stills of frozen motion that would be invisible without the prosthesis of the camera. Wells would have been aware of the pioneering work of Muybridge and Marey to whom the Futurists were also indebted, as evidenced in the visibility of duration in Giacomo Balla's paintings. The benefits of these augmentations of energy and the intensifications of perception were indisputable, at least to these practitioners. In the preface to a military handbook Marey proclaims that chronophotography, with the facilitation of dynamometers, provides "exact information about all of the acts we execute" and that the graphical method translates "the mechanical act of locomotion" into "geometric curves, in which everything becomes measurable with a precision that mere observation could

106 Adnan Morshed, "The Aesthetics of Ascension in Norman Bel Geddes's Futurama," *Journal of the Society of Architectural Historians* 63, no. 1 (Mar., 2004): 83.
107 H. G. Wells, quoted in Jeremy Withers, *Futurist Cars and Space Bicycles: Contesting the Road in American Science Fiction* (Liverpool: Liverpool University Press, 2020), 62.
108 Sarah Cole, *Inventing Tomorrow: H. G. Wells and the Twentieth Century* (New York: Columbia University Press, 2020), 525.

never attain."[109] Charcot also vaunted his own unique, schematic methods, maintaining confidently that "in visual form" one could capture "the unobservable phenomena of cognition and mental function."[110] But again, a predictable skepticism regarding these advancements would maintain the ambivalence regarding technology. Chronophotography was not wholly celebrated and there was an indelicate, thespian bearing to Charcot's aesthetic. (Freud noted that Charcot was "not a reflective man, not a thinker," and that "he had the nature of an artist."[111]) "The New Accelerator" also includes a cynical subtext, disclosed by the satiric tone of the stimulant advertisement that conveys an anxiety about the increasing velocity of modern life. Wells' ambivalence toward technology is evident in his portrayals of beings left practically immobile without their machines just as the Martians in *The War of the Worlds* are thoroughly confined to their tripod vehicles. Therein, he portrays the bicycle, a relatively new technology at the time, in a critical if not hostile manner. Wells vacillated in his assessment of these transport technologies, regarding them as emblematic of hubris and crippling machinic dependence in one context but in terms of industrious technological adaptation in another (e.g., the efficacious use of the bicycle in a theater of war).[112]

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109 Étienne-Jules Marey, quoted in Andreas Mayer, "The Physiological Circus: Knowing, Representing, and Training Horses in Motion in Nineteenth Century France," *Representations* 111, no. 1 (Summer 2010): 88.

110 Rachael Ziady DeLue, "Diagnosing Pictures: Sadakichi Hartmann and the Science of Seeing, circa 1900," *American Art* 21, no. 2 (Summer 2007): 54.

111 Freud, "Charcot," quoted in Felicia McCarren, "The 'Symptomatic Act' circa 1900: Hysteria, Hypnosis, Electricity, Dance," *Critical Inquiry* 21, no. 4 (Summer, 1995): 768.

112 Withers, *The War of the Wheels*, 78.

Technology was split into oppositional terms to confront dialectically the ambivalence that marks the encounter between bodies and machines, especially concerning the interposition of the prosthesis in machinic embodiment. But the dueling conceptions of constriction and extension are not commensurate when the latter is expressed as an automating supplement or when the double logic itself operates "under the sign of compensation."[113] The notion that technological modernity ushered in both the fragmentation and the prosthetic augmentation of the body must include the proposition that in either case bodily integrity is jeopardized, hence the necessity of the prosthesis. Armstrong's formalization of the positive and negative valences of the technological prosthesis is shaped with narrative forms drawn from the works of gothic horror and science fiction which illuminate, if inadvertently, the antipositivism at the turn of the century and the current of irrationalism that defines this literature. And while formalization is not necessarily the opposite of irrationalism, it is not unrelated semantically to rationalization. The method of formalizing the polarities of the technological prosthesis with reference to irrationalist literature troubles the clarity of these binary terms, but so does the impression that both positive and negative prostheses serve a compensatory function under the sign of lack which would devitalize the utopian potential of the first term. The double logic of the prosthesis itself is unstable, as one of its forms is bound to contain shades of the other, and it appears as entangled as these historically related genres. But the resultant aporia is instructive in this dialectical procedure as the

113 Armstrong, *Modernism, Technology, and the Body*, 91.

positive valence of the prosthesis slips into the *negative* while rationality reveals its irrational double. The principle directive shared by both gothic horror and science fiction is the subversion of rationality by the irrational, and these literary conventions rearticulate the Romantic reaction against instrumental reason. The mode of apocalypse and the *telos* of catastrophe with which many of these stories are imbued is a manifestation of this flight from rationality.

V.

An etching by Francisco de Goya titled *The Sleep of Reason Produces Monsters* (1797) portrays a man asleep, slumped over his writing, while owls and bats perch close at hand or hover in the background. Owls and bats are customarily deemed symbols of ineffability and darkness and in this case perhaps a testament to Enlightenment's failed project of disenchanting the world. "Yet the wholly enlightened earth," Horkheimer and Adorno write, "is radiant with triumphant calamity."[114] Citing the title of Goya's etching, Patrick Brantlinger contends that both gothic horror and science fiction are based on a similar idea, that "*reason taken to its extremes* produces monsters."[115] Indeed, the domination of nature by abstract reason unravels in the works of gothic horror and science fiction. In science fiction in particular from *Frankenstein* (1818) to the present one encounters worlds in which instrumental reason is pushed to its extreme and performs a volte-face in the form of science itself materializing in destructive technologies. Mary Shelley's novel is

114 Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments*, trans. Edmun Jephcott (Stanford: Stanford University Press, 2002), 1.
115 Patrick Brantlinger, "The Gothic Origins of Science Fiction," *NOVEL: A Forum on Fiction*, 14, no. 1 (Autumn, 1980): 31.

firmly situated between these literary traditions, facilitating the tropes of both monster and mad scientist, and if not mirroring the contemporary experiments in galvanic reanimation then at least alluding to the physiological and psychological implications of machinic embodiment in the nineteenth century. As Brantlinger explains, extreme reason in gothic horror is usually portrayed as an internal, subjective experience divorced from the social context which results in delusion or madness, whereas in science fiction extreme reason typically takes the form of an external threat, a menacing technological force lording over mass society.[116]

H.G. Wells was conscious of writing in a specific genre formed by converting elements of gothic horror into scientific romance. "Instead of the usual interview with the devil or magician," Wells writes, "an ingenious use of scientific patter might with advantage be substituted."[117] Wells was familiar with the publication of Bram Stoker's *Dracula* when he wrote *War of the Worlds* in which the Martians inject the blood of other creatures, primarily humans, as a form of sustenance. It is not unlikely that some awareness of the late nineteenth-century technological innovation of the hypodermic syringe may have been relevant for the crafting of these stories. The gothic tale of terror is transposed in science fiction in to the inclination to provoke astonishment, shock, or wonder, which are emotional responses that stand diametrically opposed to instrumental reason. Gothic literature is suffused with eighteenth-century ideas about the sublime or, in the words of Edmund Burke,

116 Ibid.

117 Brian W. Aldiss with David Wingrove, *Trillion Year Spree: The History of Science Fiction* (London: Paladin Books, 1988), 31.

"delightful horror, a sort of tranquility tinged with terror."[118] These ideas were contemporary with Anna Laetitia Aikin's essay "On the Pleasure Derived from Objects of Terror," in which she embraces the literary dovetailing of terror and wonder, these divergent signifiers united at the level of form.[119]

The wonder aroused in science fiction is analogous to the marvelous horror of the gothic, and this underscores the pervasive current of irrationalism. The rejection of progressive reason that is the inspiration for gothic literature is traduced in science fiction as an assimilation of the phantasmatic cloaked in the jargon of technology. An anti-empiricist pessimism is material to science fiction. Even in narratives employing "positive" visions of the technological prosthesis there are dystopian elements, such as the humans with shriveled bodies and monstrous heads in "The Man of the Year Million." The ambivalence regarding technology plays out in these narratives with an anti-promethean subtext encapsulated in Brian Aldiss' description of science fiction as "hubris clobbered by nemesis."[120] The estrangement produced by the transmogrification of reality and the irreconcilable discontinuity between the real world and its technological other create an immanence of the catastrophic.

The axiom "everything tends directly to the catastrophe" is set forth by Horace Walpole in the preface of *The Castle of Otranto* (1764), regarded as the first gothic novel.[121] That Walpole offers specific criteria in this preface for the

118 Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, 2nd ed., 1759 (New York, Garland, 1971), 257.
119 Gary Farnell, "Gothic's Death Drive," *Literature Compass* 8/9 (2011): 601; Anna Laetitia Aikin, "On the Pleasure Derived from Objects of Terror" (1773) in *Fantastic Literature: A Critical Reader*, ed. David Sandner (Westport, CT - Praeger, 2004), 33.
120 Aldiss and Wingrove, *Trillion Year Spree*, 30.
121 Walpole, *The Castle of Otranto*, 6.

construction of the narratives of catastrophe that would follow, through imitation and repetition, is noteworthy given the status of its provenance. As Frederick S. Frank has astutely observed, the preface reads like a manifesto for the "technology and psychology of future tales of terror" anticipating the "mechanistic format of the Gothic plot" and the "gearworks" of narrative devices that would become the conventions of gothic horror and eventually the scientific romance.[122] Walpole describes the techniques that facilitate the catastrophe in terms of machines. "The machinery is invention" he maintains, and the characters are "as unnatural as the machines employed to put them in motion."[123] Aside from the gesture toward a machinic text or formulaic literary constructions, the author's use of the descriptive term "unnatural" alludes to the inorganic, aberrant, and inhuman. This allusion contains echoes of the shifting distinctions between the animate and the inanimate, the vital and the mechanical, as portrayed brutally in the crushing of a body by an enormous helmet which is the story's first catastrophic circumstance.

The *leitmotiv* of catastrophe in *The Castle of Otranto* and the genre fiction that would follow are framed by Gary Farnell in terms of the Freudian *death drive*. "Some decades before Schopenhauer, Nietzsche or psychoanalysis," Farnell writes, "Gothic stages the great drama of what has come to be known in modernity at large as the death drive."[124] These vestiges and latent themes surviving from gothic literature were prevalent within the dark ruminations of the fin-de-siècle. Freud was not inured

122 Ibid., 17-18.
123 Horace Walpole, *The Castle of Otranto: A Gothic Novel* (The Floating Press, 2009), 8; *The Castle of Otranto: A Gothic Story* and *The Mysterious Mother: A Tragedy*, ed. Frederick S. Frank (Petersborough, Ontario: Broadview Literary Texts, 2003), 65.
124 Farnell, "Gothic's Death Drive," 592.

to such influence and was compelled by Hoffmann's fiction, especially the aforementioned story "The Sandman" which he interprets in his essay "The Uncanny" (1919). Freud offers Friedrich Schelling's definition of the uncanny as "the name for everything that ought to have remained secret and hidden but has come to light," and he paraphrases this formulation a year later in *Beyond the Pleasure Principle* as "a dread of rousing something that….is better left sleeping."[125] For Freud, the uncanny is that realm of the frightening which reverts "to what is known of old and long familiar."[126] The uncanny occurs when repressed infantile complexes reemerge, triggered by some impression, or when primitive beliefs resurface and "seem once more to be confirmed"[127] even when such myth, superstition, or animistic conceptions of the universe have been suppressed through the process of rationalization. But for Freud, primitive beliefs are so intimately connected with infantile complexes that the difference is nugatory. The uncanny then is an excrescence of rationalization without which there would be no necessity for myth or superstition to be suppressed. In other words, it is only in a disenchanted world that such magical urges would be suppressed and then reemerge in some form of reenchantment.

At a more granular level, the uncanny appears for the subject with a singular strangeness as a repressed memory long concealed in the unconscious but emerging in hazy duplicate form both in and out of consciousness. Thus roused from the old

125 Friedrich Schelling, quoted in Sigmund Freud, "The Uncanny," in *Writings on Art and Literature*, trans. James Strachey (Stanford: Stanford University Press, 1997), 199; *Beyond the Pleasure Principle*, trans. James Strachey (New York: W. W. Norton and Co., 1961), 30.
126 Freud, "The Uncanny," 195.
127 Ibid., 126.

and familiar the uncanny materializes as the *doppelgänger* or double, a lived, split consciousness. Jean Paul coined the term doppelgänger in his novel *Siebenkäs* (1796) which was written in part as a response to transcendental philosophy of which Schelling was a major figure. The romantic reaction against science exhibited in Schelling's philosophy was addressed by George Lukács who judged his "intellectual intuition" to be the first manifestation of irrationalism.[128] In German Romanticism the doppelgänger was canonical and the motif found its way into later works of gothic horror, science fiction, and psychoanalysis.[129] "The subject identifies himself with someone else," Freud explains, "so that he is in doubt as to which his self is."[130] Freud theorizes that a slippage occurs in the "invention of doubling," whether by the production of a "soul" or through a narcissistic self-love that serves to avert extinction, so that the "assurance of immortality" turns into its opposite, "the uncanny harbinger of death."[131] It is through this doubling, dividing, and interchanging of the self in which there is a substitution of an extraneous self for one's own, that Freud finds "the constant recurrence of the same thing,"[132] in other words, the *compulsion to repeat*.

Instinctual forces trigger the compulsion to repeat without regard for the pleasure or unpleasure of the ego. And because its force upon consciousness and the unconscious is driven toward the gratification of ends of which the subject does not

128 Georg Lukács, *The Destruction of Reason*, trans. Peter Palmer (Delhi: The Merlin Press, 1980), 129—154.
129 Dimitris Vardoulakis, "The Return of Negation: The Doppelgänger in Freud's 'The Uncanny,'" *SubStance* 35, no. 2 (2006): 100.
130 Freud, "The Uncanny," 210.
131 Ibid., 142.
132 Ibid., 210.

comprehend there is the appearance of "some 'daemonic' force at work."[133] The repressed material is reconstituted as if the experience were contemporary rather than properly attributed to something remembered in the past, returning as if experienced in the present, and thus the memories appear with an eeriness, obscured by fantasy, both familiar and strange, canny and uncanny. With each cycle of repetition there is a sense of loss or absence followed by the return of the traumatic event and this lack carries along with it "a yield of pleasure of another sort"[134] from negation, nothingness. As Jean Paul's doppelgänger uncannily remarks "Around me nothing, and without me nothing other than nothing."[135] Still, the pleasure principle is overpowered by the compulsion to repeat whose instinctual transmission is motivated toward discharge associated with the death drive.

In *Beyond the Pleasure Principle*, Freud postulates that the "universal attribute of instincts" is an "*urge inherent in organic life to restore an earlier state of things* which the living entity has been obliged to abandon," that is, the compulsion to destroy life and return to an inorganic state which is death. And it is death, in contradistinction to life, that is the inescapable reality witnessed within gothic irrationalism and consequently broadcast to modernity. A literary rendering that conspicuously symbolizes the death drive and doppelgänger takes place in Robert Louis Stevenson's gothic science fiction novel *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886). The sense of science having surpassed the limits of rationality is

133 Freud, *Beyond the Pleasure Principle*, 29.
134 Ibid., 10.
135 Dimitris Vardoulakis, "The Critique of Loneliness: Towards the Political Motives of the Doppelgänger," *Angelaki: Journal of the Theoretical Humanities* 9, no. 2 (2004): 88.

evidenced in the emphasis on physiology as represented by the chemical concoction the protagonist consumes in the laboratory which allows Dr. Jekyll to reclaim the body. These concerns position the story in the realm of late nineteenth century physical culture which was inseminated with fears of bodily degeneration as echoed in the popular works of Nordau. The regeneration of Dr. Jekyll proceeds from the chemical ingestion as Mr. Hyde passes "away like the stain of breath upon a mirror"[136] and Stevenson's simile elegantly signals the doppelgänger. Todd Dufresne has observed that Mr. Hyde seems like a "split-off piece of the death drive at war with the life drive, that is, with Jekyll."[137] In the story Dr. Jekyll is described as "a thing of vital instinct" while Mr. Hyde is "something not only hellish but *inorganic*."[138] The uncanny inorganicity of the death drive, "the amorphous dust," settles within the narrative so that "what was dead, and had no shape, would usurp the offices of life."[139]

For Freud, death is not something that one faces but an instinctual impulsion residing ineluctably within oneself, an exigency toward annihilation, and a return to the inanimate that preexisted the living. Freud views the death instinct as coextensive with the libido, just as aggression is filled with libidinal impulse. The death drive is a manifestation of unbound libidinal energy striving for disintegration, and because everything is infested with libido (or as Jean Laplanche would have it, "*Infested*, but

136 Robert Louis Stevenson, *The Strange Case of Dr. Jekyll and Mr. Hyde and Other Tales of Terror* (London: Penguin Books, 2002), 60.
137 Todd Dufresne, *Tales from the Freudian Crypt: The Death Drive in Text and Context* (Stanford: Stanford University Press, 2000), 18.
138 (emphasis added) Stevenson, *The Strange Case of Dr. Jekyll and Mr. Hyde*, 69.
139 Ibid.

also *sustained*,"[140]) there is an inherent *jouissance* to the drive. The antinomy between the terms "infest" and "sustain" attests to the dialectic of psychic life as conceived by Freud involving two categories in perpetual conflict, Eros and Thanatos, as the normal state of affairs. These diametric processes, "the ego or death instincts and the sexual or life instincts," work in adverse directions, the first is constructive and assimilatory and the last is destructive and dissimilatory.[141]

But the opposition between ego/death and sex/life is misleading with its rudimentary determinants as Eros and sexuality are not exactly the same thing.[142] Eros tends toward cohesion, preservation, and the *binding* of libidinal energy, while sexuality exhibits hostility to binding and drives instead toward *unbinding*, to discharge, animated by the death drive. It is only through the mediation of the ego that the sex instinct succumbs to control, bound by Eros as the ego is bound, which facilitates further binding. For Freud, it was with the disclosure of narcissism that the "*bound and binding form*"[143] of sexuality was revealed. Now Eros appears only with sexuality bound. Sexuality's object is cathected and in this instance the vital order is sustained in a sort of Pyrrhic victory. But as Laplanche elucidates, Freud would reaffirm for the sake of structural coherence a counterattack with "anti-life as sexuality, frenetic enjoyment [*jouissance*], the negative, the repetition compulsion."[144] Unbound sexuality is subversive and the death drive is fueled with libido. The way in

140 Jean Laplanche, *Life and Death in Psychoanalysis*, trans. Jeffrey Mehlman (Baltimore: John Hopkins University Press, 1970), 48.
141 Freud, *Beyond the Pleasure Principle*, 38, 43-44.
142 Laplanche, *Life and Death in Psychoanalysis*, 123.
143 Ibid.
144 Ibid., 123-124.

which Eros and Thanatos are intimately linked is evidenced in the very organization of the libido itself during which "the act of obtaining erotic mastery over an object coincides with that object's destruction."[145] And thus returning to "The Sandman," the protagonist, Nathanial, who had fallen in love with the automaton, experiences the reversal of object cathexis so that what was once loved he now destroys, including himself.[146]

VI.

The convolution of desire and the death drive emerges in the *jouissance* of catastrophe which is the idée fixe and, nay, the governing principle of gothic horror and science fiction. The liaison between pleasure and terror in technological modernity finds expression in *the imagination of disaster* or the desire to see technological destruction unfold. Lynne Kirby argues that the imagination of disaster, which became associated with railroad travel in the nineteenth century, is based on "the fantasy of watching technology go out of control."[147] During the fin-de-siècle, rapid industrialization and what some considered to be a Faustian embrace of technology had inflamed cultural anxieties whose counterpart was a longing for a catastrophic *release*. The imagination of disaster was epitomized in the apocalyptic fiction published and consumed by a wide reading public between 1880 and the First World War.[148] Robert Cromie's 1895 novel, *The Crack of Doom*, involves an early conception of the atomic bomb which is created by a mad scientist bent on world

145 Freud, *Beyond the Pleasure Principle*, 48.
146 Vardoulakis, "The Return of Negation," 107.
147 Kirby, "Male Hysteria and Early Cinema," 120.
148 W. Warren Wagar, *Terminal Visions: The Literature of Last Things* (Bloomington: Indiana UP, 1982), 86.

destruction. The portrait of technology domineering over humanity is rendered in a battle description in Zola's novel *Travail* (1901) wherein the metonymic statement "science had invented explosives and murderous machines" attributes potency to technological rationalization itself and the human combatants who "remained flesh for bullets and shells" appear as mere contrivances of an uncontrollable technology.[149] But the popularity of this dystopian literature, spurred by the double logic of fear and desire, is not to be interpreted as a conjuring and thus exorcising of impending doom but rather a valorization of disaster for the sake of disaster. The enticement to disaster is a species of the technological sublime unbound by the death drive.

Kirby frames disaster euphoria in Freudian terms as a "technological seduction fantasy," not as something necessarily desired but related instead to trauma, and more specifically, the "'founding trauma' of hysteria" which is a fantasy of seduction.[150] Disregarding his earlier view that hysteria was rooted in the repressed memory of a childhood seduction, Freud retained the sexual origin of neuroses but theorized instead that it was the *fantasy* of such a seduction taking place that appears in the guise of a memory. The experience of the uncanny, that moment when memories masquerade as the here and now, is transposed so that fantasy is disguised as memory with its accompanying sense of allure and dread. The technological uncanny also emerges externally in conjunction with a reified, manufactured environment which might upon first sight assume a sort of alien presence, just as

149 Émile Zola, *Work*, trans. Ernest Alfred Vizetelly (London: Chatto and Windus, 1901), 498.
150 Kirby, *Parallel Tracks*, 68.

nineteenth century machines were not uncommonly considered "somehow alive."[151] The reaction to new technology, for Tom Gunning, "allows re-enchantment through aesthetic de-familiarization,"[152] in other words, it is the irrational sense of astonishment that attends to technological novelty. Once these systems of industrial transport become second nature then it is primarily in moments of technological destruction that repressed material resurfaces. As Ernst Bloch writes:

> Only an accident occasionally brings it to mind again: the crash of the collision, the bang of explosions, the screams of shattered people—in short, an ensemble that has no civilized timetable.[153]

Outside the scope of the industrial symmetry of the modern world, outside of time itself, the seductive power of catastrophe disrupts even second nature. The persistence of the uncanny is illustrative of the strain of irrationalism and the compulsion to reenchant the world through the euphoria of disaster. Kirby concludes that the dread of enduring industrial disaster is itself a fantasy of technological seduction, and that the desire for "displacement, movement, trauma, even destruction," is a culturally shared experience.[154]

In her classic essay, "The Imagination of Disaster," Susan Sontag provides an analysis of the films of science fiction with reference to horror, noting that there is "little difference between the mass havoc" presented in either genre.[155] The

151 Herbert Sussman, *Victorian Technology: Invention, Innovation, and the Rise of the Machine* (Santa Barbara: Praeger, 2009), 39.

152 Tom Gunning, "Re-Newing Old Technologies: Astonishment, Second Nature, and the Uncanny in Technology from the Previous Turn-of-the-Century," in *Rethinking Media Change: The Aesthetics of Transition*, eds. David Thorburn and Henry Jenkins (Cambridge: The MIT Press, 2003), 47-48.

153 Ernst Bloch, *Traces*, trans. Anthony A. Nassar (Stanford: Stanford University Press, 2006), 125.

154 Kirby, *Parallel Tracks*, 68.

155 While Kirby does reference Sontag in *Parallel Tracks* there is curiously no mention of her essay, "The Imagination of Disaster" even while Kirby uses the same phrase. (Susan Sontag, "The

central principal held in common is the spectacle of destruction which is grounded in the equation of terror and pleasure and rendered for public consumption. In science fiction, she contends, the destruction is "rarely viewed intensively; it is always extensive" as exemplified in the thrill of watching "urban disaster on a colossally magnified scale."[156] Sontag argues that science fiction is "not about science." It is about disaster.[157] The claim that the apocalyptic conventions of science fiction are *not about science* addresses the objectives of an aesthetics of destruction, or in Sontag's terms, "the peculiar beauties to be found in wreaking havoc, making a mess."[158] But science fiction is still about science, albeit it's about science run amok. It's about the destructive core of rationalization at war with itself, aestheticized, often eroticized, with technological gadgets and sleek, machined interiors, a sort of technological cosplay with a nod toward otherworldly reenchantment.

When Sontag concedes that there is "nothing like the thrill of watching all those expensive sets come tumbling down"[159] she is illustrating the imagination of disaster with regard to science fiction, but her words offer a strikingly accurate portrait of some of the destructive pageantry that was a staple of entertainment on New York's Coney Island at the turn of the century. Disaster spectacles in the form of reenactments of fires, floods, and wars were staged alongside amusement park rides in front of crowds of spectators. The firefighting spectacles involved hundreds

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Imagination of Disaster," in *Hibakusha Cinema: Hiroshima, Nagasaki and the Nuclear Image in Japanese Film*, ed. Mick Broderick (New York: Routledge, 2009), 41.)
156 Ibid.
157 Ibid.
158 Ibid.
159 Ibid, 42.

of participants, from actors to professional firefighters and by 1904 these events were performed daily.[160] Four-story buildings were set ablaze and steam fire engines arrived as "victims" attempted to escape by leaping from the windows into trampoline-style nets while firefighters toiled to subdue the flames, hoisting ladders and spraying torrents of water.[161] The sensory experience of spectators was heightened both by the traumatic memory of urban fire disasters, which were not uncommon at the turn of the century, and the elements of danger and unpredictability to actual, if staged, fires. Fire is a collective experience and as Elias Canetti has written, fire is "the strongest and oldest symbol of the crowd."[162] The imminent danger of the fire induces an "active crowd-fear" which vacillates with fascination. Moreover, the fact that the buildings were constructed as exact replicas of the tenement buildings typically inhabited by recent immigrants may have stirred anxieties about the shifting social fabric in a quickly expanding metropolis.[163]

The firefighting spectacles were cinematic simply in terms of the rapidity of coordinated movements, from the steam fire engines whose billowing exhaust merged with the smoke to the scrambling of firefighters and escapees. As Gunning would contend, the visual pleasure of witnessing disaster is "of interest in itself."[164] The fledgling film industry exploited these disaster spectacles, producing a majority of

160 Andrea Stulman Dennett and Nina Warnke. "Disaster Spectacles at the Turn of the Century." *Film History* 4, no. 2 (1990): 101.
161 Ibid., 104.
162 Elias Canetti, *Crowds and Power*, trans. Carol Stewart (New York: Continuum, 1973), 26.
163 Itai Vardi, "Auto Thrill Shows and Destruction Derbies, 1922-1965: Establishing the Cultural Logic of the Deliberate Car Crash in America," *Journal of Social History* 45, no. 1 (Fall 2011), 31.
164 Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde," in *Early Cinema: Space, Frame, Narrative*, eds. Thomas Elsaesser and Adam Barker (London: BFI, 1990), 57.

actuality films during these years, many of which contained footage of "real" events.[165] James Williamson's film *Fire!* (1901) portrays both archival footage and staged scenes of a fire and rescue operation. Disaster scenarios involving various collisions between bodies and machines were portrayed in films like *The Photographer's Mishap* (1901) directed by Edison S. Porter and featuring a photographer who is hit by the train he is trying to photograph, and Cecil M. Hepworth's *How It Feels To Be Run Over* (1900) in which the photographer or viewer is "run over" by a motorcar.

These early films served no narrative function and were strictly exhibitionist, devoted to novelty and moments of shock. As Gunning conceived, the *cinema of attractions* provided stimulation through an "exciting spectacle" that confronts the audience "in an experience of assault."[166] The intent of the aesthetic of attraction was to produce a sense of astonishment or terror in lieu of contemplation.[167] The series of *explosion films* produced primarily between 1900 and 1903 were emblematic of these spectacles and feature the wanton misapplication of technology by characters who blow up with their machines.[168] In *A Pipe Story of the Fourth* (1902) an old man amuses his grandchildren by using his tobacco pipe to ignite a mass of fireworks which explodes into a jumble of human limbs and debris.[169] A couple are out for a

165 Dennett and Warnke, "Disaster Spectacles at the Turn of the Century," 107.
166 Tom Gunning, "An Aesthetic of Astonishment: Early Film and the (In)Credulous Spectator," *Art and Text* 34 (1989): 121.
167 Ibid., 124.
168 Pansy Duncan, "Exploded Views: Early Cinema and the Spectacular Logic of the Explosion" *Screen*59, no. 4 (Winter 2018): 401.
169 *A Pipe Story of the Fourth*, dir. Billy Blitzer (1902); American Mutoscope and Biograph Company), referenced in Duncan, "Exploded Views," 401.

drive one day when suddenly both passengers and motor car are blown to pieces in Hepworth's film, *Explosion of a Motorcar* (1900).[170] *The Finish of Bridget McKeen* (1901) is a thirty second film in which a maid lights the kitchen stove with kerosene which precipitates an explosion, blasting her body out of the frame only to return crashing to the floor in a pile of mangled limbs.[171] Similar themes highlighting the antinomies of the body-machine complex would appear in early twentieth century slapstick cinema, which Ernst Jünger considered as a modern form of the grotesque. In these amusements the human being had become a "plaything of technological objects" in a mechanized world where "the purpose of traffic is to be run over" and "motors exist so that people might explode with them."[172]

Sontag asserts that cinematic representations of disaster are compelling correlative to the sheer scale of the destruction and the technical authenticity, especially in terms of whether the spectacles are aurally stimulating ("the noisiest military hardware") and visually striking.[173] The staged head-on collisions of locomotives before live audiences provided realistic performances of technological disaster outside the boundaries of the amusement park or cinema. The first was organized in Ohio in 1896 as a publicity stunt in which two old locomotives, equipped with a haul of dilapidated train cars with dummy occupants and ticketmasters, were deliberately crashed. The coaches dramatically telescoped one

170 Duncan, "Exploded Views," 401.

171 *The Finish of Bridget McKeen* (Dir. Edwin S. Porter, 1901) referenced Ibid.

172 Ernst Jünger, quoted in Anton Kaes, et al, eds., *The Promise of Cinema: German Film Theory, 1907-1933* (Oakland:
University of California Press, 2016), 411.

173 Sontag, "The Imagination of Disaster," 42.

into the other as the locomotives buckled, filling the air with steam and flying debris. The thousands of spectators were at first terrified. But once the dust settled and the air cleared the crowd uproariously cheered, then rushed toward the wreckage to collect souvenirs.[174] The oscillation of dread and allure is notable, and herein are echoes of Kracauer's rollercoaster with its occupants' emotional passage from fearful screaming to howls of triumph. The injuries resulting from the staged disaster were minimal, a stray bolt having fractured a railroad official's leg in two places.[175] William Crush was one of the spectators at the event and was so inspired he produced a similarly staged train crash a few months later in a town founded for the occasion named Crush, Texas. The event was presented with considerable fanfare: tickets were sold and a grandstand was erected along with telegraph offices, a circus tent and restaurant. But what was momentous about "The Crash at Crush" is that the staged train wreck became a mortal disaster when the boilers of the two locomotives exploded unexpectedly, blowing steel shrapnel into the crowd, killing three people and injuring several others. As in the case of the Ohio staged collision, newspaper accounts described this crash in analogous terms as a stunning success which is a testament to the manner in which the scopophilic fervor for technological disaster overrides any concerns about the violent conflict between bodies and machines.[176]

That the Crush disaster met the qualifications regarding its technical authenticity is self-evident, having bent the distinctions between harmless spectacle

174 Vardi, "Auto Thrill Shows and Destruction Derbies," 23.
175 Ibid.
176 Gabriele Schabacher, "Staged Wrecks: The Railroad Crash Between Infrastructural Lesson and Amusement," in *Infrastructuring Publics*, eds. M. Korn et al. (Wiesbaden, Ger.: Sringer Fachmedien, 2019), 189.

and industrial disaster. The scramble for souvenirs is significant as it resembles the behavior of the survivors of actual railroad accidents who frequently posed for photos beside the wreckage so that the aftermath of the train wrecks is in some sense staged.[177] The easy separation between the accident and representations of the accident corresponds to the newspaper reports which provided rich, technical detail regarding the crash, including the bright paint on the engines and the advertisements on the carriages, while offering only a perfunctory note regarding casualties and fatalities.[178] "Toward the end of the century," Kirby writes, "representation of sympathy for victims tended to fade beneath a focus on the mutilation of the machine itself."[179] In these accounts, the psychic distancing mechanism that separates bodies and machines, either through the representations of bodies and machines or in their spectacular orchestration, is made possible because the imagination of disaster signifies a specifically technological disaster. The reception of technological disaster is very different from natural disaster because the focus is on the mechanical destruction that is human-made rather than sublime natural forces over which there is no control. The redirection of attention to the machinery of disaster is constitutive of the sublimation of human collateral and the anaesthetization of violence associated with technological destruction.[180] The spectacle of technological disaster has an

177 Kirby, "Male Hysteria and Early Cinema," 129-130, fn. 14.

178 Schabacher, "Staged Wrecks," 188.

179 Kirby, "Male Hysteria and Early Cinema," 129-130, fn. 14.

180 The pairing of technological destruction and anaesthesia is borrowed from Susan Buck-Morss' classic essay "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered" although she is theorizing the "technoaesthetics" of phantasmagorias rather than technological destruction. The phantasmagorias anaesthetize through a flooding of the senses whereas in this context technological destruction has an anaesthetizing effect specifically regarding violated bodies. In the spectacle of technological destruction the protagonist is always the machine and thus the hapless, animate figures

anaesthetic effect with respect to the violence inflicted upon bodies because the protagonist, the master of agency, is the machinery itself. In this manner, the disavowal of empathy and human subjectivity sets the stage for the euphoria of disaster.

Regarding the Crush tragedy, Nancy Bentley asks, "But what exactly was the spectacle of a train wreck if not culture?"[181] And she explains that the "intensified sensory event" of "The Crash at Crush" was deliberately located outside the quotidian parameters of the everyday and constructed with the same protocols that would be developed for cinema.[182] The correlation between the technical construction of these events and cinema is apropos, whether in relation to the historical reenactments of disasters or staged train wrecks. But to determine that the allure of these spectacles is merely based on the intrusion of staged devastation and fabricated tragedy into the lives of thrill-seekers, thereby providing not only a venue for a safe, vicarious experience but a means of transcending daily life, confronting fears, etc. is to disregard the reservoir of teeming ambivalence that cultivates the interest in this cult of destruction in the first place. Consumption is but one manifestation of the imagination of disaster. And one risks becoming distracted by the veneer of entertainment while sublimating the death drive and neutering the *horrifically enjoyable* aesthetic of catastrophe these spectacles provoke.

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are of nugatory consequence. Buck-Morss essay will be referenced thoroughly in the third chapter. (Susan Buck-Morss, "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered," *October* 62 (Autumn, 1992): 22.

181 Nancy Bentley, *Frantic Panoramas. American Literature and Mass Culture, 1870-1920* (Philadelphia: University of Pennsylvania Press, 2009), 2.

182 Ibid.

In 1904 Thomas Edison produced a film titled *The Railroad Smash-up* inspired by the Crush disaster.[183] The year previous he produced a different film that showcased technology of a more current variety titled *The Electrocution of an Elephant* (1903). The electrocution was staged at Coney Island's Luna Park in front of nearly a thousand spectators and featured Topsy, "the famous 'baby' elephant"[184] as described in the Edison catalog. After decades of entertaining crowds Topsy finally turned on one of her abusive handlers, a man named J. Fielding Blunt who had just fed her a lit cigarette when she trampled him to death, and so was Topsy sentenced to death, by electrocution.[185] The film opens as Topsy is led onto the platform, electrodes are attached to her feet, and then 6,600 volts of electricity are turned on. The elephant raises her trunk in the air and becomes rigid, engulfed in the smoke rising from the electrodes, before falling to her side dead.[186] The spectators' imagination was solicited and then fulfilled within a revelatory instant and the "mock" execution was complete. A mere seventy-four seconds transpire during this macabre display of technologically induced death. Aside from the obvious horror of this spectacle, one could consider *The Electrocution of an Elephant* as consistent with the conventions of horror in terms of suspense and shock, which is what the spectators wanted. But at the same time one is invited to observe the procedure

183 Ibid., 3.

184 Michael Daly, quoted in James Fiumara, "Electrocuting an Elephant at Coney Island: Attraction, Story, and the Curious Spectator," *Film History* 28, no. 1 (2016): 45.

185 Sarah E. McFarland, "Such Beastly Behavior! Predation, Revenge, and the Question of Ethics," in *Exploring Animal Encounters: Philosophical, Cultural, and Historical Perspectives*, eds. Dominik Ohrem and Matthew Calarco (New York: Palgrave Macmillan, 2018), 97.

186 Fiumara, "Electrocuting an Elephant," 45.

dispassionately with what Sontag calls "*a technological view*"[187] associated with science fiction. Dystopian science fiction films and some of these early forms of shock cinema (the latter of which waned in popularity after the First World War) constitute in Sontag's terms "the purest forms of spectacle" because they are unattenuated with subjective expression, that is, "we are rarely inside anyone's feelings," and so we view it objectively.[188] "We are merely spectators," she observes, "we watch."[189] The anaesthesia of technological perception allows the viewer to focus on the sophisticated apparatus and the machinic backdrop rather than the hapless figures on the screen. In the case of *The Electrocution of an Elephant* the hero is not the elephant but the machinery itself, the electrodes and transformer.

Diversion is provided through the arrangement of an invigorating technological procedure that is, again, *of interest in itself*, and the electrocution performance illuminates the relationship between destruction and what Erich Fromm called the "worship of technique."[190] Fromm claimed that the irrational drives of a technological society are countenanced by the maxim of *can implies ought*, or the belief that "something ought to be done because it is technically possible to do it."[191] The compulsion to "construct and use gadgets regardless of their importance in a

187 Sontag, "The Imagination of Disaster," 43.
188 Ibid.
189 This Charcotian spectatorial objectivity echoes the neurologist's aforementioned remark ("all I am is a photographer. I describe what I see") and speaks to a similar distantiation from the subject matter amplified by the mechanical prosthesis of the camera or, in Sontag's case, the mediation of the movie screen. (Sontag, "The Imagination of Disaster").
190 Erich Fromm, *The Anatomy of Human Destructiveness* (New York: Holt, Rinehart, and Winston, 1973), 344-358.
191 Ibid., 37.

specific case"[192] is observed without consequence because speculation regarding said activity has already been supplanted by the logic of technique. In *The Anatomy of Human Destructiveness*, Fromm argues that the fixation on the mechanical, the strictly technological, the inorganic, and the will to destruction are all features of *necrophilia*. The term "necrophilia" refers to a "*character-rooted passion*," that is, a tendency or a disposition rather than a perverse act.[193] In a characterological sense, the *necrophilous* (as opposed to the *biophilous*) person is driven by "the passion to transform that which is alive into something unalive; to destroy for the sake of destruction" and "the exclusive interest in all that is purely mechanical."[194] Fromm includes other signifiers in his description of the necrophilous tendencies such as "decayed, putrid" and "sickly" which are not included here for the sake of precision; these terms have connotations that gesture toward the more common conception of necrophilia as perverse phenomena, sexual or nonsexual, involving corpses, which is inconsequent in this context.[195] The necrophilous disposition is constitutive of the devotion to technology and the lust for destruction.

That Fromm's dichotomous terms necrophilia and biophilia were borrowed from Freud's drive theory is self-evident, even while he was equivocal about the death drive. Fromm critiqued Freud's vision of "man as an entity, a closed system" [196] because he claimed that it lacked a sufficient analysis of the influence of the socio-

192 Ibid.

193 Ibid., 10.

194 Fromm adopts the term "necrophilous" from the Spanish philosopher Unamuno who used the word to describe the paradoxical motto of Spanish general Millàn Astray: "Long live death!" (Ibid., 6).

195 Ibid., 332.

196 Eric Fromm, *Escape from Freedom* (New York: Henry Holt and Company, LLC, 1965), 287.

historical conditions on human drives. Disinclined to accept Freud's pessimism, Fromm viewed aggression as a character-rooted human "passion" rather than the operation of an innate drive. Still, Fromm was intrigued by the fundamental forces of Eros and Thanatos in conflict, one striving for life while the other wills its destruction, but the dialectical tension of the drives working in mutual opposition, with neither subsuming the other, is absent in Fromm's formulation of necrophilia. For Fromm, an action or activity could be considered purely necrophilous (e.g., the frivolous electrocution of an animal) but he emphasizes the tendential facet of necrophilia in the sense that a person or society would exhibit necrophilous compulsions rather than be ontologically necrophilous. The necrophilous impulse is invested with technology and thus is prevalent primarily in industrial societies where it manifests in a pervasive dehumanization, the subordination of people to machines, and the ardent turn from the organic to the dead mechanism.

In 1890, the crowd of spectators who arrived to witness the first juridical execution of William Kemmler by electric chair was a little larger than the crowd who would watch the electrocution of Topsy the circus elephant thirteen years later. But those who watched Kemmler's execution were astonished when the man failed to die after the first jolt of electricity, apparently due to insufficient voltage or an inefficient application of electrodes.[197] The condemned man remained unconscious and after another protracted application of current he was killed. Electricity had become more dangerous in the late nineteenth century with the technological

197 Armstrong, *Modernism, Technology, and the Body*, 13.

development of high-voltage alternating current for transmission, and the first accidental death by electrocution was reported by a Buffalo dentist named Alfred Porter Southwick in 1881. Dr. Southwick observed a drunken man accidentally touch a live electrical wire and fall instantly dead, and he was so impressed with this powerful new form of energy that he began advocating for its use in executions.[198] In the same year George Mill Beard and A. D. Rockwell published *A Practical Treatise on the Medical and Surgical Uses of Electricity*. The electro-medical procedure of "central galvanization" developed by the two authors was adopted for use with the electric chair and a decade later electricity was formally weaponized. The neologism "electrocution" had a juridical connotation as the word was conceived as a combination of "electricity" and "execution."[199] After the Kemmler execution Rockwell was asked to provide technical advice regarding the apparatus and technique for the electrocutions that would be conducted in 1891. It is important to note that his written account conveyed "a mixture of scientific fascination and moral disgust,"[200] as this mirrors the paradoxical merger of revulsion and allure.

The public interest in viewing these grim exhibitions attests to the fascination with the electrification of bodies at the outset of the twentieth century and the grim culmination of the sense of wonder first inspired by Galvani's experiments. Such operations of destruction and technique epitomize the necrophilous disposition and illuminate the anaesthetic function of technological destruction as spectacle.

198 Armstrong, *Modernism, Technology, and the Body*, 32; Arnold Beichman, "The First Electrocution," *Commentary* 35, no. 5 (May 1963): 410.
199 Armstrong, *Modernism, Technology, and the Body*, 32.
200 Ibid.

Rockwell's mixed reaction to this pernicious form of machinic embodiment attests to the double logic of dread and allure which is a symptom of ambivalence. The prosthetic distantiation of technology and the technological representations thereof provide a scopophilic dimension for these mechanical wonders and the euphoria of their destruction. A similar logic of disaster not only informs the literary works and filmic reproductions of horror and science fiction, and animates the disaster reenactments and the newsreels of the First World War, but also serves to facilitate destructive fantasies corresponding to the anxieties of accelerated socio-cultural and technological change.

The dueling tendencies of pessimism and ecstasy that fermented in the fin-de-siècle and the early twentieth century were not merely the product of machine age ambivalence regarding technology but the continuation of a tenacious thread of irrationalism that would culminate in an excess of psychopolitical nihilism. With an allusion to Fromm, Peter Sloterdijk describes the imagination of disaster as the *catastrophile complex*, claiming that in this social climate there flourishes "an eerie readiness for catastrophes."[201] He writes that *catastrophilia* "attests to a collective disturbance of vitality through which the energies of the living are displaced into a sympathy with the catastrophic, the apocalyptic, and the violently spectacular."[202] This would be an apt gesture to Thanatos, although Sloterdijk makes scant reference to Freud. And whether or not Fromm's theory of the necrophilous passion is evidence of the sublimation of the death drive, it is in the shadow of the death drive

201 Herein, the catastrophile complex will be termed *catastrophilia*. (Peter Sloterdijk, *Critique of Cynical Reason*, trans. Michael Eldred (Minneapolis: University of Minnesota Press, 1987), 120.)
202 Ibid.

where disaster euphoria and the worship of technique play out. The death drive could be considered a mythological construct. Freud himself referred to it as such. But when we consider that text's immediate post-WWI context, the metaphors framing the dark current of *Beyond the Pleasure Principle* were already those of technological modernity.

Chapter Two

Alfred Jarry's Proto-Futurism, Bachelor Machines, and the Lyrical Technophilia of F. T. Marinetti

"The spirit of necrophilia," Fromm writes, "found its first explicit and eloquent expression" in Italian Futurist luminary Filippo Tommaso Marinetti as decreed in the *Founding and Manifesto of Futurism* of 1909.[203] But the allure of destruction and the enchantment with all that is mechanical, as evidenced in the previous chapter, was already *old and long familiar*. The lyrical technophilia espoused by Marinetti is rooted in the traditions of Symbolism and romanticism, the shades of which are even more pronounced in Futurist aesthetics than in the artistic praxis of their forerunner, Alfred Jarry. And the Futurist directive to disavow the distinction between art and life was already being carried out in the cabaret culture of fin-de-siècle Paris. The biographical details of Jarry's way of being in the world are a testament to the impulse to merge art and life. From Jarry's earthy, Rabelaisian, puppet theater and his sundry literary works emerges a mechanistic aesthetic populated with varieties of destructive machines that captured Marinetti's imagination long before the production of the first Futurist Manifesto, and so did Jarry's machinic affect, his phallocentrism, his nihilism, and his perpetuation of scandal. The twin vitalist forces of Friedrich Nietzsche and Henri Bergson that surface throughout Jarry's writing are the motivating forces behind the Futurist imaginary. This irrationalist vitalism engenders visions of machines as manifestations of living force, the metallization of man, and dreams of mechanical

203 Fromm, *The Anatomy of Human Destruction*, 10, 344.

parthenogenesis. The appearance of *bachelor machines* in the prose of Jarry and Marinetti provides a lens through which one can situate these audacious figures in the years before the First World War.

I.

Renato Poggioli, in *The Theory of the Avant-Garde*, considers antagonism, or the *antagonistic moment*, as a permanent feature of the avant-garde. Peter Bürger, in his *Theory of the Avant-Garde*, historicizes the antagonism that was central to Poggioli's theory. Bürger contends that the "detachment of art from the praxis of life" beginning with art's autonomy in the eighteenth century and culminating with the Aestheticism of the nineteenth century effectuated the "crystallization of a special sphere of experience," that is, aesthetic experience, which was divorced from ordinary life.[204] The early avant-garde movements reacted against the instrumental rationality of the bourgeois world and sought to dismantle the institution of art. The avant-garde forced the aesthetic experience, which "rebels against the praxis of life,"[205] into the praxis of life itself as art and life would coalesce. As Bürger postulates, "what most strongly conflicts with the means-end rationality of bourgeois society is to become life's organizing principle."[206] The destruction of art's autonomy was consequent to the reintegration of art into the praxis of life and when the futurists

204 Peter Bürger, *Theory of the Avant-Garde*, trans. Michael Shaw (Minneapolis: University of Minnesota Press, 1984), 24.
205 Ibid, 34.
206 Ibid.

proclaimed "we desperately want to reenter life."[207] Jarry, the connective tissue between Anarcho-Symbolism and Futurism, had already annihilated this distinction.

Poggioli argues that the spirited hostility and antagonism of the avant-garde is infused with a dynamism that is "inherent in the very idea of movement" itself, which the Futurists would consecrate as a "religion of speed."[208] The veritable inebriation of the avant-garde with its penchant for destruction was constitutive of a sort of *transcendental antagonism* or, more precisely, "*nihilism* or the *nihilistic moment*."[209] Against the Aestheticist vision of *l'art pour l'art* the avant-garde endorsed an essential vitalism and the injunction of action for the sake of action driven beyond any sense of propriety, morality, or limit. Nietzsche's irrationalist philosophy of vitalism found consistent favor among the avant-garde, especially in the Anarcho-Symbolist circles of Paris.

For Nietzsche, nihilism is "a *normal* condition."[210] If the nihilist has the will to eschew former goals, convictions, and faith, then that nihilism is active. Active nihilism, Nietzsche declares, "reaches its maximum of relative strength as a violent force of destruction."[211] Destruction is creative. In contraposition, passive nihilism is betrayed by exhaustion, and an enervation of spirit; the passive nihilist craves the

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207 Umberto Boccioni, et al., "Futurist Painting: Technical Manifesto," in *Futurism: An Anthology*, eds. Lawrence Rainey, Christine Poggi, and Laura Wittman (New Haven: Yale University Press, 2009), 65.
208 Renato Poggioli, *The Theory of the Avant-Garde*, trans. Gerald Fitzgerald (New York: Harper and Row, 1971), 26; F. T. Marinetti, *Critical Writings*, trans. Doug Thompson, ed. Günter Berghaus (New York: Farrar, Straus and Giroux), 253.
209 Poggioli, *The Theory of the Avant-Garde*, 26.
210 Friedrich Nietzsche, *The Will to Power*, tran. Walter Kaufmann and R. J. Hollingdale (New York: Vintage Books, 1967), 17.
211 Ibid.

balms of morality, religion, or other illusions that serve as distractions from the present moment. Passive nihilism is decadent. While the passive nihilist recognizes former beliefs to be fictions, the active nihilist has the will to "throw them overboard."[212] The experience of nihilism tends to vacillate between active and passive, destruction and resignation, rebellion and intoxication.[213] Decadence in the fin-de-siècle was perceived by the Symbolists as a symptom of cultural decline which provoked the desire for an aesthetic revolution. Within the rejection of traditional narrative structures and the principles of realism there was a compulsion toward radical changes in the arts that were heralded by decadence. Decadence was the catalyst. From decadence the trajectory from passive nihilism to active nihilism runs through Symbolism into Futurism proper.

The influence of Nietzsche's philosophy on Jarry is manifest in his life and work. As Jean-Michel Rabaté suggests, Jarry was "one of the first exuberant avant-gardists who had been touched by the spirit of Nietzsche."[214] The rhetoric of nihilism and violence that permeates Nietzsche's writing similarly infiltrates Jarry's aesthetic production, especially his plays, as the infamous *Ubu Roi* would attest. Jarry was introduced to the untranslated works of Nietzsche by his lycée instructor Benjamin Bourbon in 1889 when the philosopher was in a state of mental deterioration but still alive. He would soon transform Nietzsche's *Anti-Christ* into his own *César-*

212 Paul van Tongeren, *Friedrich Nietzsche and European Nihilism* (Newcastle, UK: Cambridge Scholars Publishing, 2018), 44.
213 Ibid.
214 Jean-Michel Rabaté, "Alfred Jarry's Nietzschean Modernism," in *New Critical Thinking: Criticism to Come*, ed. Julian Wolfreys (Edinburgh: Edinburgh University Press, 2017), 167.

Antechrist (1895) wherein the grotesque Père Ubu makes his first appearance.[215] Jarry's nihilist predilection is crystallized in the epigraph of his third play of the Ubu cycle, *Ubu Enchained*, and attributed to Papa Ubu: "Hornstrumpot! We shall not have succeeded in demolishing everything unless we demolish the ruins as well."[216] And with a nod to the utility of destruction he continues "but the only way I can see of doing that is to use them to put up a lot of fine, well-designed buildings."[217]

It is significant that this will to destruction for Jarry was also directed inwardly, masochistically. He sought the terms of his own self-destruction primarily through the vehicle of alcohol (absinthe, ether) the abuse of which he declared "distinguishes man from the beasts"[218] even though this exertion would contribute to his early death at the age of thirty-four. Jarry inhabited the Dionysian figure lionized in Nietzsche's derivation as the tragic artist who seizes the "will to life" in order to "*be oneself* the eternal joy of becoming" even while this joy is "itself the *joy of destruction*."[219] In Freudian terms, the task of rendering the destructive instinct innocuous is fulfilled by the libido in an attempt to push the death drive outward, toward the external world, a movement that is called "the instinct for mastery, or the will to power"[220] less one succumb to the "impulsion to self-destruction."[221] Jarry

215 Rabaté, "Alfred Jarry's Nietzschean Modernism," 168.
216 Alfred Jarry, *The Ubu Plays*, trans. Cyril Connolly and Simon Watson Taylor (New York: Grove Press, 1968), 106.
217 Ibid.
218 Brotchie, *Alfred Jarry,* 250.
219 Friedrich Nietzsche, *Twilight of the Idols, or, How to Philosophize with the Hammer*, trans. Richard Polt (Indianapolis: Hackett Publishing Company, 1997), 91.
220 Sigmund Freud, "The Economic Problem of Masochism," in *The Complete Psychological Works of Sigmund Freud*, ed., trans., James Strachey (New York: W. W. Norton & Company, 1976), 4075.
221 Sigmund Freud, "Anxiety and Instinctual Life," in *The Complete Psychological Works of Sigmund Freud*, trans. James Strachey (New York: W. W. Norton & Company, 1976), 4709.

imperturbably embodied the death drive as signified in his own creative destruction and the immoderation of his living.

"As for Alfred Jarry, he was a dangerous man," wrote Alfred Douglas in his autobiography, "very dangerous."[222] Douglas' assessment of Jarry was probably colored by an incident that occurred in a restaurant, La Jeunesse, where he was dining with Jarry and other friends when Jarry brandished a revolver and fired several rounds into the ceiling after which they were all promptly thrown out. Thereafter, Douglas conveyed to Rachilde that he would no longer attend her Tuesday night "*Mercure*" receptions convened with her husband, Alfred Vallette, founder of the eminent *Mercure de France* journal. Douglas intimated that he found her guests hostile and experienced physical repulsion while in the presence of Jarry. Rachilde herself was a pariah among the Parisian bourgeoisie, the author of diverse and aberrant works (one novel in particular, *Monsieur Vénus* (1884), was deemed pornographic by the authorities). As a precocious teenager whose wild enthusiasms disturbed her parents, Rachilde had read the Marquis de Sade and was already publishing her own stories under different pseudonyms. She was active in various sports and was skilled with both sword and pistol.[223] Among the avant-garde circles in Paris she was widely revered. Rachilde was one of Jarry's closest allies and facilitated the production of *Ubu Roi* at Lugné-Poe's Théâtre de l'Oeuvre in December of 1896. Among the habitués of the Vallette's *Mercure* Tuesdays were André Gide, Paul Valéry, Maurice Ravel, Gustave Kahn (credited with inventing free verse) and

222 Brotchie, *Alfred Jarry,* 185.
223 Daniel Gerould, "Madame Rachilde: 'Man' of Letters," *Performing Arts Journal* 7, no. 1 (1983): 118.

miscellaneous others.[224] The avant-garde scene in Paris flourished, attracting artists like Mallarmé, Apollinaire, and Picasso, who envisioned their artistic liberation in anarchistic terms, inciting one another with their anarcho-symbolist praxis while posing an affront to bourgeois rationalism.[225] Jarry was a sensation in these circles and, as Roger Shattuck confirms, he was well received both *despite* his "fearsome behavior" and *because* of it.[226]

That Jarry was always armed with his Bulldog revolver was not extraordinary in fin-de-siècle Paris given the persistence of anarchist violence that had swept Europe in the late nineteenth century. The frequent *attentats* (bomb attacks) and assassinations were induced in part by the "propaganda by the deed" (i.e., revolutionary means of incitement beyond the word) anarchist tactic as well as the availability of dynamite patented by Alfred Nobel in 1867. There were in excess of ten bombings in Paris between 1872 and 1886 and the police responded by rescinding the prohibition on arms openly displayed.[227] Jarry took full advantage of this permissiveness regarding weaponry and would go out at night flanked with two revolvers in his belt. André Breton described him as fully armed, "dressed in furs and

224 Ibid.; Daniel Gerould, "Madame Rachilde: 'Man' of Letters," *Performing Arts Journal* 7, no. 1 (1983), 118; Roger Shattuck, *The Banquet Years: The Origins of the Avant-Garde in France, 1885 to World War I* (New York: Vintage Books, 1968), 194.
225 Patricia Leighten, "Picasso's Collages and the Threat of War, 1912-13," *The Art Bulletin* 67, no. 4. (Dec., 1985): 660.
226 Shattuck, *The Banquet Years*, 193.
227 Erin Williams Hyman, "Theatrical Terror: Attentats and Symbolist Spectacle," *The Comparatist* 29 (May 2005): 101.

shod in slippers," and in addition to his pistols he carried a heavy lead cane or by another account a carbine slung over his shoulder.[228]

Jarry was a sort of menacing, gothic dandy of the Parisian underworld with a round, clown-white face that was powdered and badly shaven, black shoulder-length hair parted down the middle, and an extravagant manner of dress that became more outlandish over time. His attire was both foppish and threadbare, and he would dress up in grimy, black clothes that were floppy on his tiny stature, a black hooded cape, woman's blouse, stovepipe hat and espadrilles. He was, in Marinetti's words, "a flagrant banner of voluntary poverty."[229] Although known as a prolific artist, enthusiastic alcoholic, and ardent cyclist who imagined himself fused with his racing bicycle, Jarry's more infamous excess was his proclivity for violent escapades as evidenced by the scene at La Jeunesse. These public displays embodied a nihilistic, theatrical bearing that people who were not his closest associates would find unnerving if not frightening, and this was by design. Apollinaire recounts an incident when a passerby asked for directions and "Jarry immediately pulled out a revolver, ordered the man to take six paces back, and only then indicated the direction [with his gun]."[230] On another occasion when asked for a light Jarry raised his revolver, fired the weapon, and quipped "Voilà!"[231] When Jarry accidentally broke a mirror in a

228 André Breton, *Anthology of Black Humour* trans. Mark Polizzotti, (San Francisco: City Lights, 1997), 211; Shattuck, *The Banquet Years*, 193.
229 Marinetti, *Marinetti: Selected Writings*, trans. R. W. Flint and Arthur A. Coppotelli (New York: Farrar, Straus, and Giroux, 1971), 15-16.
230 Guillame Apollinaire, quoted in Alastair Brotchie, *Alfred Jarry: A Pataphysical Life* (Cambridge: MIT Press, 2015), 293.
231 Alastair Brotchie, *Alfred Jarry: A Pataphysical Life* (Cambridge, MA: MIT Press, 2015), 185; Shattuck, *The Banquet Years*, 215.

restaurant as he tried to shoot another man's pipe he made no effort to conceal his pleasure as other guests were predictably alarmed. And it would not be uncommon after such a scene to see Jarry "cheerily waving goodbye with his revolver."[232]

There was a consistency with regards to the specific settings in which Jarry would perform some exploit with his revolver: the presence of women, as Alistair Brotchie details, "preferably pregnant" women.[233] At a dinner party held by critic Maurice Raynal and attended by Picasso, Apollinaire, the Spanish sculptor Manolo, and several others (including three pregnant women) Jarry announced to the room that he disliked Manolo. Perhaps piqued by Manolo's sobriety Jarry ordered him from the room, but when a few moments later Manolo peeked around the door Jarry pulled out his revolver and fired at him. Manolo fled as Apollinaire struggled to disarm Jarry. In the aftermath of this incident, Jarry mused "Wasn't it just as beautiful as literature?"[234]

The temporary loss of his precious object, the Bulldog revolver (presumably confiscated by Picasso[235]), was significant enough for Jarry to allude to this crisis in his semi-autobiographical novel *La Dragonne*. The protagonist ruminates mournfully over the loss of his revolver which was pawned in order to pay for more alcohol:

232 Brotchie, *Alfred Jarry*, 312.
233 Ibid, 320.
234 Ibid.
235 Shattuck claims that Picasso had adopted Jarry's "eccentric pistol-carrying habits," a detail that would attest to the range of Jarry's influence. Picasso was reticent if not secretive about his work and was disinclined to provide explanations for his artistic praxis. On one occasion when someone asked him about his aesthetic theory Picasso "eloquently fired his gun" which Patricia Leighton claims was a "gift" from the "quintessential anarchist" Alfred Jarry. (Shattuck, *The Banquet Years*, 219; Leighten, "Picasso's Collages, 671.)

> In order to drink more and all the time….it came to the point when he even had to sell the Thing which, through a tiny, sovereign movement of his index finger, made him prince of the outer darkness and master of everyone's life, everywhere and always: his revolver.[236]

The power the protagonist draws from the weapon occurs in the intersection of finger, now "sovereign," and trigger, performing the fusion of man and mechanical prosthesis, but also the experience of disavowal. The fetishization of the weapon which is imbued with a sort of magical force is indicated by the conspicuous capitalization of the pronoun "Thing" and treated as an emblem charged with libido. Whether Jarry was familiar with Freud's 1895 publication of *Project for a New Scientific* psychology is uncertain, but therein Freud speculates on the "Thing" (*das Ding*) as a libidinal object which, due to its intractable exteriority and *otherness*, consciousness is unable to process. Rabaté astutely marks this distinction regarding Jarry's phallocentrism and the allusion to the "Thing" but in reference to the phallus in Jarry's erotic science fiction novel *The Supermale*.[237]

The walls of the spiral stairway that led to Jarry's 1890s dwelling he called "Dead Man's Calvary" were limned with handprints of blood and the hovel at the top of the stairs was adorned with dusty crucifixes, censers, stuffed owls as well as a live owl with which Jarry cohabitated.[238] The romantic irrationalism of Nietzsche and the gothic horror of Le Comte de Lautréamont's *Les Chants de Maldoror* not only permeated expressly the aesthetic of Jarry's dwelling but surfaced as well in the styles and registers of his writing. From *Maldoror*, Jarry appropriates a phrase that is

236 Alfred Jarry, quoted in Jill Fell, *Alfred Jarry* (London: Reaktion Books, 2010), 173-174.
237 Rabaté, "Alfred Jarry's Nietzschean Modernism," 170.
238 Brotchie, *Alfred Jarry,* 84.

delivered by the Templar in *César-Antechrist* as "uprooted phallus, do not bounce around so much."[239] As Shattuck observes, the sexual instinct has been removed (uprooted) from its original context and "threatens to go on a rampage,"[240] which is reminiscent of Karl Abraham's analysis of the mechano-sexual correspondence between unstoppable railway motion and unbridled sexuality, again, divorced from its initial context. Jarry references the same phrase in the gothic play *Haldernablou* wherein a phallus destroys a temple.[241]

As Jarry gradually drifted into insolvency he gave up Dead Man's Calvary and after staying briefly with Henri Rousseau he found a shabby room in a building that had been remodeled so that each floor was reduced by half horizontally, doubling the number of floors. Because of Jarry's slight stature he was able to stand in the room upright but most of his guests were forced to stoop. The mantel in Jarry's apartment was adorned with a massive stone phallus of Japanese origin, a gift from the Symbolist painter Félicien Rops.[242] Next to the phallus, which was always covered with a violet, velvet skullcap, there were a couple volumes of the *Bibliothèque Rose* (19th century children's stories) and a beat-up copy of Rabelais, which was the extent of his library. Apollinaire describes an occasion when a "a literary lady" entered the apartment, out of breath from ascending the stairs and a

239 Jarry, quoted in Rabaté, "Alfred Jarry's Nietzschean Modernism," 172.
240 Shattuck, *The Banquet Years*, 231.
241 During the nineteenth century archeologists considered Jesus as a "spring fertility god" the symbols for whom were often phallic (cocks, asses, fish, etc.). Since antiquity, gods who die and are later resurrected have often been regarded in sexual terms and for authors and artists in the fin-de-siècle, obscene depictions of Christ or the resurrection were not uncommon. (Scott Bates, "Revolutionary Nonsense: Charles Cros's Kippered Herring," *The French Review* 57, no. 5 (Apr., 1984):606.)
242 Rabaté, "Alfred Jarry's Nietzschean Modernism," 172.

little stunned to find herself in such a tiny, unfurnished place. She looked at the phallus and affably asked "Is that a cast?" "No," Jarry replied. "It's a reduction."[243] Jarry's pronounced phallocentrism betrays a misogyny which was rendered more conspicuous given his asexual demeanor. He carried the outrageous and androgynous pose of the dandy. Sexuality in general would become increasingly mechanized in his writing just as Jarry would adopt a curiously mechanical affect in his daily life.

Jarry had the "nihilist's eye"[244] for ugliness, and images of monsters occur frequently in his work, particularly in the woodcuts, many of which appeared in the journal he co-published with Remy de Gourmont, titled *L'Ymagier* (1894-1896). The publication was a motley assortment of illustrations, printed music, essays, broadsides, and numerous woodcuts (e.g., anonymous medieval xylographic fragments, the advanced woodcuts of Dürer, and Jarry's woodcuts among others).[245] The focal point of *L'Ymagier* was the transformative power of the image upon the imagination, especially with regards to popular images, and each issue was dedicated to a specific topic.

Jarry published an essay titled "Les Monstres" in the eponymous issue in which he discusses mythological beasts and construes the term "monster" to signify "an unusual combination of elements" or an "unaccustomed harmonizing of dissonant elements: the Centaur and Chimera being thus defined for those with no

243 Shattuck, *The Banquet Years,* 216; Fell, *Alfred Jarry*, 213-214.
244 Nietzsche, *The Will to Power*, 17.
245 Ute Kuhlemann Falck, "Idea and Reality: Edvard Munch and the Woodcut Technique," in *Burning Bright: Essays in Honour of David Bindman*, eds. Diana Dethloff, et al. (London: UCL Press, 2015), 246-247.

understanding."[246] Jarry posits the hybridities of the popular mythological beasts, Centaur and Chimera, as symbols for a public who would not understand the more abstruse formulation that follows: "I give the name of *monster* to any original, inexhaustible beauty."[247] Whether the formulation is self-referential one could submit that in Jarry's life and work the dissonant elements were unrestrained and an uncertain monstrosity is inherent in his aesthetic itself. Picasso would describe this dissonant element in terms of the necessity of *ugliness*. By Gertrude Stein's account, Picasso claimed that the creation of something *new* required such struggle and intensity that the artist was "forced to make it ugly."[248] Those who follow and emulate the work are capable of making, in Stein's words, "this thing a beautiful thing"[249] but the new retains its ugliness. Dialectically speaking the beautiful only exists after having absorbed the ugly. This is what Adorno called "the violence of the new."[250] "The harmonistic view of the ugly was voided in modern art," he writes, "and something qualitatively new emerged."[251]

Jarry's speculation regarding the juxtaposition of dissonant elements and the entanglement of the monstrous and the beautiful is addressed to a specific audience differentiated, again, from "those with no understanding." The oppositionality projected between artist and public hinges on this use of linguistic hermeticism, a

246 Jarry, quoted in Fell, *Alfred Jarry*, 54.
247 Ibid.
248 Gertrude Stein, *Picasso* (New York: Dover Publications, Inc., 1984), 9.
249 Ibid.
250 Theodor W. Adorno, Aesthetic Theory, trans. Robert Hullot-Kentor (New York: Continuum, 1997), 23.
251 Ibid., 46.

characteristic of form and style that Poggioli predicates is constitutive of the avant-garde and its concerted antagonism toward bourgeois life. Poggioli references a theory by the "youthful Nietzsche" that metaphor originates in the "desire of a group of youths to distinguish themselves by a kind of secret language," that is, a jargon that repudiates the prose idiom used by the older generation and viewed as a sign of instrumental power.[252] More specifically, Poggioli claims that the hostility of the avant-garde to the public is signified in a "polemical jargon full of picturesque violence, sparing neither person nor thing, made up more of gestures and insults than of articulate discourse."[253] The deliberate poetic obscurity which is a paradoxical inversion of linguistic rationalism engenders an antinomy similar to the Nietzschean opposition between metaphor and everyday speech. Jarry would discharge the ugly, the dissonant, and inexhaustible kernels of his antagonism (or in Nietzsche's terms, "press these magnificent monsters into service"[254]) in a spectacle of creative destruction titled *Ubu Roi*.

The tumultuous scandal that was the 1896 stage production of *Ubu Roi*, for which Jarry is most well known, was a detonation of nihilism in dramatic form *par excellence*. Even the lithograph theatre program is arresting. The poster is garish, consisting of just a few colors (notably red and yellow) and representational albeit made up of crudely drawn figures with thick lines, chaotically arranged against a pitch black sky. The monstrous Ubu, whose red shape is defined by his massive belly, presides over a hellish dystopian scene in which his balloon-shaped robots, the

252 Poggioli, *The Theory of the Avant-Garde*, 37.
253 Ibid., 36-37.
254 Nietzsche, *The Will to Power*, 492.

Palotins, are pulling carts loaded with tax collections while a bulbous mechanical bird with antennae hovers over a house engulfed in flames before which supplicants kneel as if in prayer. The banner at Ubu's feet reads "It won't take long to make my fortune, whereupon I shall kill everyone and go away."[255] The destructive, satirical tenor is self-evident. And while the composition is unsophisticated by design, the stark figures appear in exaggerated forms more prominent for their blunt color and lack of detail. There is no shading or other technical artistry facilitated for the sake of realism so the drawing is flat and two-dimensional and its characters are emblems of the basest of human instincts. The kneeling figures appear in robes indicative of either a pre-modern era or some ritualistic raiment in anachronistic contraposition to the robots. The specificity with regards to a historical present is ambiguous and one is left with apocalyptic and inhuman character types and an inscription signifying only rapaciousness and cruelty.

This inhumanity is replicated in the stage production of *Ubu Roi*. The dehumanization of actors was a consequence of their transformation into marionettes. This hybrid format was presented in a milieu where marionette theaters flourished amid the patronage of Symbolists who, like Jarry, considered puppetry to provide a purer vehicle of the artist's expression than even the most skilled performer. Actors had become established as public figures in the banquet years and Jarry was fiercely opposed to this cult of celebrity, maintaining that "the more brilliant and individual" the actor is "the worse he does."[256] Jarry regarded marionettes, over whom "one is

255 Fell, *Alfred Jarry*, 87.
256 Jarry, quoted in Fell, *Alfred Jarry*, 118.

sovereign master and Creator," as the means to "translate the rudimentary framework of one's thoughts, in their bare exactitude."[257] This charge is reminiscent of the sentiments of German romantic poet Heinrich Kleist writing a century previous who described puppets as more graceful than actors especially since they lacked the distracting human *affect*.[258]

The realist conventions of the nineteenth century were sidestepped in puppet theaters, but with the production of *Ubu Roi* Jarry subverted the dramatic form at its core by flouting even the distinctions between puppet theater and dramatic theater, and by blurring the differentiation between mechanized actors and their wax simulacra. Jarry addressed the crowd before the play began, informing them that "a few actors have agreed to lose their own personalities, performing with masks over their faces so that they can mirror the mind and soul of the man-sized marionettes that you are about to see."[259] The actors in rigid masks mimicked the stilted, jolting movements of puppets while commingling with dummy marionettes, creating an uncanny effect. Jarry determined that with the correct lighting just six postures while facing the audience and six positions in profile could simulate the range of human expression, thus a violent backward jerking movement causing the head to strike the wall would simulate shock.[260] This was a theater of caricature, and *Ubu Roi* was a significant part of the revival of the grotesque in the late nineteenth century under the

257 Ibid.
258 Heinrich Kleist, quoted in Douglas Radcliff-Umstead, "Pirandello and the Puppet World," *Italica* 44, no. 1 (Mar., 1967), 13.
259 John Bell, "Puppets and Performing Objects in the Twentieth Century," *Performing Arts Journal* 19, no. 2 (May 1997): 30.
260 Fell, *Alfred Jarry*, 83.

influence of both romanticism and existentialism.[261] It was through this method of caricature that the barbarity of Jarry's *types* was more directly exposed.

Jarry's use of caricature and his formalization of theatrical types is reminiscent of Bergson's theory of the comic even though "Laughter: An Essay on the Meaning of the Comic" (1911) was published a few years after his death. Bergson was a major influence on Jarry's thought and Jarry took very detailed notes (as required by Bergson) when he attended Bergson's lectures.[262] Bergson argues that the caricaturist will find some anomaly in the most regular face, some "impending bias, the vague suggestion of a possible grimace," that is almost imperceptible, and then render this visible through exaggeration and magnification. The deformities and disproportions which exist in nature "as mere inclinations" because they are "held in check by a higher force" are hypertrophied in hideous form by the caricaturist. "His art, which has a touch of the diabolical," Bergson writes, "raises up the demon who had been overthrown by the angel."[263] Bergson situates the comical element in caricature specifically in terms of machines: "*The attitudes, gestures and movements of the human body are laughable in exact proportion as that body reminds us of a mere machine*."[264]

In this context Bergson approximates the machinic appearance of caricatures to marionettes just as Jarry conceived of *Ubu Roi* in predominantly mechanical terms,

261 Mikhail Bakhtin, Rabelais and His World, trans. Helene Iswolsky (Bloomington: Indiana University Press, 1984), 46.
262 Fell, *Alfred Jarry*, 33.
263 Henri Bergson, *Laughter: An Essay on the Meaning of the Comic*, trans. Cloudesley Brereton and Fred Rothwell (New York: The Macmillan Company, 1913), 26.
264 Bergson, *Laughter*, 29.

from the stilted movements of the actors to the "debraining machine" that the Palotins used to dismember the nobles. It was Jarry's intention (for which he was castigated) to elevate the macabre debraining machine to the status of an actor in the production as evidenced by the inclusion of the debraining machine in the cast of characters.[265] W. B. Yeats was in attendance and he was struck by the movements and appearance of these mechanized actors, describing them as "dolls, toys, marionettes….hopping like wooden frogs."[266] The production of *Ubu Roi* brought into radical ambiguity the relationships not just between animate and inert mechanisms or between mechanized bodies and their dummy facsimiles, but also the distinctions between the performers and their audience.

Ubu Roi was a direct assault on the sanitized bourgeois theater experience wherein any breach of continuity was uncommon and disruptions from the audience were unacceptable. Jarry determined that the reaction of the crowd would be part of the performance. He orchestrated the offstage hubbub in advance by inviting his own claque of drinking companions from the local bar (in lieu of artists and literary friends) of whom he instructed to make a disturbance with vocal outbursts, the hurling of projectiles, and fisticuffs. This "counter-*claque*" would create a racket of applause or howls of condemnation, whichever would be in opposition to the reaction of the rest of the audience. "The performance must not be allowed to reach its conclusion," Jarry demanded, "the theater must explode."[267] The escalation of the

265 Stephen Barker, "Canon-fodder: Nietzsche, Jarry, Derrida (The Play of Discourse and the Discourse of Play)," *Journal of Dramatic Theory and Criticism* (1989): 76.
266 W. B. Yeats, "The Tragic Generation," 1914, quoted in Olga Taxidou, *Modernism and Performance: Jarry to Brecht* (New York: Palgrave Macmillan, 2007), 1.
267 Brotchie, *Alfred Jarry:* 160.

subsequent chaos consumed both actors and audience in a singular performance/counter-performance that dissolved the boundaries between stage and street in utter cacophony, concretizing the integration of art and life.

Although the public reaction to *Ubu Roi* was one of explosive displeasure, critic Henry Bauer wrote favorably of the play in *L'Écho de Paris*, recognizing the production as a channel of aesthetic provocation. "From this huge, strangely suggestive figure of Ubu," he declared, "blows the wind of destruction, inspiration of today's youth, which destroys everything that has been traditionally respected."[268] W. B. Yeats also acknowledged the artistic necessity of nihilism and destructive chaos in the production of *Ubu Roi* but his response was more ambivalent. He was first determined to "support the most spirited party" and "shouted for the play" but upon returning to his hotel room he lapsed into a state of mourning, perhaps having recognized the end of an era, in

his words,

> after Stéphen Mallarmé, after Paul Verlaine, after Gustave Moreau, after Puvis de Chavannes, after our own verse, after all our subtle and nervous rhythm, after the faint mixed tints of Conder, what more is possible? After us the Savage God.[269]

The sentiment portrays an acquiescence to the end of symbolism and perhaps the death of rationality itself or merely what Shattuck described as Jarry's own vision of the "second coming," which was a "comic Apocalypse."[270]

268 Fell, *Alfred Jarry*, 94.
269 Yeats, quoted in Taxidou, *Modernism and Performance*, 1.
270 Shattuck, *The Banquet Years*, 229.

After the production of *Ubu Roi* and for the rest of his short life Jarry was perceived as having inhabited the persona of Père Ubu, adopting the mannerisms of the grotesque protagonist, and speaking of himself in the royal first person plural. For Jarry, becoming Ubu was both a manifestation of the attempt to conjoin art and life and an act of "literary mimesis" wherein the author assumes the persona of one of his characters. The legend of Père Ubu dates from Jarry's adolescence and is based on his rotund physics teacher, Félix Hébert, who was incompetent both in terms of demonstration and discipline, and about whom Jarry and his friends constructed a mythology that the adult Jarry would continue to exhibit in the form of puppet shows. Autobiographical elements are frequent in Jarry's work but the persistent focus on Père Ubu, both in aesthetic form and personal affect, lends credence to the suggestion made by his contemporaries that Jarry preferred to inhabit a realm of fiction, and that the world outside his imagination was of nugatory consequence. As Rachilde remarked, "he wanted his life to conform to his literary program."[271] This conflation was implemented through the role of Ubu, pieced together with a caricature of a childhood authority figure, transformed into his apocalyptic theater, and then melded with Jarry's own idiosyncrasies into his daily life.

Jarry's demeanor was a mechanization of affect, a sort of impersonation of the machine. The most conspicuous attribute was the machinic articulation of his speech, which seemed denatured as if both nuance and modulation were flattened. André Gide described the manner in which Jarry would snap out syllables and invent "odd

271 Madame Rachilde, quoted in Brotchie, *Alfred Jarry*, 34.

words" while "oddly mangling others."[272] "Everything about Jarry," Gide wrote, "smacked of affectation—his way of talking in particular….with that toneless voice of his—a voice without warmth or intonation, or accent or emphasis."[273] But the impression that Jarry prompted this transformation following the production of *Ubu Roi* is imprecise because Jarry had displayed such mannerisms since adolescence. The poet Gandilhon Gens'd'Armes, recounted that when Jarry started talking it seemed as if he were "in thrall to a torrent of words" beyond his control:

It was no longer a person speaking, but a machine controlled by a demon. His staccato voice, metallic and nasal, his abrupt puppet-like gestures, his fixed expression and uncontrollable flood of language, his grotesque and brilliant turns of phrase ended up provoking a feeling of disquiet.[274] The feeling of disquiet reported by Hertz is corroborated in a memoir by Lucie Delarue-Mardrus who similarly referenced his "staccato speech and his sorcerer's gaze" but was particularly distracted by Jarry's grin, which she found frightening. "His sudden smile….reached from ear to ear" she said, "and was then instantly extinguished as if by a click, and which never seemed to affect the eyes."[275] Apollinaire was also struck by Jarry's mechanical grin, noting that Jarry would "stop speaking in order to grin, and then immediately become serious again." [276]

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272 André Gide, *The Counterfeiters*, trans. Dorothy Bussy (London: Penguin Books, 1966), 263.
273 Ibid.
274 Gandilhon Gens-d'Armes, quoted in Brotchie, *Alfred Jarry*, 39.
275 Lucie Delarue-Mardrus, quoted in Brotchie, *Alfred Jarry,* 291.
276 Apollinaire, quoted in Alastair Brotchie, *Alfred Jarry*, 293.

The machinic disposition as evidenced in the literary and biographical record of Jarry is salient, allowing R. W. Flint to conclude in the introduction to *Marinetti: Selected Writings* that "Jarry was a robot Père Ubu."[277] But the mannerisms of the youthful Jarry allude to the likelihood that the theatrical persona of Ubu was conceived with the self-conscious imprint of Jarry's own eccentricities rather than as a transformative impersonation that Jarry wrought after 1896. Lived aesthetic praxis, for Jarry, coalesced in a single frenetic nexus of human and machine. Flint pinpoints Jarry summarily as a prototype of metallized man, advancing his "grand attempt to *swallow* the machine, to *become* it."[278]

Even Jarry's bicycling exemplified an iteration of the body-machine complex in that he made no distinction between his body and the bicycle, imagining himself fused with metal as a "combination of inexorable mathematics and human action."[279] The cultural phenomenon of bicycling was a new development in the fin-de-siècle. The mid-century "pedestrian curricle" (or, "hobby horse") was outmoded by the velocipede (with cranks and pedals attached to the front wheel) which was then modified with sprocket and chain, wheels of equal diameter, and pneumatic tires, culminating in the modern "safety" bicycle made commercially available by the eighteen nineties.[280] The bicycle was hailed as a symbol of technological modernity and contributed to an upsurge of interest in sports. Jarry was not only an ardent

277 R. W. Flint, "Introduction" to *Marinetti: Selected Writings*, trans. R. W. Flint and Arthur A. Coppotelli (New York: Farrar, Straus, and Giroux, 1971), 15-16.
278 Ibid.
279 Brotchie, *Alfred Jarry*, 252.
280 Samuel M. Barton, "The Evolution of the Wheel: Velocipede to Motocycle," *The Sewanee Review* 5, no. 1 (Jan., 1897): 49.

cyclist, he also wrote articles on athleticism and feats of speed, topics that were especially relevant in a decade when physical culture and the cult of the body were fashionable. The founders of the hygiene movement, Doctors Rouhet and Desbonnet, promoted the physical activity of horseback riding as a way to steel oneself to the ills of life in industrialized societies. Their attention shifted to the horse itself and mechanistic conceptions of the *animal machine* that Marey had exposed in chronophotographic representations of human and animal movement. Rouhet and Desbonnet portrayed the horse as a motor geared for "optimum use" for the sake of battling the problem of fatigue and applying these principles to the human machine.[281]

But just as the *new* in the avant-garde context is associated with the ugly or monstrous, the induction of new technology also corresponds to socio-cultural dissonance and antagonism. The novelty of the bicycle with its rider often provoked hostility in passersby. Jarry considered the riding crop as an essential bicycling accessory, not just to defend himself from aggressive dogs chasing what must have appeared as a strange beast, but also to repel pedestrians who would occasionally attempt to unseat the cyclist or force the rider to crash.[282] Jarry's friend Octave Mirbeau reported similar hostilities with regards to the new transport technology of the automobile in his early road novel, *La 628-E8*, titled after the license plate number of his roadster. Mirbeau conveys situations when his automobile was "pelted with stones" and recounts an incident when someone rolled a heavy log onto the road

281 Kari Weil, "Men and Horses: Circus Studs, Sporting Males and the Performance of Purity in Fin-de-Siècle France," *French Cultural Studies* 17, no. 1 (February 2006): 100.
282 Brotchie, *Alfred Jarry*, 25.

"causing a nasty skid."[283] Jarry's choice of the riding crop as a weapon against such hostility was a matter of necessity tinged with antagonism.

Rachilde describes an occasion when she was being pulled in a little trailer behind Jarry's bicycle over precipitous terrain when they crashed. Rachilde was unscathed but Jarry suffered contusions and his trousers were torn. "Well, Madame, we believe we were a little frightened" he said, referring to himself in the third person plural, then added "never have we wanted to take leave of a woman so badly."[284] The flip misogyny of the statement warranted no comment in Rachilde's account as she was more perplexed by the fact that Jarry told her that nothing was damaged but the left pedal, which actually meant his left "leg" because the bicycle was undamaged. Jarry made no distinction between his body and the bicycle.[285] Reverence for his bicycle surpassed a mere appreciation for the efficiency of the technological prosthesis; for Jarry, it was a sort of exoskeleton. He ascertained that "muscles can move, by pressure rather than traction" with the integration of the body and the bicycle frame as a skeleton extrinsic to the rider.

In this human-machine Jarry perceived "the mineral prolongation of….[the rider's]….bone structure."[286] Such conceptualizations of organ extension were current in organic philosophies of technology in the nineteenth century. Ernst Kapp espoused in his *Foundations for a Philosophy of Technology* (1877) the theory that

283 Octave Mirbeau, *Sketches of a Journey* (London: Philip Wilson Publishers, 1989), 32.
284 Fell, *Alfred Jarry*, 146.
285 Fell, *Alfred Jarry*, 252.
286 Alfred Jarry, quoted in Brotchie, *Alfred Jarry*, 251.

technology materializes as extensions of human organs or by "organ projection."[287] For Kapp, mechanical devices mimic and extend features of the human form as limbs, organs, or the exteriorization of the nervous system. According to this theory technology advances by mirroring and ultimately replacing these bodily forms, which would indicate that agency is inherent in technology itself. Jeffrey Herf maintains that the theory of "organ projection" places technological evolution in the realm of the organic, that is, superseding the Cartesian dualism in which technology is a product of the rational intellect and the body is merely modeled on the machine.[288] Jarry gestures toward a theory of technological evolution with the distinction that the locomotor "does not need centuries of evolution to convert itself" because the process can be circumvented through the infinite, scientific perfectibility of man and machine. In the case of the bicycle, the pedals and crankshaft form a prolongation of the rider's legs; the diamond shaped frame an extension of the rider's skeleton; and the reciprocal action of the rider's feet is transformed through chain, sprocket and wheels into the forward movement of the body-machine complex.

The integration of body and machine as represented by bicycle and rider is the topic of Hugh Kenner's essay "The Cartesian Centaur," wherein he discusses the mechanization of the body in the work of Samuel Beckett. Kenner explains that the necessity of creating "a body worthy of human reason" was endeavored by the Greeks in their assemblage of the most noble functions of both "rational and animal

287 Jeffrey Herf, *Reactionary Modernism: Technology, Culture, and Politics in Weimar and the Third Reich* (Cambridge: Cambrdige University Press, 1984), 158.
288 Ibid.

being" and thus engendered the centaur.[289] In modern times, however, he claims that we have a more dignified image of physical perfection than the horse: "The Cartesian Centaur is a man riding a bicycle."[290] In Kenner's idealized conception of the Cartesian Centaur, the "odd machine exactly complements"[291] the body and compensates for the body's deficiencies, suggesting that the mechanical prosthesis is an integral component of the body itself just as the crank arm of Jarry's bicycle is an extension of his leg, a component of the human machine. In the Cartesian Centaur the body is conceived as "a reduction to uncluttered terms of the quintessential machine" while the mind is detached and the "body and mind go each one nobly about its business, without interference or interaction."[292] The union of body and machine is distinct and separate from "thought" as Descarte posits in his Sixth Meditation: "Although the whole mind seems to be united to the whole body, I recognize that if a foot or arm or any other part of the body is cut off, nothing has thereby been taken away from the mind."[293] Kenner resolves that after three centuries the ambitious project of the Enlightenment, of which Descartes is the "symbol and progenitor," has at long last "accomplished the dehumanization of man."[294] And dehumanization is a prerequisite for the metallized man.

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289 Hugh Kenner, "The Cartesian Centaur," in *Samuel Beckett: A Critical Study* (New York: Grove Press, Inc., 1961), 121.
290 Ibid.
291 Ibid., 118.
292 Ibid., 121, 124.
293 René Descartes, *Selected Philosophical Writings*, trans. John Cottingham, Robert Stoothoff and Dugald Murdoch (Cambridge: Cambridge University Press, 1988), 120.
294 Kenner, "The Cartesian Centaur," 124.

Jarry's attachment to the mechanistic mode of existence is consistent with his machinic affect and impassive disposition. Eschewing emotion, he ate his meals in reverse from pastry to salad, and methodically abused alcohol as a discipline. Jarry comported himself, as Rachilde reports, like "a one-horsepower motor which must absorb so many liters of fuel [alcohol] per ten kilometers" and with his bicycle "he imperturbably pounded the dusty or muddy roads….equally indifferent to both."[295] The body is mechanically derailed from thought as it is absorbed in the machine, in Baudrillard's terms, "hypnotized by its own performance."[296] As if in a fugue state, Jarry chronicles the inspiration provided by the dynamism of body and bicycle:

> If man has been inspired enough….he should use this machine with gears to whisk up forms and colors as fast as possible with a rapid suction as he whirls along roads and bicycle tracks; for by serving the mind pulverized and scrambled scraps of food one is spared working through memory's destructive oubliettes, and after this ingestion the mind can far more easily re-create its own new forms and colors. We do not know how to create out of nothingness, yet we can do so out of chaos.[297]

For Jarry, the principles of geometry and the velocity of physical performance dematerialize synaesthetically and in this ecstasy of dissociation memory is superseded by a chaotically receding present. Marinetti would call this is a "poetry of feverish expectation."[298] The fragmentation of the boundaries between body and machine and the consequent scrambling of memory were a product of Jarry's creative

295 Brotchie, *Alfred Jarry*, 251.
296 Jean Baudrillard, *The Transparency of Evil: Essays on Extreme Phenomena*, trans. James Benedict (New York: Verso, 1993), 47.
297 Alfred Jarry quoted in, Brotchie, *Alfred Jarry*, 251.
298 F. T. Marinetti, "We Abjure our Symbolist Masters, the Last Lovers of the Moon," in *Futurism*, 93.

destruction. He would often present this collapse of rationality in a curiously scientific register.

Jarry published journalistic essays titled "Spéculations" which were often written as if from the perspective of an anthropologist from an alien civilization. Topical details of human activity like the system of mail delivery, modern transportation, or sports, are reported in a dry and logical diction, but with an extraordinary naiveté. A metro bus is conceived as an atavistic pachyderm; a dead body floating in a river is some species of fish. Thus Jarry would transpose commonplace objects and human behavior into incongruous perspectives.[299] In 1905 Marinetti commissioned Jarry to contribute articles to his journal *Poesia*, one of which was titled "Le Fouzi-Yama," a prose-poem about the military prowess of the Japanese. He detailed the Japanese tradition of fireworks and theorized that there may be a reservoir of gunpowder buried within Mt. Fujiyama. He also discussed weaponry such as the "yama gun" and the manner in which the Japanese scoff at the European ignorance of their culture.[300] In another article titled "On Military Lyricism" Jarry remarked on the commendable swagger of the drum major and suggested the baton be replaced by the children's toy the cup-and-ball.[301] He also proposed using kites for military surveillance. Again, these essays involve some

299 Shattuck, *The Banquet Years*, 216; Fell, *Alfred Jarry*, 155-156.
300 Marjorie G. Wynne and Luce Marinetti Barbi, "F.T. Marinetti and Futurism," *The Yale University Library Gazette* 57, nos. 3-4 (April 1983): 115.
301 The article, "On Military Lyricism," was also published as an homage to Jarry in 1913 in the journal *Les Soirées de Paris* (Peter Brooker, Sascha Bru, et al., eds., *The Oxford Critical and Cultural History of Modernist Magazines, Vol. III, Europe 1880-1940* (Oxford: Oxford University Press, 2013), 128).

inversion of the subject matter, in this case framing the military apparatus in terms of child's play.

Jarry's own experience in the military was brief. One of Jarry's compatriots described Jarry's movements as ridiculously stiff and robotic while holding a gun much too long for his small stature as he performed drills.[302] During this time he wrote his Symbolist drama *César-Antichrist* wherein he makes the first reference to his imaginary science of "pataphysics." Like Père Ubu, the term "pataphysics" was coined as part of the adolescent mythology inspired by his physics teacher and then developed into a pseudoscience while attending the lectures of Bergson. Pataphysics is an anti-science that investigates the exceptions to the rule rather than the rule itself. It is an invented science in which the world is examined in reverse, which is similar to the way in which the narrator of Jarry's *Speculations* observes the procrustean elements of the world from an alien perspective. In *César-Antichrist* pataphysics is explained as follows: "Axiom and principle of the identity of opposites, the pataphysician, clamped to your ears and your retractable wings, flying fish, is the dwarf atop the giant, beyond metaphysics."[303] The identity of opposites is a primary feature of the play itself as the drama opens in a framework of Christ but a term is added and one is introduced to the world of the Antichrist.

In Jarry's posthumously published novel, *Exploits and Opinions of Dr. Faustroll, Pataphysician: A Neo-Scientific Novel*, Dr. Faustroll declares that "pataphysics will examine the laws governing exceptions and will explain the

302 Fell, *Alfred Jarry*, 62.
303 Alfred Jarry, quoted in Brotchie, *Alfred Jarry*, 30.

universe supplementary to this one." Moreover, pataphysics will "describe a universe which can be….envisaged in the place of the traditional one."[304] This formulation bears a striking echo of Nietzsche's proposition in *Twilight of the Idols* that the "'true world' has been constructed by contradicting the actual world: this 'true world' is in fact an apparent world, insofar as it is just a *moral-optical* illusion."[305] Dr. Faustroll argues that the shape of a watch is not round and that such a proposition is "manifestly false." "Since it appears in profile as a narrow rectangular construction, elliptic on three sides" Jarry reasons, "why the devil should one only have noticed its shape at the moment of looking at the time?"[306] There is also a Bergsonian element at play in Dr. Faustroll's argument. Bergson expresses a similar skepticism regarding the watch, claiming that if one follows the hand of a watch "which corresponds to the oscillations of a pendulum" one does not measure duration. Instead, one is "limited to counting simultaneous moments, which is very different."[307] For Bergson, the clicks of the second hand represent skeletal, two-dimensional constructs of time devoid of élan vital.

The pataphysical "identity of opposites" becomes part of Jarry's intertextual method of writing in stylistically contradictory registers. As Brotchie observes, Jarry's writing exhibits "erudition with idiocy, the heroic with the craven, and the mythological with the everyday."[308] Parts of *Faustroll* are modeled after the narrative

304 Alfred Jarry, *Exploits & Opinions of Doctor Faustroll: A Neo-Scientific Novel*, trans. Simon Watson Taylor (Boston: Exact Change, 1996), 21-22.
305 Nietzsche, *Twilight of the Idols,* 21-22.
306 Alfred Jarry, *Exploits and Opinions of Dr. Faustroll*, 23.
307 Bergson, quoted in Philipp Blom, *The Vertigo Years: Change and Culture in the West, 1900-1914* (Ontario: McClelland & Stewart, 2008), 84
308 Brotchie, *Alfred Jarry*, 24.

structure from the *Fifth Book of Pantegruel* by Rabelais in which the protagonist visits various islands searching for the Holy Bottle and each island is represented by a chapter with a corresponding dedicatee that denotes their rule over the island. Jarry devotes three of these chapters to British physicists of whom he introduces to his realm of fiction.[309] *Faustroll* features one of Jarry's many destructive machines called the Painting Machine. The painting machine is "animated inside by a system of weightless springs, revolved in azimuth in the iron hall of the Palace of Machines," which is the only building left standing in a "razed Paris."[310] The Painting machine spins and crashes against the pillars "blowing onto the walls' canvas the succession of primary colors ranged according to the tubes of its stomach."[311] The phallocentric discharge of the Painting Machine ushers in "the unforeseen beast," Clinamen, who ejaculates "onto the walls of its universe."[312]

In 1899, after reading the French translation of H. G. Wells' novella *The Time Machine*, Jarry responded with an article titled "Commentary and Instructions for the Practical Construction of the Time Machine" published under the pseudonym "Dr. Faustroll." The "Commentary" was more technically precise in terms of the mechanism's actual construction than the portrait of the time machine in Well's story (although similar in appearance) and included speculation regarding the nature of physical time and duration, which are themes inspired by Bergson. The theories employed in Jarry's article were drawn from a recent publication by Lord Kelvin

309 Fell, *Alfred Jarry*, 131.
310 Alfred Jarry, E*xploits & Opinions of Doctor Faustroll,* 88.
311 Ibid.
312 Ibid.

titled *Popular Lectures and Addresses: The Constitution of Matter* (1893). The strict, technical detail of Jarry's mock scientific article was so convincing that the eminent scientist Sir William Crookes actually thought that the "Commentary" was a genuine scientific paper and sent it to his colleague Samuel Pierpont Langley (after whom Langley Air Force Base is named) for review.[313] Well's time machine was designed with "a glittering metallic framework" which included ivory, a "transparent crystalline substance," and some little white levers; the thing had "an odd twinkling appearance" and it looked "singularly askew."[314] Although Wells' described some of the materials of the time machine and its general appearance he offers little information in terms of form. Elaine Showalter claims the embodiment of the time machine is a bicycle and that the first readers visualized it as such.[315] In the preface to the 1931 edition, Wells remarks that the time machine had lasted "as long as the diamond-framed safety bicycle which came in about the date of its first publication."[316] It is not unlikely that this reference to the bicycle was an allusion to Jarry's article. Jarry's time machine had an "ebony frame," (not "ivory") and it was "similar to the steel frame of a bicycle."[317]

Jarry's proto-futurism is most rigorously exhibited in his science-fiction novel, *The Supermale*, published in 1902. The novel was inspired by Nietzsche's

313 Brotchie, *Alfred Jarry*, 240-241.
314 H. G. Wells, *The Time Machine* (San Diego: Icon Classics, 2005), 8-9.
315 Elaine Showalter, "The Apocalyptic Fables of H. G. Wells," in *Fin de Siecle/Fin du Globe: Fears and Fantasies of the Late Nineteenth Century*, ed. John Stokes (New York: Palgrave Macmillan, 1992), 74.
316 Wells, quoted in Showalter, "The Apocalyptic Fables of H. G. Wells," 74.
317 Alfred Jarry, *Selected Works of Alfred Jarry*, eds. Roger Shatuck and Watson Taylor (New York: Grove Press, Inc., 1965), 118.

Thus Spake Zarathustra and, as Jean-Michel Rabaté declares, Jarry rewrites the *superman* as a "phallic *Supermale.*"[318] The novel opens with the protagonist, André Marcueil (later revealed as the "Supermale") entertaining guests at his Chateau de Lurance. The guests include a "celebrated American chemist William Elson" and his daughter Ellen; an "engineer, electrical expert, and manufacturer of automobiles and aircraft, Arthur Gough; Doctor Bathybius; a senator, a baroness, and an actress. Marcueil makes the following statement: "The act of love is of no importance since it can be performed indefinitely."[319] The sex act is considered as a perpetual motion machine, a performance of superhuman vitality, and as a physiological process drained of emotion. Elson then suggests that his "Perpetual Motion Food" facilitates similarly superhuman feats of endurance. The drug is "fuel for the human machine" that indefinitely delays "muscular and nervous fatigue, repairing it as it is spent."[320] The narrative centers around two events requiring feats of endurance, the first of which is a ten thousand mile bicycle race between André Marcueil, a five man tandem bicycle 45 meters long, a locomotive, and a bullet-shaped car. The second is a sort of sex contest wherein Marcueil endeavors to achieve eighty-eight orgasms in a twenty-four hour period.

There are various eroticized human-machine hybrids in *The Supermale*. The copulating bodies form one such machine, albeit a metaphorical one.[321] The race car

318 Rabaté, "Alfred Jarry's Nietzschean Modernism," 174.
319 Alfred Jarry, *The Supermale*, tran. Ralph Gladstone and Barbara Wright (New York: New Directions, 1977), 1.
320 Ibid., 4.
321 Kai Mikkonen, *The Plot Machine: The French Novel and the Bachelor Machine in the Electric Years (1890-1914)* (New York: Rodopi, 2001), 187.

recently engineered by Arthur Gough is depicted in both anthropomorphic and erotic terms. The car is "as fleet as a hippogriff" and beneath its coat of red paint, "the machine exhibited, almost with pride, its organs of propulsion."[322] Ellen drives the car as if she were carried away by this "lewd and fabulous god" even while the machine would do whatever she willed: "The metallic beast, like a huge beetle, fluttered its wing-sheaths, scratched the ground, trembled, agitated its feelers, and departed."[323] There is an appearance of a dynamometer which Marcueil finds upon entering a zoo at night. The dynamometer is also anthropomorphized and eroticized. Marcueil says he wants to "kill it" and then destroys the machine, leaving a pile of "twisted metal" and "broken springs" that writhe on the pavement "as if they were the beast's entrails."[324] And finally there is the *machine-to-inspire-love,* that falls in love with the Supermale.

The account of the ten thousand mile race is given in the form of a newspaper article written by one of the cyclists in the race. During the race, Ellen watches Marcueil from the windows of the speeding locomotive.[325] At some point the bullet shaped car is "turned loose" and replaced by a "trumpet-shaped flying machine."[326] Each rider in the five man tandem team lies horizontally on the bicycle with their legs locked on either side to aluminum rods which rotate as a single mechanism. The bicyclists are powered by Elson's Perpetual Motion Food, which is a stimulant containing strychnine and alcohol. (In the non-fictional world at the turn of the

322 Alfred Jarry, *The Supermale*, 25, 28.
323 Ibid.
324 Ibid.
325 Ibid., 32.
326 Ibid.

century the use of the stimulants in bicycle racing was not uncommon and athletes used a variety of drugs including "sugar cubes dipped in ether," coffee spiked with cocaine and strychnine, and nitroglycerine capsules to assist with breathing.[327]) During the ten thousand mile race one of the bicyclists, Jewey Jacobs, dies, but he continues pedaling as if the Perpetual Motion Food still animates his moving limbs. Baudrillard portrays Jewey Jacob's corpse pedaling as a "somnambulistic and celibate machine."[328] "*Rigor mortis* is replaced by *mobilitas mortis*," he avers, "and the dead rider pedals on indefinitely, even accelerating, as a function of inertia."[329] Jewey Jacobs leaves the realm of the organic and enters the world of perpetual motion machines.

Although prostitutes were provided for the sex contest, at the last moment Marcueil notices the affectionate gaze of Ellen and takes her, under disguise, as his lover. In order to ensure the authenticity of the experiment, Doctor Bathybius observes the copulation from a bull's eye window located in the upper portion of the wall. He becomes so inspired that he transforms his impressions into writing. The result is a theory that "*God is infinitely small,*" beyond dimensions, "*but within*."[330] The nonperishable feature of humankind is the "small vibration" which is "thought,"

327 John Hoberman, "Fin-de-Siècle Physiology as Sexual Farce: Alfred Jarry's The Supermale (1902)," *Nineteenth-Century Prose* 25, no. 1 (Spring 1998:) 159.

328 Baudrillard, *The Transparency of Evil*, 47.

329 Ibid., 102.

330 In *Faustroll*, Jarry also contemplates the dimensions of God and uses pataphysical algebra in order to calculate the surface area as follows:
Let us note, in fact, that according to the formula
oo - o - a + a + o = oo
the length *a* is nil, so that *a* is not a line but a point.
Therefore, *definitively*:
GOD IS THE TANGENTIAL POINT BETWEEN ZERO AND INFINITY
(Alfred Jarry, *Exploits and Opinions of Dr. Faustroll*, 114.)

termed here the "immortal soul." The other nonperishable feature is the "germ" which is carried from generation to generation since the beginning of time. The germ is god split in two persons, the Spermatozoon and the Ovum, one of which is drawn to the other in utter passivity which humans call "love."[331] Dr. Bathybius converts this framework into "mythicophilosophical terms" by claiming that man and woman "scale the sky and crush these vermin, the gods" by which he means the ovule and spermatozoon. On that day, Dr. Bathybius claims, man is called "Titan, or Malthus."[332] Once the experiment is finished the Bathybius says "I saw it as truly as though I had held it under a microscope or a speculum." "He's not a man," he concludes, "he's a machine." But the Supermale is more than a machine. In *The Supermale*, Jarry asks the question: "Who are you, Man? And he answers: "both God and Machine."[333] Echoing Kenner's cynical conclusion regarding Enlightenment and dehumanization, Ihab Hassan writes "the dehumanization of man is also his apotheosis."[334]

After the performance, Ellen sits up and arranges her hair before looking at Marcueil with hostility. "That wasn't the least bit funny," she says. Marcueil slaps Ellen with a fan and she threatens to gouge his eyes with a long, "sword-shaped" hairpin before collapsing into a deep sleep. Marcueil mistakenly assumes that Ellen is dead and seems to experience a moment of regret which vanishes when she

331 Alfred Jarry, *The Supermale*, 55-56.
332 Michel Carrouges, "Directions for Use," in *The Bachelor Machines*, eds. Marc Le Bot, Jean Clair, and Harald Szeemann (New York: Alfieri/Rizzoli, 1975), 39; Alfred Jarry, *The Supermale*, 56.
333 Alfred Jarry, quoted in Ihab Hassan, *The Dismemberment of Orpheus: Toward a Postmodern Literature* (Madison: University of Wisconsin Press, 1982), 52.
334 Hassan, *The Dismemberment of Orpheus*, 52.

awakens, saying repeatedly "I love him." When Elson realizes that it was his daughter in the room with Marcueil rather than the prostitutes he reasons that since Ellen loves him then they should marry. But Marcueil is incapable of love. Elson, Gough, and Bathybius conspire to install some sense of emotion in Marcueil who has become a mere sex machine:

> Since this man had become a mechanism, the equilibrium of the world required that another mechanism should manufacture—a soul.[335]

Gough is tasked with construction of a "most unusual" machine that would inspire Marceuil to experience love, a *machine-to-inspire-love*.[336] The machine is constructed using Faraday's electromagnetic experiments and engineered in the style of an electric chair. But once the machine is turned on there is a reversal in the flow of current as the machine falls in love with the man, precipitating a meltdown and the death of Marcueil. Sexual excess induces a transformation that leads to Marcueil's violent death in the grips of an amorous machine.[337]

II.

The grinding intersection of the bodies and machines is illuminated in the destruction of the Supermale in a denouement modeling the destructive unbound libidinal energy of the death drive. This reversal in polarity between the body and the machine is a sadistic expression of the identity of opposites and the transformation of the *machine-to-inspire-love* into a device of death is an apt description of a "bachelor machine." Michel Carrouges contends that "every bachelor machine is first of all a

335 Alfred Jarry, *The Supermale*, 77.
336 Ibid.
337 Rabaté, "Alfred Jarry's Nietzschean Modernism," 168, 174.

pataphysical machine, or a patamachine."[338] Carrouges adopted "bachelor machines" from Marcel Duchamp who used the term to describe some of the assemblages in his work, *The Bride Stripped Bare by Her Bachelors, Even,* also known simply as the *Large Glass* (1915-1923). Bachelor machines function through the antithetical components of the machinic and the erotic. They are sexual machines but it is an eroticism converted into "(bitter) humor."[339] The bachelor machines negate eroticism by either making it an "inhuman parody….or an enigmatic punishment" while affirming eroticism with the "obsession with erotic images"[340] which points to a specifically voyeuristic feature of the bachelor machines. Sexuality is reduced to a purely mechanical process in the bachelor machines of which *coïtus interruptus* is constitutive. Jarry's *machine-to-inspire-love* is a bachelor machine.

Carrouges examines this phenomenon appearing throughout the history of anthropomorphized machines between 1850 and 1925. Bachelor machines take various cultural forms such as Shelley's *Frankenstein*, Poe's "The Pit and the Pendulum," the punitive harrow in Kafka's "In the Penal Colony," Fritz Lang's *Metropolis*, and the aforementioned *machine-to-inspire-love* in *The Supermale*. As an "improbable machine," the bachelor machine first appears as "an impossible, useless, incomprehensible, delirious machine." To these abstractions, Carrouges offers other possibilities for bachelor machines both in terms of a "single peculiar and unknown machine" and a "heteroclite assemblage" which may include a "lightning-

338 Carrouges, quoted in Linda Klieger Stillman, "Machinations of Celibacy and Desire," *L'Esprit Createur* 24, no. 4 (Winter 1984): 24.
339 Roy C. Caldwell, "'Tristram Shandy,' Bachelor Machine," *The Eighteenth Century* 34, no. 2 (Summer 1993): 104.
340 Ibid., 107.

conductor, a clock, a bicycle, a train or a dynamo." The bicycle, train, and dynamo are important elements in *The Supermale* plot. Measuring increments of time and competitions involving time were part of the obsession with speed and record breaking at the turn of the century. Lightning rods gained in popularity in the latter part of the nineteenth century, as indicated with the publication of books like Richard Anderson's text *Lightning Conductors, Their History, Nature, and Mode of Application* (1879); Heinrich Meidinger's *History of the Lightning Rod* (1888); and *Lightning: Its Forms and Its Effects on Humans, Animals, Plants and Bodies* (1866), by Felix Sestier.[341]

But Carrouges suggests that its component parts are not important because the bachelor machine is not governed by physical laws or even social mores; instead, it is a "semblance of machinery" like something one would experience in dreams, movies, and even "cosmonauts' training grounds," and here the bachelor machine enters the realm of science fiction.[342] Carrouges affirms that the bachelor machine is governed by the "mental laws of subjectivity." It only assumes "mechanical forms" for the simulation of "mechanical effects," which seems to draw into question the exact status of the apparatus. This ambiguity, which Carrouges terms a "fog of absurdity,"

341 It is worth noting that in the 1950s when Carrouges published his classic text, *Les Machines Célibataires* (1954), there was a heightened interest in themes of Enlightenment and progress. The lightning rod, invented by Benjamin Franklin in 1752, was regarded as a primary achievement of Enlightenment inquiry and a symbol of the path from myth to science. Popular science books like Basil Schonland's *The Flight of Thunderbolts* were common. Schonland provides an account of the natural phenomena of lightning that his biographer called "elegant vulgarization of his own special field" of science. (Oliver Hochadel and Peter Heering, "Revisiting an Invisible Technology," in *Playing with Fire: Histories of the Lightning Rod*, special issue, *Transactions of the American Philosophical Society* 99, no. 5 (2009): 3; Brian Austin, *Schonland: Scientist and Soldier* (Phildelphia: Institute of Physics Publishing, 2001), 577.

342 Carrouges, "Directions for Use," 21.

will only be resolved once the subjective basis of the bachelor machine is revealed, constituting the "dawn of an implacable logic." Indeed, "t*he determinant structure of this unlikely-looking machine*," Carrouges posits, "*is based on a mathematical logic*."[343]

"Each bachelor machine," Carrouges explains, "is a system of images" composed of two equivalent units, a sexual unit and a mechanical unit, both of which are split into a male element and a female element. The male and female elements of the sexual unit are clearly defined categories although not without complication as established in Duchamp's *The Bride Stripped Bare by Her Bachelors, Even* where the masculine element is fractured into nine bachelors against a single bride. The mechanical unit is also split into male and female elements that directly correspond with the male element and the female element of the sexual unit. For Carrouges, the simplest prototype ("the *Maldoror* prototype") of the bachelor machine is found in Lautréamont's famous formula: "the chance meeting of a sewing machine and an umbrella on a dissecting table."[344] The umbrella is the male element and the sewing machine is the female. The third element, the dissecting table, is "no more a mechanical element than a sexual one" but its importance is paramount because it represents the determinate *function* emerging from the system of the two apparatuses. "Instead of the love bed, signifying union and life," Carrouges writes, "the dissecting

343 Ibid.
344 Lautreamont, quoted in Carrouges, "Directions for Use," 22.

table expresses the bachelor machine's specific function, which is solitude and death."[345]

Duchamp's work, *The Bride Stripped Bare by Her Bachelors, Even*, consists of two contiguous plates of glass stacked vertically on which a painting is composed not just with oil paint and varnish but other materials like mirror silver and sawdust. The painting covers only a fraction of the transparent surface so that one can see through or beyond the glass "canvas" which is mounted in the middle of a room at a height of nine feet. The bride hovers in the upper window while the "bachelor apparatus" remains "in solitary confinement" in the lower pane.[346] Thus the two sexual elements are projected onto the two plates of glass that feature mechanical figurations baring little affinity to human anatomy. The closed circuits of the upper and lower regions ensure that the bride and bachelor(s) are unable to touch, which is a metaphor for the modern impulsion toward love and death.[347] The metal rail dividing the plates of glass corresponds with the third element of Lautréamont's formula, the dissecting table, which leaves the celibate bachelor confined in a state of permanent cessation.

The bride, or "Hanging Female Object," is situated in on the left side of the window. The bride is an insect-like figure with a crescent-shaped head mounted with a clasp and the abdomen of a wasp (also labeled "wasp or sex cylinder.") Emanating from the right side of the bride and stretching across the glass is a nebulous horizontal

345 Carrouges, "Directions for Use," 22.
346 Ibid.
347 Jana Horákova, "The Turing Machine on the Dissecting Table," *Theory of Science* 35, no. 2 (2013): 275.

shape in which there are three asymmetrical squares abreast. This figure is called the "Top Inscription" or "Milky Way" and is the color of flesh. In Carrouges terms this is the bride's skin, "the mortal remains of the bride."[348] Duchamp also referred to this amorphous shape as the Bride's "cinematic blossoming," or "imagined orgasm."[349] The squares within the Top Inscription are reminiscent of film frames and contribute to the voyeuristic component of the assemblage. The angular piece descending from the bride on the left side of the glass is her "skeleton." Therefore the stripping bare of the bride corresponds to a "stripping dead" performed on the *Large Glass*.[350] Carrouges notes that the skeleton appears as a tool which stabs downward to menace the bachelor(s).[351] But the gendered duality of the *Large Glass* does not preclude that the Bride is also a machine. In Duchamp's notes the irregular squares are also described as "draft pistons" through which the Bride transmits messages to the bachelor(s) below. The bride, likened to an internal combustion machine, instigates a variety of sexo-mechanical movements in the bachelor apparatus.[352] "The bride is basically a motor," Duchamp writes, "a sort of automobile."[353]

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348 Carrouges, "Directions for Use," 24.

349 Linda Dalrymple Henderson, "The *Large Glass* Seen Anew: Reflections of Contemporary Science and Technology in Marcel Duchamp's 'Hilarious Picture,'" *Leonardo* 32, no. 2 (1998): 115.

350 Carrouges, "Directions for Use," 24.

351 Caldwell, "'Tristam Shandy,' Bachelor Machine,"107-108.

352 Linda Dalrymple Henderson, "Etherial Bride and Mechanical Bachelors: Science and Allegory in Marcel Duchamp's 'Large Glass.'" *Configurations* 4, no. 1 (1996): 97.

353 Duchamp includes the following description in his notes (strikethroughs and underlining in the original: "The Bride is first basically a motor. But a motor that transmits its timid power – she is this very timid power. This timid power is a sort of automobiline [sic], an essence of love, which once distributed through the engine of soft cylinders, when it makes contact the sparkles of its common constant and equal| life, it serves to the blossoming of this virgin who has reached the goal of her desire." (Duchamp, quoted in Ricardo Ibarlucia, "The Bride Machine: Duchamp's Theory of Art Revisited," *Aisthesis* 14, no. 2 (2022): 140-141.)

On the left side of the lower panel there are "Nine Malic Molds" (also labeled "Eros' Machine"), which are arranged like suits on a carousel. These lifeless forms are character types or "uniforms" including a priest, a delivery boy, a gendarme, a cavalryman, a policeman, an undertaker, a flunkey, a busboy, and a station-master. Duchamp notes that these figures are hollow vessels, "vaguely phallic in shape," and "cut by an imaginary horizontal plane" and thus "castrated."[354] The figures are reduced, like the bride, to automatons. Aside from this region being the machine of Eros, Duchamp also calls this assemblage the "Cemetery of Uniforms and Liveries." As Carrouges observes, "Death also reigns over the male bachelor's zone."[355] To the right of the molds there is a water mill wheel and pulley that operates the scissors above the chocolate grinder. The fulcrum of the scissors is affixed to a central rod or "bayonet." Below the scissors there is an arc of cone-shaped drainage umbrellas arranged like arrows indicating movement and these are connected to the butterfly pump above the chocolate grinder. Central to the assemblage is the chocolate grinder which consists of three cylindrical drums arranged around the central rod (bayonet). The chocolate grinder is mounted on a table with cabriole legs. That Duchamp chose shapely, anthropomorphic cabriole table legs (allegedly cloaked with long table cloths by prudish Victorians) also hints at the erotic futility of a system in which the Bride and Bachelor(s) never enjoy physical contact. The turning of the water mill activates the back and forth movement of the scissors as the chocolate grinder rotates below.

354 Duchamp, quoted in Amelia Jones, "Equivocal Masculinity: New York Dada in the Context of World War I," *Art History* 25, no. 2 (April 2002): 185.
355 Henderson, "Etherial Bride and Mechanical Bachelors," 96, figure 3; Carrouges, "Directions for Use," 24.

The multiple operations of the bachelor mechanisms seems to mimic sexual activity. Naming the rod that is central to this chocolate grinder apparatus a "bayonet" is noteworthy, given the phallic shape of the weapon in this sexually charged machinery. During Duchamp's two years of military service he wrote about a soldier polishing his bayonet, noting that the soldier was grooming his bayonet "in secret." As Christine Kayser has suggested, the activity of "grooming in secret" one's bayonet is a reference to onanism.[356] Duchamp also described the chocolate grinder in onanist terms, saying "the bachelor grinds his chocolate himself."[357] The relationship between the Bride and her Bachelor(s) is defined by "onanism and imagined orgasms."[358]

On the far right of the Bachelor's realm there are three isometric drawings of circular shapes, vertically spaced, which represent the "Oculist Witnesses." Duchamp created these three shapes by scraping a section of mirror silvering.[359] The Oculist Witnesses are voyeurs of the erotic machinery, but their vision doubles as the physician's gaze. Above the Oculist Witnesses there is a small circle designated as a magnifying glass. Octavio Paz claims this "represents the hole in the lock through which the voyeur peeps."[360] By extension, Paz argues, the spectator is a voyeur just like the Oculist Witnesses. In *The Supermale,* Dr. Bathybius' observation from the

356 Christine Vial Kayser, "Marcel Duchamp, the Bride and the French Flag on the Great War Battlefield," in *Flags, Color, and the Legal Narrative*, eds. Anne Wagner and Sarah Marusek (Switzerland: Springer, 2021), 647.
357 Duchamp, quoted in Jerrold Seigel, *The Private Worlds of Marcel Duchamp: Desire, Liberation, and the Self in Modern Culture* (Berkeley: University of California Press, 1995), 92.
358 Henderson, "Etherial Bride and Mechanical Bachelors," 91.
359 Thomas Singer, "In the Manner of Duchamp, 1942-47: The Years of the Mirrorical Return,'" *The Art Bulletin* 86, no. 2 (2004): 358.
360 Octavio Paz, "Water Writes Always in Plural," *Diacritics* 8, no. 4 (Winter 1978): 49.

bull's eye window is a sort of bachelor machine. The separation of Ellen and Marceuil by the windows of the train as they watch one another during the race is also a bachelor machine.

The paradoxical nature of the bachelor machine, with its fixation on eroticism coupled with the incapacity to engage, corresponds to the stance of the Italian Futurists regarding women and eroticized machines, especially the war machine. The Futurists expressed a scorn for women while celebrating the seductive power of warfare with its "graceful speeding torpedoes" offering "mouthfuls of detonating kisses."[361] The Futurist's stance toward women was related to the Nietzschean drive to overcome being "merely" human and the desire to create an "inhuman and mechanical type" that would be "naturally cruel."[362] In the machinic imaginary, dehumanization is a goal because a disaffected, mechanized humanity will be free from anomie and alienation even though these are symptoms of the machine world that the Futurists embrace. The desire to not desire is constitutive of the process of self-mechanization, something Jarry had perfected. On Carrouges' terms, the bachelor machine's "attitude" is "founded on a certain loss of human sense," and the "impossibility of involvement and communion with women."[363] The voluntary dehumanization of the Futurist *metallized man* is itself a bachelor machine.

III.

361 F. T. Marinetti, "The Founding and Manifesto of Futurism," in *Futurism*, 100.
362 Peter Nicholls. *Modernisms: A Literary Guide* (New York: Palgrave Macmillan, 2009): 87; F. T. Marinetti, "Multiplied Man and the Reign of the Machine," in *Futurism*, 90.
363 Carrouges, quoted in Yoshiki Tajiri, *Samuel Beckett and the Prosthetic Body: The Organs and Senses in Modernism* (New York: Palgrave Macmillan, 2007), 20.

Marinetti was immersed in the literary decadence of 1890s Paris where he frequented Symbolist circles. Like Jarry, he comported himself flamboyantly and had gained some notoriety as an avant-garde dandy. The figure of the dandy is considered to be a hypertrophic character with a frozen exterior that conceals a "raging core" of narcissism.[364] The attitude of the bachelor machine as outlined by Carrouges bears some similarity to these tendencies, especially as a "modern form of the Narcissus complex"[365] with an icy resolve. The dandy's eschewal of romantic love is based on a fierce individualism and the disinclination to become burdened by desire. In the words of Baudelaire, "the dandy aspires to insensitivity."[366] The dandy's insolent and callous aloofness is part of his power from which he performs "acts of intelligent and original cruelty."[367] Camus claimed that "the very violence of his refusal" is what rallies the dandy's forces."[368] The dandy is also associated with androgyny, a "non-producing"[369] sort of celibate machine. It is Jeffrey Schnapp's conceit that the Futurist metallized man, known for his cruelty, finds his origins in the dandy.[370] In a similar sense, Marinetti, the "aesthete of the machine,"[371] would find

364 Jeffrey T. Schnapp, *18 BL and the Theater of Masses for Masses* (Stanford - Stanford University Press, 1996), 103.
365 Carrouges, quoted in Tajiri, *Samuel Beckett and the Prosthetic Bod*, 20.
366 Baudelaire, quoted in Richard Pine, *The Dandy and the Herald: Manners, Mind and Morals from Brummell to Durrell* (London: Macmillan Press, 1988), 20.
367 Charles Bernheimer, *Figures of Ill Repute: Representing Prostitution in Nineteenth-Century France* (Cambridge: Harvard University Press, 1989), 75.
368 Albert Camus, *The Rebel: An Essay on Man in Revolt*, trans. Anthony Bowler (New York: Vintage Books, 1956) 51-52.
369 Rhonda K. Garelick, "Material Girls: Dance, Decadence, and the Robotics of Pleasure in '*L'Eve future*'" *Nineteenth-Century French Studies* 21, 3-4 (Spring—Summer 1993): 465.
370 Schnapp, *18 BL*, 103.
371 Andrew Hewitt, *Fascist Modernism: Aesthetics, Politics, and the Avant-Garde* (Stanford: Stanford University Press, 1993), 83.

his antecedent (albeit sublimated) in Jarry, the "robot Père Ubu."[372] The "typology of dandyism" is that of "drivers seeking a speed buzz" which Schnapp traces back to eighteenth century horse drawn carriages like phaetons and cabriolets speeding dangerously along the streets of London. Both Jarry with his racing bicycle and Marinetti with his pronounced "automobilism" were proponents of acceleration. Self-styled as a "hyperactive multiplied man," Marinetti was reputed as the "caffeine of Europe."[373] He was also monikered "Poeta Pink" after the popular stimulant that was guaranteed by the manufacturer to provide strength and vitality.[374]

Marinetti had returned to Italy before the premier of *Ubu Roi* but he was clearly impressed with the Ubu cycle of plays (although he was always disinclined to concede artistic influence). In his *Futurist Memoirs*, Marinetti writes about an occasion when he was at a salon with Jarry "spouting poetry." "I toss off my ode on the speed of cars," he recalls, "and Jarry his metamorphosis of a bus into an elephant"[375] Marinetti sent a manuscript of his play *Le Roi Bombance* to Jarry which prompted an appreciative letter in which he said "your treatment of surprise is not aimed so much at laughter as the horrifyingly beautiful."[376] The phrase "horrifyingly

372 R. W. Flint, "Introduction" to *Marinetti: Selected Writings*, 16.
373 Schnapp, Jeffrey T. Schnapp, "The Romance of Caffeine and Aluminum," in *Things*, special issue, *Critical Inquiry* 28, no. 1 (Autumn 2001): 250; Günter Berghaus, *Futurism and Politics: Between Anarchist Rebellion and Fascist Reaction*, 1909-1944 (Providence: Berghahn Books, 1996), 23.
374 The product was advertised as follows: "The Pink Pill is to the weak organism what water is to a withering flower. The Pink Pill gives rich and pure blood and slams the door shut on illness. It immediately restores vitality to the exhausted organs and is the best remedy for anemia, sclerosis, general fatigue, and nervous exhaustion." (Marinetti, *Critical Writings*, 10).
375 Marinetti, *Marinetti: Selected Writings*, 330.
376 Fell, *Alfred Jarry*, 175.

beautiful" echoes Jarry's fascination with monsters and the monstrous while establishing a shared appreciation for the beauty of destruction.

Le Roi Bombance, which resembles the themes and plotline of *Ubu Roi* (Flint calls it "a boisterous plagiarism"[377]), is a caustic parody about politics and revolution in the form of an allegory of the digestive system. King Bombance (who, like *Père Ubu*, appears with an enormous stomach and protruding nose) assumes power after a revolution and becomes increasingly tyrannical. His royal chef dies and there are protests and political unrest. The three remaining cooks attempt to pacify the crowds by promising them a royal banquet, but this is a ruse. Instead, the cooks barricade themselves in the kitchen and greedily devoir all of the food. When the famished crowds realize they have been duped they cannibalize Bombance and all of his servants. The court poet, "L'Idiot," tries in vain to pacify the crowds but then commits suicide once he realizes that life is nothing but a struggle of attrition between the "eaters and the eaten."[378] In the end Sainte Pourriture and her son, the vampire Ptiokaroum, resurrect the cannibalized people in a perpetuation of the cycles of creation and destruction. The formerly cannibalized are then vomited whole from the bodies of those who had eaten them.[379]

Regarding the production of *Le Roi Bombance*, Flint writes that "it was greeted by a small but satisfactory riot."[380] The adjective "satisfactory" indicates that

377 Flint, "Introduction" to *Marinetti*, 10.
378 Roselee Goldberg, quoted in Anne Bowler, "Politics as Art: Italian Futurism and Fascism," *Theory and Society* 20, no. 6 (Dec., 1991): 791, fn. 17.
379 Enrico Cesaretti, "Dyspepsia as Dystopia: F. T. Marinetti's *Le Roi Bombance*." *Romantic Review* 97, nos. 3-4 (May-Nov, 2006): 354; Luca Somigli, "The Poet and the Vampire: *Roi Bombance* and the Crisis of Symbolist Values," *Italica* 91, no. 4 (Winter 2014): 575.
380 Flint, "Introduction" to *Marinetti*, 10.

Marinetti had hoped for a riot. Indeed, Marinetti tried to emulat the way Jarry provoked the audience by inciting hostility among the audience members or between the audience and some of the outrageous characters on the stage. The manner in which *Ubu Roi* destroyed the illusions created by realist theater through the explosive performance, the rupture of the distinction between actors and audience, and the fisticuffs was a prelude to Marinetti's method of "art as action."[381] Marinetti chose to wage war against the bourgeois establishment with provocation and uproarious scandal and "art as action" was a manifestation of that tactic.[382] One could create chaos with simple stunts like selling "the same ticket to ten people" in order to provoke "bickering, wrangling."[383] But Marinetti tried to subvert the conventional, meditative theater with noise and bombast generated by both audience and actors. "It was a matter of astonishment what Marinetti could do with his unaided voice," Wyndham Lewis remarked, "He certainly made an extraordinary amount of noise."[384] In particular, Marinetti wanted to create "body madness"[385] (*fisicofollia*) which is the audience member's psychosomatic reaction to theatrical chaos that leads to a weakening of inhibition and an incitement to join the fray.[386] Art as action was first put into service for the performance of Marinetti's play *Electric Puppets* (*Poupés*

381 Günter Berghaus, "Marinetti's Early Writings and Aesthetics: A Prelude to Futurism," in *Italian Futurist Theatre, 1909-1944* (Oxford: Clarendon Press, 1998), 33.
382 Ibid.
383 Flint, "Introduction" to *Marinetti*, 121.
384 Wyndham Lewis, *Blasting and Bombardiering* (Berkeley: University of California Press, 1967), 33.
385 Marinetti, quoted in Günter Berghaus, 'Variety, Music-hall and Futurist Theatre Aesthetics," in *Una bellezza nuova: Studi e ricerche nel Centenario del Manifesto di Fondazione del Futurismo di Filippo Tommaso Marinetti* (Roma: Biblioteca d'Orfeo, 2009), 261.
386 Christine Poggi, "The Futurist Noise Machine," *European Legacy* 14, no. 7 (2009): 822.

électriques) in 1909, the same year Marinetti published *The Founding and Manifesto of Futurism* in *Le Figaro*. Just as Jarry facilitated chaos at the premier of *Ubu Roi* by inviting provocateurs, Marinetti actually *hired* agitators to attend the production of *Poupées Électriques* to guarantee that scandal would ensue. Again, the boundary between theater and street, art and life, dissolved as one was left to wonder whether the focal point was the audience of the play itself.

Electric Puppets is a drama about bourgeois dehumanization, the mechanization of sex, nihilism and suicide. The main character is a revered inventor, John Wilson, who cohabitates with his wife, Mary, and two life-size, electric robots that are inventions of his own design. The robots, named Mr. Prudent and Mrs. Prunelle, engage in normal human activities such as knitting or holding up newspapers and genuinely appear as the alter egos of the Wilsons. John prefers the company of the robots to that of other human beings. To enhance their sex life, the couple engage in a role-playing game in which they pretend that the robots are real people so that they must discreetly make love behind the robots' backs. Progressively, John begins to treat his wife, who has become disinterested in their game, as if she were a robot herself. When she cries John says that he must have pushed the electric button to produce tears, as if emotions were mere electrical impulses.[387] Eventually, Mary seeks the affection of an acquaintance, a naval officer who has just returned from the Far East. At the very moment that Mary and her lover passionately embrace John walks into the room, revolver in hand. John hands the

387 Radcliff-Umstead, "Pirandello and the Puppet World," 13.

revolver to Mary and tells her that this gun "will be the most useful and faithful companion during his [the sailor's] absences."[388] Mary turns the revolver on herself.

Some of the themes are familiar such as the trope of the female automaton but the incursion of machine forms, the incorporation of technological elements (even the fact that Wilson is an "inventor"), and the deliberate blurring of the distinction between bodies and machines would become elements of the Futurist imaginary. *Electric Puppets* features the first staged manifestation of robots or "manufactured mechanical people."[389] It is also considered the first Futurist performance, in part, because the chaos and the scandal it manufactured. A few years after the performance Marineetti revised the play and renamed it *Sexual Electricity*, which focuses more explicitly on the erotic synthesis of bodies, mechanical robots, and electricity.

Human-machine hybridity also appears in Marinetti's novel, *Mafarka the Futurist*, published in the same year, and this story, significantly, explores the fantasy of male reproduction. In the novel, the eponymous protagonist joins his brother, Magamal, to fight and depose their uncle who has usurped the throne. But Magamal is attacked by a rabid dog and subsequently dies. To consol his mother, Mafarka sets out to create a massive mechanical bird whose name is Gazurmah. As Mafarka constructs his mechanical son he is approached by the beautiful Colubbi, a former lover, but he chases her away because he is adamant about creating a mechanical son

388 Harold B. Segel, *Pinocchio's Progeny: Puppets, Marionettes, Automatons, and Robots in Modernist and Avant-Garde Drama* (Baltimore: John Hopkins University Press, 1995), 262.
389 Paul Menard, "I Am Your Worker/I Am Your Slave: Dehumanization, Capitalist Fantasy, and Communist Anxiety in Karel Capek's *R.U.R*," in *To Have or Have Not: Essays on Commerce and Capital in Modernist Theatre*, ed. James Fisher (Mcfarland, 2011), 123.

"without the help of a vulva!"[390] "So I concluded that without the support and stinking collusion of the woman's womb," Mafarka proclaims, "it is possible to produce from one's flesh an immortal giant with unfailing wings!"[391] Collubbi and Mafarka die and the mechanical son, probably envisioned as an airplane, rises into the sky.

Curiously, Mafarka claims to see "only straight lines" through a "metallized" vision.[392] This is the first articulation of Marinetti's devotion to the straight line, to which he ascribes a divine status. The straight line is contrasted to the "curves of the earth," the "tortuous paths, roads….that hug the irregular backs and stomachs of mountains." Against "zigzags and arabesques" the straight line is associated with velocity.[393] But the straight line is also a phallus. In Bocioni's "Technical Manifesto of Futurist Sculpture" the straight line is "alive and palpitating." Boccioni contends that the "fundamental, naked severity" of the straight line "will express the severity of steel, which characterizes the lines of our modern machinery."[394] The Futurist phallicization of objects is a way to avoid the "wobbly nature of emotions" which are associated with femininity and female sexuality.

The nineteenth century cult of the body surfaces in romantic literature and is expressed most conspicuously by Walt Whitman, a poet who Marinetti admired. The

390 Amanda Recupero, "Unexpected Organs: The Futurist Body and Its Maternal Parts," *Symposium: A Quarterly Journal in Modern Literatures* 74, no. 4 (2020): 214.
391 Anja Klöck, "Of Cyborg Technologies and Fascistized Mermaids: Giannina Censi's 'Aerodanze' in1930s Italy," in *Theatre and Technology*, special issue, *Theatre Journa*l 51, no.4 (Dec., 1999): 397.
392 Ara H. Merjian, "Manifestations of the Novel: Genealogy and the Sculptural Imperative in F.T. Marinetti's Mafarka le Futuriste," *Modernism/Modernity* 23, no. 2 (April 2016): 371.
393 Marinetti, "The New Religion-Morality of Speed," in *Futurism*, 224-225.
394 Umberto Boccioni, "Technical Manifesto of Futurist Sculpture," in *Futurist Manifestoes*, ed. Umbro Apollonio (Boston: Museum of Fine Arts Publications, 1970), 24.

cult of the body was inherited by Marinetti who then modernized and transformed the cult of the body into the cult of the machine, misogynistic from its inception.[395] Regarding the cult of the machine, Katia Pizzi, contends that the machines were inextricably "charged with erotic and exotic power" and "braided with flesh and metal."[396] The Futurist *scorn for women* was a synecdoche for the eroticization of machines and the consequent displacement of the female."[397] The feminine absence provides the locus for Futurist parthenogenesis, even while her presence is the first requisite to effectuate the eroticization of the machine with which she is replaced. The fantasy of celibate male reproduction appears in Futurist stories and manifestoes along with the appearance of mechanical birds, electric puppets and metallized men. The cult of the machine straddles the domains of science fiction and cultural myths like the bachelor machine.

The contentions of Marinetti's machine-cult take form in his 1904 book of poetry titled *Destruction*, which he described as an "erotic and anarchist poem" and the first work he would designate as "Futurist."[398] The verse in *Destruction* is couched in themes of death and apocalyptic destruction. The collection includes a poem titled "To the Automobile" which portrays a human-machine hybrid in terms of

395 Neil Larsen and Ronald W. Sousa, "From Whitman (to Marinetti) to Álvaro de Campos: A Case Study in Materialist Approaches to Literary Influence," *Ideologies and Literature* 4, no. 17 (1983): 101.
396 Katia Pizzi, *Italian Futurism and the Machine* (Manchester: Manchester University Press, 2019), 18.
397 Kathryn Bishop-Sanchez, "Kissing all Whores: Displaced Women and the Poetics of Modernity in Álvaro de Campos," in *Embodying Pessoa: Corporeality, Gender, Sexuality*, eds. Anna M. Klobucka and Mark Sabine (Toronto: University of Toronto Press, 2007), 203.
398 Berghaus, *Futurism and Politics,* 21.

the "voluptuous fusion of the passengers' bodies with the powerful metal monster."[399] The anthropomorphic fusion of this instance of machinic embodiment is reflected in Boccioni's statement "man evolves into machine and machine into man"[400] although he adds a mechanomorphic component to intimate a cycle of machine life. Another poem in the collection titled "The Demon of Speed" (dedicated to Gustave Kahn) features metropolitan railway excursions and other urban experience. The poem bears some resemblance to the work of Symbolist author, Émile Verhaeren, the so-called "Marinetti of Belgium."[401] Verhaeren also departed from the Symbolist tradition of "urban melancholy and moral decay"[402] and wrote verse about the dynamism of cities. For Verhaeren, humanity is concentrated in cities, with "enough red force and new clarity" for the ignition of "violent brains" with "fertile fever and rage."[403] Marinetti claimed Verhaeren as a precursor to Futurism, naming him a "glorifier of machines and tentacular cities."[404]

For Marinetti, the locomotive power of engines was considered not in opposition to Bergson's *élan vital* but as a manifestation of this living force. The automobile became an agent of vitality which extends to the self-transformation of the Futurist. Marinetti's surging enthusiasm emanates from a Nietzschean world, which is an endless "monster of energy" and a "firm magnitude of force" that

399 Marinetti, quoted in Pizzi, *Italian Futurism and the Machine*, 53.
400 Boccioni, quoted in Ibid., 3.
401 Christine Poggi, *Inventing Futurism: The Art and Politics of Artificial Optimism* (Princeton: Princeton University Press, 2008), 16; Vera Castiglione, "A Futurist before Futurism: Émile Verhaeren and the Technological Epic," in *Futurism and the Technological Imagination*, ed. Günter Berghaus (New York: Rodopi, 2009), 107.
402 Castiglione, "A Futurist before Futurism," 107.
403 Émile Verhaeren, quoted in Ibid.
404 Marineti, "We Abjure Our Symbolist Masters,"*Futurism*, 95.

"transforms itself."[405] Nietzsche offers "a *light*" to the strongest and most intrepid "midnightly men" who embody the will to power.[406] Marinetti attributes this self-transformative power in terms of the fusion of humans into machines. As Roger Griffin proffers, Marinetti transmutes Nietzsche's will to power "alchemically into a palingenetic vision by celebrating technology" not merely as a way of better perceiving the dynamism that creates the phenomenal world but also by authorizing human beings "to experience that dynamism directly."[407]

This spirit of self-transformation is exhibited in Futurist forerunner, Mario Morasso, who wrote tracts about drivers fusing with their racing cars, finally able to seize "the ancient divine into modern secular life in the form of speed."[408] The famous lines from the *Founding and Manifesto of Futurism* declaring that a speeding automobile riding on rifle fire is more beautiful than the *Winged Victory of Samothrace* was likely inspired by an earlier formulation by Morasso regarding the aesthetic power of the motorcar. With the automobile, Morasso writes, "the individual finds his energies multiplied a hundredfold by the machine."[409] In this conceptualization there is an obvious foreshadowing of Marinetti's manifesto, "Multiplied Man and the Reign of the Machine." And it is possible that some of these echoes are coincidental expressions of the machinic imaginary at the turn of the

405 Nietzsche, *The Will to Power*, 550.
406 Ibid.
407 Roger Griffin, "The Multiplication of Man: Futurism's Technolatry Viewed Through the Lens of Modernism," in *Futurism and the Technological Imagination*, 84.
408 Danila Cannamela, *The Quiet Avant-Garde: Crepuscular Poetry and the Twilight of Modern Humanism* (Toronto: University of Toronto Press, 2019), 41.
409 Mario Morasso, quoted in Franco Ferrarotti, "Time, Technology, and the Transformations of Social Life," *International Journal of Politics, Culture and Society* 13, no. 3 (Spring 2000): 548.

century. Mirbeau describes a similar "multiplication" of human capacity created in a sort of mind-machine complex in his car novel, *La 6280E8*: "man's brain is not related to electric currents but to a car race track where thoughts, images and sensations can move a hundred kilometres an hour."[410] The trope of the automobile anthropomorphized as a horse is similarly repeated in the writings of both Marinetti and Morasso (and, of course, Jarry depicts the automobile as hippogriff), but this is unsurprising given the traditional means of transport for this milieu was the horse. Cars were known as "horseless carriages" and "horsepower" became a unit for measuring engine capacity.[411]

The metallized man presaged by Marinetti corresponds to Jarry's Supermale in that both are built to transcend human capacities. For Jarry, the love machine was invented to *instill* emotion in the Supermale and this bachelor machine ends in death. Conversely, Marinetti prepares the Futurist to *uninstall* any semblance of emotion that might encumber the transformation of man into a "nonhuman, mechanical species, built for constant speed,"[412] also a bachelor machine. But the correspondence between the novel and the manifesto is limited because Marinetti ventures into Lamarckian evolutionary theory, citing "Lamarck's transformist hypothesis"[413] or the conceit that mutations will occur through the evolution of a species "according to need."[414] In Lamarck's terms, "the habits, mode of life and all the other influences of

410 Mikkonen, *The Plot Machine*, 27.
411 Shirley Vinall, "The Emergence of Machine Imagery in Marinetti's Poetry," *Romance Studies* 3, no. 2 (1985): 87.
412 Marinetti, "Extended Man and the Kingdom of the Machine," in *Critical Writings*, 86.
413 Ibid.
414 Günter Berghaus, "Futurism and the Technological Imagination Poised between Machine Cult and Machine Angst" in *Futurism and the Technological Imagination*, ed. Günter Berghaus (New York:

the environment….over the course of time," have "built up the shape of the body and of the parts of animals."[415] For Marinetti there would be no "over the course of time" because "time and space died yesterday" and the Futurists have created a velocity "which is eternal and omnipresent."[416] In the Futurist imaginary, adapting to the environment of the machine age will necessitate the production of the prosthetic, metallized body of the extended or multiplied man, which is a science fiction.

The "Founding and Manifesto of Futurism" opens up with the Futurists "blackening many reams of paper" with their delirious scribbling. They've been up all night and suddenly they hear "the famished roar of automobiles." "Let's go!" Marinetti cries, "Friends away! Let's go!" The next sentence, "Mythology and the Mystic Ideal are defeated at last," is best interpreted in reverse: it is rationality that has been defeated, and in its place the inauguration of a new Futurist mythopoesis. The Futurists are "about to see the Centaur's birth,"[417] but in this case the Cartesian Centaur is not a man riding a bicycle; it is a Futurist driving a motorcar. The automobiles come to life, "three snorting beasts," and the Futurists go to lay their "amorous hands" on the "torrid breasts" of the machines. Marinetti lies stretched out like a corpse on the hood but is "revived at once under the steering wheel," which takes the form of a guillotine blade menacing his stomach.[418] The anthropomorphization and subsequent eroticization of the machine is followed by the

Rodopi, 2009), 26.
415 Jean-Baptiste Lamarck, quoted in Timothy Campbell, "Vital Matters: Sovereignty, Milieu and the Animal in Futurism's Founding Manifesto," in *A Century of Futurism: 1909-2009*, special issue, *Annali d'Italianistica* 27 (2009): 159.
416 Marinetti, "The Founding and Manifesto of Futurism," in *Futurism*, 51.
417 Marinetti, "The Founding and Manifesto of Futurism," in *Marinetti: Selected Writings*, 39.
418 Ibid., 40.

Futurist experiencing a revivification (multiplication) through the machine's living force, which in turn threatens said Futurist with its guillotine steering wheel. The metaphor corresponds with the collisions between bodies and machines. The racing car is both phallus and projectile, a product of stylized technology with an integral propensity to crash. And the Futurist story of origin itself is a car crash.

Marinetti and his mechanic, Ettore Anglini, are driving down a Milan street when two bicyclists suddenly appear in front of the four-cylinder Fiat, forcing the driver to turn abruptly into a ditch. Two racing drivers from the Isotta e Franschini automobile factory arrive in their motorcars to provide assistance.[419] Marinetti describes the bicyclists as "wobbling like two lines of reasoning."[420] As an opponent of reason, the simile carries negative connotations both in terms of its vehicle, "two lines of reasoning," and its tenor, "wobbling," the latter of which is antithetical to the steely rigidity of the Futurist. The muddy water of the ditch is "maternal," reminding him of his Sudanese nurse, even while the water is also industrial waste, "with a metallic taste," hinting at some mechanical parthenogenesis.

The Futurists' descriptions of automobiles are more intimate than the descriptions of the Futurists' own bodies fusing with their machines. The machine is construed in terms of its aesthetic and erotic components. Marinetti praised the motorcar for its hard, metal surfaces, the roaring engine, the speed and the capacity for violence.[421] After the crash Marinetti exults, "I felt the white-hot iron of joy

419 Samuele F. S. Pardini, "The Automobile," in *Futurism: A Microhistory*, eds. Sascha Bru, Luca Somigli, and Bart Van den Bossche (Cambridge: Legenda, 2017), 48.
420 Marinetti, "The Founding and Manifesto of Futurism," in *Futurism*, 100.
421 Larsen and Sousa, "From Whitman (to Marinetti)," 99.

deliciously pass through my heart."[422] The death drive of Futurists in their machines is inextricably enmeshed with the pleasure principle and the bodily destruction through flesh and metal provides a certain *jouissance*.[423] Marinetti contemplates the mysteriousness of the motor, insisting that one must "caress them, treat them with respect."[424] "They thought it was dead, my beautiful shark," Marinetti remarks after his crash, "but a caress from me was enough to revive it." The car is anthropomorphized as a large shark, that required a large derrick and "iron grapnels" to move it out of the ditch. The shark's interior is a "soft upholstery of comfort."[425] The interior and exterior are gendered. "Thrillingly phallic in shape and power, but feminine in allure and identity," Christine Poggi expounds, "the automobile becomes a classic Freudian fetish, a locus of transposed desire."[426]

The cult of the machine differs from the positivist celebration of industrial technology in the way the Futurists cynically aestheticized technology. Machines are reinvested with cult value and these aestheticized, industrial products become fetish objects, divorced from the domain of industrial capitalism that produces them. The aestheticization of the Futurist machine is theatrical. Marjorie Garber argues that "fetishism is a kind of theater of display" and even the penis as "anatomical object" is understood through the Lacanian phallus (in contradistinction from the literal one). "The structuring of desire," she argues "becomes literalized as a stage prop, a

422 Marinetti, *Marinetti: Selected Writings*, 41.
423 Sylvia Mieszkowski, "Bruising Bodies, Crashing Cars," in *Hard Bodies*, eds. Ralph J. Poole, Florian Sedlmeier, and Susanne Wegener (Berlin: Lit Verlag, 2011), 56.
424 Marinetti, "Multiplied Man and the Reign of the Machine," in *Futurism*, 90.
425 Marinetti, "The Founding and Manifesto of Futurism," in *Marinetti: Selected Writings*, 41.
426 Poggi, *Inventing Futurism*: *The Art and Politics of Artificial Optimism* (Princeton: Princeton University Press, 2009),167-168.

detachable object."[427] For the Futurists, their machines were transitional objects, "invested with transitional narcissistic libido."[428] The transitional nature of the machine fetish is evidenced in the fact that Futurists rarely referred to "technology" and instead spoke of "machines."[429] The Italian Futurists were conversant, not with theories of relativity or quantum physics, but with the mechanical technology of the late nineteenth century, a product of materialism and positivism against which the Futurists railed. Their objects of obsession were locomotives, motorcars, and airplanes. Even the dynamism lauded by Marinetti was often transformed into eulogies to the abstract features of the machine. Like Baudelaire, the Futurists contemplated technology as an artificial means of opening up the imagination.[430]

The first futurist manifestoes published before the First World War should be considered with regards to Marinetti's lyricism and the historical context of their composition, especially the First Futurist Manifesto. In the late nineteenth century following the Risorgimento Italian nationalists aspired to become a great European power but lacked the industrial resources to compete with other nations even though Italy was more advanced than most nations relying primarily on agriculture. The leaders were wary of a pronounced and pugnacious nationalism and focused instead on internal development.[431] Industrial growth, however, moved rapidly in the two decades before the First World War and it is within this surge in technological

427 Marjorie Garber, "Fetish Envy," *October* 54 (Autumn, 1990): 47.
428 Heinz Kohut, "Forms and Transformations of Narcissism," *Journal of the American Psychoanalytic Association* 14, no. 2 (1966): 261.
429 Pizzi, *Italian Futurism and the Machine*, 5.
430 Mikkonen, *The Plot Machine*, 15.
431 Morasso, quoted in Emilio Gentile, *The Struggle for Modernity: Nationalism, Futurism, and Fascism* (Westport, CT: Praeger, 2003), *x.*

development that we find the enthusiastic Marinetti and other proto-futurists like Morasso raving about machines. Morasso believed that modern man was now living "in a new world in which unimaginable new forces are unfolding" and this was changing "man's feelings and habits," even "human nature."[432] Marinetti exalted with similar sentiments about the "physical, intellectual, and emotional equilibrium on the cord of velocity stretched between contradictory magnetisms."[433] He expounds about the "acceleration of life" and "human desires and ambitions multiplying and going beyond all limits" in a manifesto form of utopian science fiction.[434]

Marjorie Perloff argues that the "controversial war clause" of the *Futurist Manifesto* has been misunderstood and she refers specifically to the phrase "the destructive gesture of freedom-bringers" and the sentence "We will glorify war." She explains that the manifesto was written by the anarcho-socialist Marinetti of 1908 at a time when he wanted to do away with both the papacy and the parliamentary system. The "destructive gesture" is a reference to the anarchist bombings that rocked Paris in the early eighteen nineties which fascinated the young Marinetti living in Paris. The "destructive gesture" also alludes to the assassinations of Tsar Alexander II in 1881 and the Italian King Umberto I in 1900. With the toss of a stick of dynamite, the Tsar Alexander II was assassinated. Considered Europe's most tyrannical ruler, this killing was an inspiration for anarchists who felt that *propaganda by the deed* was a sign that revolutionary change was possible. The Russian anarchists were called

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432 Morasso, quoted in Gentile, *The Struggle for Modernity*, *49*

433 Marinetti, "Destruction of Syntax—Radio—Imagination—Words-in-Freedom," in *Futurism*, 144.

434 Ibid.

"Nihilists" in the press, a term coined by Ivan Turgenev in his novel, *Fathers and Sons*.[435] The character Arkady, in conversation with his uncle, defines "nihilist" as a person who "doesn't bow down before authorities, doesn't accept even one principle on faith, no matter how much respect surrounds that principle."[436] This is an apt summary of Marinetti's Futurist posture. But the assassination of the King of Italy in 1900 was just one of several assassinations carried out by Italian anarchists. The French President Marie Carnot was assassinated in 1894; the Prime Minister of Spain, Antonio Canovas del Castillo, was assassinated in 1897; and this was followed by the assassination of Austrian Empress Elisabeth of Bavaria in 1898.[437] The historical context is illustrative and so are the nuances in the different English translations of the gesture: "the destructive gesture of freedom-bringers,"[438] "the destructive act of the libertarian,"[439] and "the destructive gesture of anarchists,"[440] the latter of which seems to fit the mindset of Marinetti in 1908.

For Perloff, the other misunderstood term in the Futurist Manifesto is the word "war." The romantic Futurist of 1909 considered "war" in terms of revolution, "a Utopian cleansing."[441] "What 'war' would really mean when it was declared in

435 Richard Jensen, "Daggers, Rifles and Dynamite: Anarchist Terriorism in Nineteenth Century Europe," *Terrorism and Political Violence* 16, no. 1 (2004): 125.
436 Ivan Turgenev, *Fathers and Sons*, trans. Elizabeth Cheresh Allen (New York: The Modern Library, 2001), 23.
437 Daniele Conversi, "Anarchism, Modernism, and Nationalism: Futurism's French Connections, 1876–1915," *The European Legacy* 21, no. 8 (2016): 793.
438 Marinetti, "The Founding and Manifesto of Futurism," in *Marinetti: Selected Writings*, 42.
439 Marinetti, "The Foundation and Manifesto of Futurism," in *Critical Writings*, 14
440 F. T. Marinetti, "Founding and Manifesto of Futurism," in *Futurism*, 51.
441 Marjorie Perloff, "The First Futurist Manifesto Revisited," *Rett Kopi*, Manifesto Issue: *Dokumenterer Fremtiden* (2007), 156.

1914," Perloff argues, "was completely beyond his imagination."[442] That the First World War was inconceivable to Marinetti prior to 1914 was only because there had never been a full-fledged industrial war and nothing in history could prepare one for what was about to take place. Marinetti may have been more interested in an aesthetic revolution and the fantastical destruction of museums, libraries, and universities, and indeed conflated the destruction of property with the destruction of people, but the Futurists were some of the first volunteers who fought in the war.[443] Regardless, Perloff draws our attention to the seductive contradictions in Marinetti's rhetoric, which brings the lyrical nature of his technophilia into sharper relief.

The accelerated pace of technological change in the first part of the century left some authors, like Aby Warburg, deeply skeptical. Warburg maintained that "in the rational world things did not act upon each other at a distance without intermediaries, as they did in the world of witchcraft and sorcery." To see the world with clarity one needs time to step back and contemplate a given chain of events in detached manner. Warburg argued that a "zone of reasoning" was required for human reflection and this was threatened by the "lighting speed of electrotechnical information." In other words, in an age of dynamism and rapid change the time required for analysis and contemplation is diminished. [444] The breakneck flow of new

442 Marjorie Perloff, "The First Futurist Manifesto Revisited," *Rett Kopi*, Manifesto Issue: *Dokumenterer Fremtiden* (2007), 156.

443 Pizzi similarly argues that Marinetti's "*macho* posturing" was purely performative just as his violent rhetoric was lyrical. She claims that Marinetti was "reluctant to operate machines in person," after his car crash and relied on a chauffeur for his transport needs, even suggesting that he looks nervous in a photograph in which he is sitting on an agricultural machine. But it's worth noting that Marinetti commandeered an armored car in the First World War. What was lyrical would become political. (Pizzi, *Italian Futurism and the Machine*, 51)

444 E. H. Gombrich, *Aby Warburg: An Intellectual Biography* (London: The Warburg Institute, 1970), 224; Pizzi, *Italian Futurism and the Machine*, 32.

technology at the turn of the century was too often swept up into an abstract technolatry. It is possible that the internal explorations of the Symbolist imagination would leave one more susceptible to fantasies of human-machine hybrids and parthenogenetic machines. Benjamin would critique the positivist separation of the natural sciences and the humanities because technology is only associated with science, thus one is blind to the "concomitant retrogression of society." "Technology," he avers, "serves this society only by producing commodities."[445] Once the plethora of industrial products and ever faster machines outstrips the threshold of human needs the energies generated by technology become destructive.[446]

Ultimately, Marinetti's lyrical technolatry would transform into a political program and the First World War would change the face of Futurism and the rest of the Western world. In 1905 Morasso claimed that the nineteenth century was "the century of a democratic-humanitarian utopia" and that the twentieth would be "the century of force and conquest."[447] "It is in the new century that force will have its largest kingdom," he posits, "and it is in the new century that we will see ever more formidable armies and ever more bloody wars."[448] Unfortunately, Morasso's visions of robotized soldiers in battles fought with ever more advanced industrial machines would prove quite prescient.

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445 Walter Benjamin, "Eduard Fuchs: Collector and Historian," *New German Critique* 5 (Spring 1975): 34.
446 Ibid.
447 Morasso, quoted in Gentile, *The Struggle for Modernity*, 58.
448 Ibid.

Chapter Three
Psychic Armor and the Myth of Metallization

The mythic figure of the metallized man is embedded in the metamorphosis of Futurist activity from a radical aesthetic praxis to the adventure of military conflict. This idea metastasizes in the maelstrom of the first industrial war and becomes part of the psychic armor acquired by many combatants to facilitate their cognitive survival. Avant-garde and modernist authors such as Marinetti, Wyndham Lewis, and Jünger, exhibited varying expressions of the cult of hardness and a proto-fascist imaginary. The phantasmagoria of technological destruction was particularly seductive for certain witnesses who experienced the aestheticization of violence as a different form of armoring, one that served to anaesthetize the detached participant whose self-alienation became a source of pleasure. The prostheses of vision enhanced these forms of detachment and created a path toward greater levels of abstraction and an increasingly captivating spectacle.

I.

Futurism advanced rapidly in 1910 and 1911 as the movement expanded from painting to other mediums such as music and photography. The publication of manifestoes also accelerated sharply and these proclamations functioned in tandem with Futurist *serate*,[449] which were theatrical demonstrations during which the manifestoes were vociferously declaimed. The Futurist *serate* followed the tradition of Jarry's nihilistic dramaturgical chaos (also emulated in Marinetti's plays) but with

449 The word "*serata,*" the plural form of which is "*serate,*" is defined as "any kind of evening entertainment" but the Futurist serate were theatrical demonstrations which were usually raucous, sometimes violent affairs. (Berghaus, *Futurism and Politics*, 13, n. 10.)

a decidedly bellicose, confrontational encounter with the public. Marinetti opened the first Futurist *serata* in Trieste in 1910 with a speech about the precepts of Futurism before launching into a strident, nationalist rant, attempting to provoke the growing irredentist sentiment among the predominantly Italian population in a city that was still part of the Austro-Hungarian Empire. A reading of the Futurist Manifesto was delivered by Armando Mazza, "a barrel-chested" poet specifically chosen supposing a fight would break out.[450] After the reading of more Futurist poetry, some Austrians got up to leave and a group of Futurists began shouting at them and bullied them back into their seats. From this moment forward Futurism was associated with both irredentism and violence, and Futurist *serate* became exhibitions of fisticuffs, scandal, and publicity. The second *serata* in Milan also veered into anti-Austrian harangues and culminated with the Futurists shouting "Long live War, only hygiene of the world!" and "Down with Austria!"[451] Another fight ensued and the violence spilled out into the streets. In a Venice *serata*, Marinetti improvised a "Speech Against the Venetians" which was punctuated "with resounding slaps" by the Futurist painters Boccioni, Russolo, and Carrà. Marinetti noted that the fists of Armando Mazza also "left an unforgettable impression" in the following scrum.[452]

The anti-traditional posture of Futurism absorbed a variety of militant, political persuasions and cultural specificities in a flexible manner similar to the eclectic, revolutionary factions that were drawn into the fascist movement after the

450 Lawrence Rainey, *Futurism: An Anthology*, 7, 10.
451 Marinetti, "The Futurist Political Movement," in *Futurism: An Anthology*, 216.
452 Marinetti, Boccioni, Carla Carrà, and Luigi Russolo, "Against Passéist Venice," *Futurism: An Anthology*, 68.

war, and for whom the Futurists were the principal ideologues.[453] Within Futurism the anarcho-syndicalist inclinations of Luigi Russolo and Carlo Carrà merged with the nationalist propensities of Marinetti and Boccioni as they committed to increasingly aggressive aesthetic praxis lyrically in the form of manifestoes and physically with theatrical exhibitions of violence.[454] The philosophy of Georges Sorel was an important source of inspiration for the Futurists, especially in terms of the elevation of technology over positivist science, the predilection for intuition over the intellect, and the opposition of dynamism to tradition. For Sorel, revolution would never advance with the fetters of bourgeois reason and rational planning, but through myth and the necessity of violence. Sorel envisioned a productive alliance between humanity and technology even while recognizing that technology was the single rational component within an irrational civilization. Change would only be precipitated through the use of visionary ideals, the assembly of images, and the emotive appeal of rhetorical projections. "We do nothing great," Sorel claimed, "without the help of warmly coloured and sharply defined images which absorb the whole of our attention."[455] Sorel lamented the disappearance of the sublime through the process of disenchantment and responded by prescribing regenerative violence, which played out in the Futurists' celebration of an affirmative aggression drawn up into the cult of the machine.

453 Jobst Welge, "Fascist Modernism," in *Modernism*, eds. Astradur Eysteinsson and Vivian Liska (Philidelphia: John Benjamins Publishing Company, 2007), 549.
454 Paul Atkinson, *Henri Bergson and Visual Culture: A Philosophy for a New Aesthetic* (New York: Bloomsbury Academic, 2021), 41.
455 Georges Sorel, *Reflections on Violence*, ed. Jeremy Jennings, trans. Thomas Ernest Hulme (Cambridge: Cabridge University Press, 2004), 140.

On the eve of the First World War, there was an intoxicating sense that joining the war would at long last provide the opportunity to throw off the yoke of "the lugubrious fin-de-siècle."[456] The Futurists sought the purgative function of a war imagined in Sorelian terms as a conflagration of creative revolution. The slogans about the hygienic qualities of war as a "cleansing bath"[457] were features of a war mythology that would inform the coalition of Futurists and Fascists in the years after the war. For Giovanni Papini, the war was a means of "cleansing the earth….in a warm bath of black blood,"[458] a sentiment illustrative of the psychopolitics of the time. But the Futurists were not alone in their fervor for war. This war psychosis engulfed the imaginations of the European milieu. The masses were swept into a wave of catastrophilia which, in Sloterdijk's terms, materialized in "outbreaks of jubilation and of national emotion, of pleasure in fear and the ecstasy of fate."[459] The trepidation experienced upon plunging into war was overcome by the imagined dynamism of warfare and the promise of the cathartic destruction of the old social order.

In Germany, there was a sense of millenarian euphoria in August of 1914 emerging with the belief that the deep economic, cultural and political divisions in the country would be resolved in this *Drang nach vome,* or "push forward," to war.[460] One commentator claimed "the nation recognizes no races anymore; all speak one

456 Marinetti, quoted Berghaus, *Futurism and Politics*, 8.
457 Sloterdijk, *Critique of Cynical Reason*, 120.
458 Berghaus, *Futurism and Politics*, 8.
459 Peter Sloterdijk, *Critique of Cynical Reason*, 121.
460 Modris Eksteins, *Rites of Spring: The Great War and the Birth of the Modern Age* (New York: Houghton Mifflin Company, 1989), 192-193.

language, all defend one mother, Deutschland."[461] The "condition of war" was bound in a means-ends correspondence with the "condition of peace." In other words, victory was inherent in the very declaration of war because the condition of war marshaled a sense of "overcoming."[462] The battle itself would be a minor step in the process. As Modris Eksteins explains, "technological innovation and industrial progress would, in a grand synthesis, combine with a spirit of pastoral simplicity" and this cohesion would bring a victorious peace.[463] The war would transform life's inauthenticity into an "authentic life" enhanced by machines.[464] Mobilization across the continent was exhilarating. According to Sloterdijk, the first year of the war was "waged by purely volunteer armies; no one had to be forced to go to the front."[465]

When Italy joined the war it was the Futurists who were some of the first volunteers sent to the front. Marinetti joined the Lombard Battalion of Volunteer Bicyclists and Automobilists alongside other Futurists including Boccioni, Luigi Russolo, and the architect Saint'Elia.[466] Highly regarded by the people of Milan, the soldiers in the battalion were greeted with crowds gathering in the street, cheering, while an airplane passed overhead dropping leaflets in the colors of the Italian flag. At the front, they fought with Alpine troops in various military operations, the most significant of which was the capture of the Austrian fortress at Dosso Casina. But due to the poor performance of the bicycle in combat the Lombard Battalion

461 Ibid., 193.
462 Ibid.
463 Ibid., 192-193.
464 Sloterdijk, *Critique of Cynical Reason*, 120.
465 Ibid., 121.
466 Neither Boccioni nor Sant'Elia would return from the war.

disbanded and the Futurists returned to Milan where they awaited anxiously, in Marinetti's terms, for "the pleasure of returning to battle."[467] Marinetti attended an artillery school and was then sent to the Gorizia front in May of 1917 where he joined the 73rd Artillary Battalion and was subsequently wounded. After recovering from his injuries he joined the Bombardieri di Nervesa, a bomber unit, and fought on the Karst front. And finally, in June of 1918, he joined a battalion of armored motorcars, the Squadriglie Automitragliatrici Blindate.[468] Marinetti commandeered an armored car, the *Blindata 74*, and fought against the Austrian offensive in the battle of Vittorio Venetoin before joining the counter-offensive where he sped down enemy roads in pursuit of fleeing Austrian troops.

Driving the armored car was a suitable occupation for Marinetti, a staunch advocate of automobilism. The armored car was a relatively new technology for the theater of war and the correlation between technological innovation and military adventure was a persistent feature of the European outlook in the early years of the century. For the Futurists, the dangerous thrills experienced while driving a race car were associated with the audacity of military combat as Morasso had theorized in *The New Weapon: The Machine* (1905).[469] But automobilism and warfare were indelibly linked before Morasso's speculative weaponization of the motorcar. In 1902, Frederick R. Simms invented the "Motor War Car" which was an armored car

467 Selena Daly, "'The Futurist Mountains: Filippo Tommaso Marinetti's Experiences of Mountain Combat in the First World War," *Modern Italy* 18, no. 4 (2013): 324.
468 Andrea Benedetti, "The War Diaries of Filippo Tommaso Marinetti and Ernst Jünger" *International Yearbook of Futurism Studies* 2, no. 1 (2012): 230; Cinzia Sartini Blum, *The Other Modernism: F. T. Marinetti's Futurist Fiction of Power* (Berkeley: University of California Press, 1996), 100.
469 Poggi, *Inventing Futurism*, 11-12.

mounted with a machine gun.[470] The impetus for the Motor War Car's construction was to provide mobility for the Maxim machine gun (patented by Hiram Maxim in 1884), which was too heavy to move around without transport, and this followed a series of other attempts, including the use of the horse-drawn carriage and a motorized tricycle. But the Motor War Car was the first armored and weaponized automobile.[471] Initially, it was slow and prone to break down but in the years between its invention and the First World War the armored car underwent various improvements. Armored cars were used with some success in military conflicts from the Balkans to Italian Tripolitania.

The armored car is emblematic of the dialectic between combat destructive capacity and mortal crew endangerment. It provided a better cortical layer to shield against the shocks of artillery but the motorcar required roads and would bog down in the barbed wire entanglements of trench warfare. Visibility was limited to a small rectangular slit in the armor and bullets could still penetrate the seams between the plates. But the danger and unpredictability of war machinery were attributes that were already baked into the Futurist "non-productivist" (i.e., aesthetic) vision of military conflict, which was emblematic of the Sorelian vision of struggle, violence, and sacrifice.[472] As Andrew Hewitt argues, the Futurists revered the imperfect, lurching nature of the internal combustion machine as a source of antagonism at the

470 The term, motorcar, itself, was coined by Simms in 1893 after he purchased the British rights to the Daimler patents for the first automobiles. (Eva Chen, "The Adventure of Technology: Kipling, the Motorcar, and National Regeneration," *Modernism/Modernity* 29, no. 1 (January 2022) 169).
471 R. M. Ogorkiewicz, "Sixty Years of Armoured Cars," *Royal United Services Institution Journal* 105, no. 618 (1960): 268.
472 Jeffrey T. Schnapp, "Propeller Talk," *Modernism/Modernity* 1, no. 3 (1994): 161.

core of technology. "The machine," Hewitt maintains, "was a social symbol of a natural antagonism."[473] They extolled the machine for its aesthetic qualities and not in terms of its Taylorist efficiency, envisioning the machine as a totality rather than an aggregate of components. War itself, including the combatants, the terrain, the military hardware, etc., would become a sort of pulsing machinic aggregate. Marinetti declared that the "New Religion-Morality of Speed" was "born in this Futurist year of our great liberating war."[474] For Marinetti, velocity was aggression, war and combat; patriotism was the velocity of the nation; and war was its "central motor."[475] War itself, including the combatants, the terrain, the military hardware, etc., would become a sort of pulsing machinic aggregate.

Marinetti's adventures in the armored car were the inspiration for his erotic war novel, *The Steel Alcove* (1921). The themes of patriotism, warfare, and the erotic drive are not unrelated to the dark enthusiasm collectively shared in anticipation for the war. Catastrophilia ferments in the social structure and is translated into the "mental structure" of the individual.[476] As Herbert Marcuse argues, the destructive tendencies are activated and aggravated in a scarcely sublimated "socially useful aggressive energy" that is exhibited in "the behavior of the nation as a whole."[477] In this case, bellicose nationalism and the waging of industrial war are framed in terms of Eros and Thanatos, both constructive and destructive actions working for life and

473 Hewitt, *Fascist Modernism*, 142.
474 Marinetti, "The New Religion-Morality of Speed," in *Futurism: An Anthology*, 224-226.
475 Ibid.
476 Sloterdijk, *Critique of Cynical Reason* , 120-121; Herbert Marcuse, "Aggressiveness in Advanced Industrial Societies," in *Negations: Essays in Critical Theory*, trans. Jeremy J. Shapiro (London: May Fly Books, 2009), 193.
477 Marcuse, "Aggressiveness," 193.

working for death. But even if destruction didn't work "in the service of Eros"[478] one could still invoke the Nietzschean conceit that they were in league or that the compulsion to love is ineluctably "wedded" to the desire for destruction.[479] In the years before the First World War Marinetti waxed fervently about the "furious coitus of war" which took the form of a "gigantic vulva stirred by the friction of courage."[480] Wyndham Lewis combined copulation and violence in the "delicious rage" of the protagonist in "Cantelman's Spring-Mate" who "beat a German's brains out" with the "same impartial malignity"[481] with which he mounted his spring-mate. And in the phantasmagoria of Ernst Jünger's war writings, "the voluptuousness of blood hangs over war" and the virile soldier was fueled with the "fury of savage desire" that is "comparable to only Eros itself."[482] As Marcuse aptly adduced in his own meditation on the violent apparatus, "procreating and killing are inextricably united."[483]

The Steel Alcove attests to the commingling discourses of violence and desire in exaggerated form, the setting of which is a battlefield that bears little likeness to the real battlefields of World War I. The Futurist libidinal cathexis onto the war machine is unambiguously pronounced in this story and like the industrial machines in Zola's *The Beast Within* and Huysman's *Against Nature* the armored motorcar is gendered as female. Marinetti anthropomorphizes the armored car and remarks on

478 Ibid., 194.
479 Andreas Broeckmann, *Machine Art in the Twentieth Century* (Cambridge, MA: MIT Press, 20116), 266, n. 82.
480 Marinetti, "Let's Murder the Moonshine," quoted in Poggi, *Inventing Futurism*,173.
481 Wyndham Lewis, "Cantelman's Spring-Mate," in *Blasting and Bombardiering*, 310.
482 Ernst Jünger, quoted in Klaus Theweleit, *Male Fantasies, Volume 2: Male Bodies: Psychoanalyzing the White Terror*, trans. Erica Carter and Chris Turner (Minneapolis: University of Minnesota Press, 1989), 188.
483 Marcuse, "Aggressiveness," 193.

the "health" of its iron, "or rather steel," while observing the machine's "sensitivity," which is a standard Futurist trope.[484] The armored car is situated within the theater of war, albeit aestheticized in an integration of art and life which transforms the devastation into an erotic adventure. The relationship between Marinetti and his armored car, which he references as his "new mistress,"[485] is clearly amorous:

> The most virile impetus of my engine which is simultaneously heart, sex, inspired genius and artistic will, drives into you, with coarse delight for you, for me, I feel it! I am the extremely powerful Futurist genius-sex of your race, your favorite male who returns you vibrating fecundity by penetrating you![486]

In this narcissistic dedication to his mistress the other armored cars of his battalion are conspicuously absent, not to mention the other crew members who would have accompanied the author. Even the enemy does not appear in this fantasy, but this is not to say that there is no political dimension. For Marinetti, the armored car becomes an eroticized war machine invested with patriotic desire.[487] The "fast steel alcove" is an apparatus through which Marinetti can "receive the naked body of my naked Italy."[488]

The steel plates of the Blindata 74 and the metaphor of the "steadiness of the dreadnought" are part of a catalogue of references to the proto-fascist dream of metallization. The metaphor is apt in that the dreadnought was often referenced in the development of the first tanks which were envisioned as having the capacity to

484 Marinetti, quoted in Christine Poggi, "Metallized Flesh: Futurism and the Masculine Body," *Modernism/modernity* 4, no. 3 (1997): 26.
485 Ibid.
486 Blum, *The Other Modernism*, 102.
487 Katia Pizzi, "Dancing and Flying the Body Mechanical: Five Visions for the New Civilisation," *European Legacy*, 14, no. 7 (2009): 788.
488 Marinetti, quoted in Daniele Conversi, "'Art, Nationalism and War: Political Futurisms in Italy (1909–1944)," *Sociology Compass* 3, no. 1 (2009): 100.

cross any obstacle in its path with the ease in which a dreadnought cuts through water. The armored car itself merges with the driver who is encased within its metal and incorporates a form of armoring with specific reference to "watertight compartments."[489] But the Blindata 74 is also a watertight "engine heart" as demonstrated in the various references in *The Steel Alcove* to the "power of the futurist heart" which is an armored heart.[490] The steel alcove is an emblem of metallization with all of its associations with hardness, virility, and destruction, but in another dimension Cinzia Sartini Blum argues that this "battleship heart" is in a "perennial battle against the oceanic feminine," and more broadly speaking battling all that is Other. [491] The chaos of battle is subject to eroticization when its sheer formlessness is gendered feminine and becomes something the soldier male must subjugate. The warrior, vulcanized within the steel alcove, is a buttress against the disintegration associated with industrial war.

The fantasy of seducing mother Italy takes place in an armored car on the battlefield, a space of violent mechanization devoid of generative sexuality. This fevered dream is a sort of bachelor machine or, in Carrouges words, "a fantastic image that transforms love into a technique of death."[492] It is a militarized, onanistic coitus between man and machine. With regards to Marinetti's armored, engine heart one is reminded that Duchamp considered the bride in *The Bride Stripped Bare by Her Bachelors, Even* as a motor or a sort of automobile. The desire to become a

489 Marinetti, quoted in Blum, *The Other Modernism*, 93.
490 Ibid., 92, 102.
491 Ibid., 92-93.
492 Carrouges, quoted in Broeckmann, *Machine Art*, 36.

machine so that one can either fill the void left by the terminated female or provide compensation for a neutered masculinity, is a central feature of the bachelor machine, along with autoeroticism and death.[493] Jacques Lacan theorizes that the new industrial man (*homo psychologicus*) has a relationship with his machine, especially the motorcar, which is "so very intimate" that it appears "as if the two were actually conjoined."[494] The "emotional significance" of the machine, Lacan argues, "comes from the fact that it exteriorizes the protective shell of his ego, as well as the failure of his virility."[495] For Marinetti, the protective shell in this war setting is the Blindata 74, a bachelor machine in which he is cocooned in solipsistic autoeroticism.

The steel alcove conceived as a fetishistic or magical object is endowed with a transformational power that allows the soldier male to elude or "transcend" a dangerous reality.[496] This transcendence is a type of armoring and the erotic war story corresponds with the metallization of man, which is both a symptom of the attempt to restore virility through the mechanization of war and a metonym for the compulsion to become a machine. The metallized soldier blunts the collision between nature and technology, a confrontation which may appear as a mere backdrop where homing pigeons carry out their flights to and from tanks in the midst of the blasting and the mayhem. Technological warfare transforms the reality of human activity in conflict and *technics*, or the practical, accumulative understanding of technology, and serves to weaponize the bodies of the combatants to function in the logic of the war

493 Broeckmann, *Machine Art*, 37-38.
494 Jacques Lacan, "Some Reflections on the Ego," *International Journal of Psycho-Analysis* 34 (1953): 17
495 Ibid.
496 Blum, *The Other Modernism*, 102-103.

machine.[497] Through technics the soldier is inscribed into the conflict in which technology promises an increasingly sophisticated armor against the relentless chaos of assault. Concurrently, the increasing sophistication of weaponry escalates the very ferocity of the threat the soldier faces in the double logic of armor and assault.[498] On the battlefield, the steel plates of the armored motorcar allow the soldier male to elude or "escape" most of the bullets, encapsulated in machinery for the preservation of bodily integrity.

II.

In the context of the Great War, the metallized man refers specifically to the ideal "martial male body," [499] virile and armored. The myth of the metallized man conforms to Marinetti's vision of the war as a shifting array of speeding machines and glittering military hardware, which is not unrelated to the basic "captivating power" of military pageantry.[500] For the Futurists, the allure of destructive mechanical prostheses and the enthralling movement of weaponry mounted on armored machines are symptoms of a reenchantment of technology in the form of the war machine. Metallized man is a manifestation of this enchantment and so is the utopian figure of the *new man*. The provenance of the new man is Nietzsche's superman, who is merciless and cruel, but the superman was drawn to the beauty of the ancients which

497 Wenceslao J. Gonzalez, "The Philosophical Approach to Science, Technology and Society," in *Science, Technology and Society: A Philosophical Perspective*, ed. Wenceslao J. Gonzalez (Málaga, ESP: Gesbiblio, S. L., 2005), 9.
498 Paul Earlie, "Derrida's Political Emotions," *Theory & Event* 20, no. 2 (2017): 383.
499 J.A. Mangan, *Shaping the Superman: Fascist Body as Political icon – Aryan Fascism* (London: Frank Cass, 1999), *xi*.
500 Blum, *The Other Modernism*, 200, n. 29; Marshall Berman, *All That Is Solid Melts into Air: The Experience of Modernity* (New York: Penguin Books, 1988), 137.

would have been forsworn by the new man in the age of machines.[501] The new man for Marinetti is a "disciple of the engine"[502] and a product of his own martial and nationalist activity. He lauded the Arditi and considered these élite assault troops as embodiments of the new men of the future.[503] The myth of the new, metallized man was not exclusive to Futurism as the theme appears in German literature relative to the First World War and even crops up as the metaphor of "flesh to metal"[504] in Soviet literature. Post-war iterations of the new man appeared as Spengler's "barbarians" and the *worker* of Ernst Jünger, and they shared similar attributes to the Futurist new man: imperviousness to pain, self-discipline, love of danger, and the repudiation of the past.[505]

The very idea of this new, metallized man is itself a form of armor. The metallized man or the new man mythologizes the soldier body's status and thus creates a fiction which obscures the soldier's relation to the brutal reality of battle. The soldier fantasizes himself as a "figure of steel: a man of the new race," which is a utopian model that the soldier aspires to become.[506] The figure of steel is an ideal type, an abstraction. In Jünger's writing the figure of steel is depicted in evocative rather than illustrative terms and never appears as a begrimed soldier in the field of battle.[507] The phantasmatic figure is not necessarily a false impression but instead a

501 Mosse, George L. "The political culture of Italian futurism: A general perspective." *Journal of Contemporary History* 25, no. 2 (1990): 261.
502 Ibid.
503 Benedetti, "The War Diaries," 226.
504 Rolf Hellebust, "Aleksei Gastev and the Metallization of the Revolutionary Body," *Slavic Review* 56, no. 3 (1997): 500.
505 Mosse, "The Political Culture of Italian Futurism," 262.
506 Theweleit, *Male Fantasies Vol. 2*, 162.
507 Ibid., 162, 206.

sort of projection that allows the soldier to restructure the chaos into impressions that recast the radical precariousness of his immediate temporality.[508] The Great War, even though this was the first industrial, fully mechanized and modern war, engendered an array of myths, legends, and fantasies that one would associate with more antiquated mentalities.[509] Of the hundreds of memoirs published about the First World War it is illuminating to consider one attempt to provide an account of what exactly was happening in the immediate vicinity of a soldier in battle.

> The air was alive with the rush and flutter of wings; it was ripped by screaming shells, hissing like tons of molten metal plunging suddenly into water, there was the blast and concussion of their explosion, men smashed, obliterated in sudden eruptions of earth, rent and strewn in bloody fragments, shells that were like hell-cats humped and spitting, little sounds, unpleasantly close, like the plucking of tense strings, and something tangling his feet, tearing at his trousers and puttees as he stumbled over it, and then a face suddenly, an inconceivably distorted face, which raved and sobbed at him as he fell with it into a shell-hole.[510]

This fragment is illustrative of the sort of violent, mechanized chaos that might inspire a soldier to build up a metallic callus of psychic armor. The account also serves as an impression of what exactly the soldiers were armoring themselves against.

Klaus Theweleit, in his seminal two-volume work *Male Fantasies,* provides a psychoanalytic analysis of members of the *Freikorps*, which were German inter-war militia groups composed of battle-hardened veterans of the First World War. The imaginary of the new man, the *figure of steel*, finds expression in the writing of these

508 Eric J. Leed, *No Man's Land: Combat and Identity in World War I* (London: Cambridge University Press, 1979), 116.
509 Ibid., 115.
510 Frederic Manning, quoted in Michael Adas, *Machines as the Measure of Men*: *Science, Technology, and Ideologies of Western Dominance* (Ithaca, NY: Cornell University Press, 2015), 370.

soldier males and is incorporated into their proto-fascist ideology. For the Freikorps, the idea of the new, metallized man provided a form of psychic armor like the armored stability provided by the cohesion of military discipline. The *front* itself was conceived not in terms of the violence of battle but as an armored boundary not unlike their body armor, both of which would insulate the soldier males from disintegration.[511] In Theweleit's terms, the new man has a "machinized"[512] physique with a metallic periphery. His mechanized body is phallic, devoid of viscera; it is a "body made machine in its totality."[513] "We are presented with a robot," Theweleit writes, "that can tell the time, find the North, stand his ground over a red-hot machine-gun, or cut wire without a sound."[514] The metallized man is aware of technics in the sense that his only "consciousness of self" is his "knowledge of being able to do what he does." "The ideal man of the conservative Utopia," Theweleit contends, is a man "whose interior has lost its meaning (the technocrat is his contemporary manifestation)." The mechanized body of the new man becomes a machine and the soldier male's armor transforms his "incarcerated interior" into a fuel that propels him into combat.[515]

The soldier males in Theweleit's account bore psychic armor as a substitution for an ego in that the soldier male either lacks an ego ("his psyche eliminated") or that his bodily ego has been "in part displaced into his body armor."[516] For Theweleit, the

511 Jessica Benjamin and Anson Rabinbach, "Foreword," in Theweleit, *Male Fantasies Vol. 2, xix.*
512 Theweleit, *Male Fantasies Vol. 2,* 162.
513 Benjamin and Rabinbach, "Foreword," in Theweleit, *Male Fantasies Vol. 2*, *xix*; Theweleit, *Male Fantasies Vol. 2,* 162.
514 Theweleit, *Male Fantasies Vol. 2,* 162.
515 Ibid.
516 Ibid.

soldier males "never entered the field of object relations" between the "whole ego and whole other," and thus individuation remained incomplete.[517] But if the soldier males were unable to experience interiority and integrity of *self*, leaving them vulnerable to what they envision as a constant external threat, then the presence of psychic armor is drawn into question because said protective shield is a prerequisite for establishing the very distinction between inside and outside, self and other.[518] The partial or interrupted process of individuation is more clearly framed as an incomplete exteriorization of the protective shell of the ego that is channeled into the soldier male's body armor. The soldier male's desire to extinguish interiority while armoring the exterior is never fulfilled because of the ineluctable inner realm that is encapsulated within the armor (in Theweleit's terms, just as "a cauldron contains boiling soup"[519]). In other words, some of the excess energy that is constitutive of "danger" is actually the product of internal, libidinal tension, and the soldier male is most forcefully armored against internal tension through the mechanism of projection. Projection, for Freud, is the treatment of stimuli "as though they were acting, not from the inside, but from the outside" and thus the armor is brought into full operation "as a means of defense against them."[520] The armor itself is a projection.

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517 Benjamin and Rabinbach, "Foreword," in Klaus Theweleit, *Male Fantasies Vol. 2*, *xxi*.
518 Samuel Weber, "Toward a Politics of Singularity: Protection and Projection," in *Religion: Beyond a Concept*, ed. Hent de Vries (New York: Fordham University Press, 2008), 641.
519 Theweleit references Freud's suggestion that "pots, kettle, vats, and hollow spaces" are seen as representations of "the womb—the body of the mother." (Theweleit, *Male Fantasies Vol. 1, Women, Floods, Bodies, History*, trans. Eric Carter and Chris Turner in collaboration with Stephen Conway (Minneapolis: University of Minnesota Press, 1987), 238, 242).
520 Freud, quoted in Weber, "Toward a Politics of Singularity," 641.

The soldier male lives in perpetual fear that his boundaries will collapse immediately upon contact with any external entity or Other. The projection of a phantasmatic metallized body prompts the soldier male to dominate and subjugate both for the love of violence and to resist against bodily fragmentation. Movement through a technologically dominated battle field is visualized sadistically in terms of "puncture, rape, and dismemberment of a passive object."[521] The "totality armor" of metallized man and the armored boundary of the "troop as totality" both serve as the hardened peripheries of the "person as front."[522] The musculature of the soldier male is also part of this cult of hardness, forging the soldier body into an armored phallus, the hypertrophied soldier body as war machine. Ultimately, this index of armoring functions as "organs of reality-control" (because the soldier is incapable of tolerating "animate reality").[523] Armoring provides a defense against instinctual drives, against the threat of emotion, even against thought itself. The stunted ego growth of the soldier male requires the fortification of a troop formation into which his bodily form may be inserted. Ernst Jünger's remarks on this soldier male are instructive: a man whose inner value is not absolutely above question must learn to obey to the point of idiocy, so that even in the most terrible moments, his instincts can be subdued."[524]

III.

Georg Simmel observed the bewildering realities of urban-industrial life and concluded that a sensory overload was shaping the human psyche and provoking a

521 Leed, *No Man's Land*, 122.
522 Theweleit, *Male Fantasies*, Vol. 2, 162.
523 Ibid., *xxi*, 162.
524 Jünger, quoted in Theweleit, *Male Fantasies Vol. 2,* 207.

catalogue of responses, from mental exhaustion and agoraphobia to a cold and calculated rationalism. The incapacity to experience manifold sensory phenomena resulted in what Simmel described as a blasé attitude that was itself a protective measure and a form of mental armoring. Simmel determined that the "metropolitan type," had developed out of necessity "a protective organ" that would absorb the pressures of mass society and shield one from the profound disruptions of the "external milieu" that posed a persistent threat.[525] This protective organ would harden mental activity to the "least sensitive" functions while excluding the force of personality.[526] The organs that Marinetti declares were "adapted to the exigencies of an environment made of continuous shocks"[527] are metaphorically reminiscent of Simmel's construction. For Simmel, the purpose of this organ's development is to protect the individual from "being leveled" and "swallowed up in the social-technological mechanism."[528] The threat of one's boundaries collapsing or fears of becoming submerged are themes that are consistent with the discourse of metallization. The menace of Marinetti's engulfing fluids signals Freudian topoi with regards to the organ as prosthesis, as prosthetic armor, and as a protective shield, the latter of which Foster designates as "one of the great fictions of modern(ist) thought."[529]

525 Georg Simmel, "The Metropolis and Mental Life," in *Georg Simmel: On Individuality and Social Forms*, ed. Donald N. Levine (Chicago: University of Chicago Press, 1971), 326.
526 Ibid.
527 Marinetti, "Multiplied Man and the Reign of the Machine," in *Futurism: An Anthology*, 90
528 Simmel, "The Metropolis and Mental Life," 326.
529 Foster, *Prosthetic Gods*, 386, n. 36.

Foster examines the literary production of Marinetti and Wyndham Lewis through which he theorizes wartime models of the "new technological subject"[530] The pairing of Marinetti and Lewis is explicative, especially given the rivalry of their movements. There is a semblance of Futurist influence in the pages of the Vorticist literary mouthpiece *Blast*, not only in terms of the machinic writing, experimentations with typography, and the manifesto style, but in the tenor of nihilism and aggression. The signature paintings of the movements were not entirely dissimilar (one can find elements of Cubism in both), but the styles were distinct. Futurist paintings tend toward representations of velocity with distorted perspectives and the whirling multiplication of forms. Lewis described Futurist paintings as "swarming, exploding or burgeoning with life" which he considers to be the Futurists' "ideal."[531] Vorticist paintings are marked instead by abstraction and stasis. The Vorticist movement eschewed the histrionic tendencies of the Futurists with their Sorelian cult of action, and cultivated instead a detached intellectualism. The Vorticists converted the blasé affect into a militant aesthetic pose. Moreover, Lewis was sharply critical of the Futurists' obsession with technology and the inclination to "sentimentalize machines,"[532] especially this hubbub about "AUTOMOBILISM (Marinetteism)"[533] which he disparages in the first pages of *Blast!* The Vorticists' approach to technology was one of guarded enthusiasm. They would seek out "machine forms"[534]

530 Ibid., 115.
531 Wyndham Lewis, "A Review of Contemporary Art," *Blast: Review of the Great English Vortex* 2, *War Number*, ed. Wyndham Lewis (July 1915): 38.
532 Wyndham Lewis, *Wyndham Lewis the Artist* (New York: Haskell House Publishers, Ltd., 1971), 79.
533 Wyndham Lewis, *Blast I* (Santa Rosa: Black Sparrow Press, 2002), 8.
534 Lewis, *Wyndham Lewis the Artist*, 78.

while observing them from a prosthetic distance, critically expropriating the technological vitality without becoming absorbed in the process. In this sense, Lewis and Vorticism provided a sort of corrective to the Futurist reification of technology and their attendant romance with destruction.

In Foster's account, Marinetti is associated with discharge (unbinding), and the desire "to explode the old bourgeois idea of a nontechnological subject"[535] (even while he really wanted to destroy bourgeois subjectivity altogether). Lewis, contrarily, is associated with the opposing force of binding, which Foster presents as a "new ego" that could "withstand the shocks" of modernity by forging a hardened, protective shield that could "*thrive* on such shocks."[536] There is an echo of "Multiplied Man and the Reign of the Machine" in this formulation, and Foster portrays Lewis' new ego as if metallized. But the single-page essay titled "The New Egos," published in the first issue of *Blast*, exhibits a more ambivalent assessment of this new ego. Lewis contrasts the "new egos" with the "civilized savage," the latter of whom is surrounded by "very simple objects" and very few other human beings.[537] The "savage" is marked by *impersonality* which is concentrated, "swaddled up in a bullet-like lump," and his "Great Art" is reduced "down to the simple black human bullet."[538] In contradistinction, the new ego, "the modern town dweller," is a sociable, *personal* ego, who "sees everywhere fraternal moulds for his spirit."[539] The

535 Foster, *Prosthetic Gods,* 115.
536 Ibid.
537 Lewis, "The New Egos," in *Blast I,* 141.
538 Ibid.
539 Ibid.

new ego does not exhibit the aloof "intellectualistic character"[540] of Simmel's metropolitan type. For the new ego, "impersonality becomes a disease."[541] The new egos' "frontiers interpenetrate" and their "individual demarcations are confused."[542] Thus, the distinctiveness of self is lost in a metropolitan Bergsonian flux.[543] The fluid overlap of individuals and the dispersal of their interests is the object of Lewis' critique, for he abhors assimilation both in terms of individual and national boundaries.

Lewis employs a boxing metaphor in this portrait of the new egos, and places the new egos' "contemporary methods" in opposition to the "old style" of fighting. "In the old style," Lewis explains, "two distinct, heroic figures were confronted, and one ninepin tried to knock the other ninepin over."[544] Ninepins are hardened by manufacture and shaped rather like bullets. The hardened shapes of the ninepins seem to echo the previous references to bullets and bullet shapes associated with the "civilized savage." The mental image of dueling ninepins contrasts sharply to the boxing methods of the new egos which involve a sexualized merging of figures "burrowing into one another" and exchanging "intimate pommels." The mention of "promiscuity" in this context reaffirms the sexual undertones of the new egos' fighting methods. "We are all today," Lewis argues, entangled in "each other's vitals" and the nature of this entanglement is "reminiscent of the insect-world."[545] The

540 Simmel, "The Metropolis and Mental Life," 325.
541 Lewis, "The New Egos," 141.
542 Ibid.
543 David Ayers, *Wyndham Lewis and Western Man* (New York: Palgrave Macmillan, 1992), 26.
544 Lewis, "The New Egos," 141.
545 Ibid.

preoccupation with *vitals* corresponds to "*vitalist* enthusiasms" of the "*emotional*," Bergsonian type, which Lewis contemptuously describes in terms of "heat, moisture, shapelessness, and tremor of the vitals of life."[546] For Lewis, vitals are the "smoking-hot *inside* of things," which is analogous to Theweleit's *cauldron* of interiority. The entomological reference signals the mechanization of human activity, just as the insect world could truly be said to be a world of machines.[547] David Ayers links the eroticized conflict in the new egos to Lewis' short story "Bestre," wherein there is a "stand-up fight between one personality and another," and the fight proceeds "more like phases of a combat or courtship in the insect-world."[548]

Dueling figures appear in several of Lewis' drawings from this period (e.g. *Combat No. 2* and *Combat No. 3,* both completed in 1914).[549] But the interpenetration of fighting figures is most strikingly depicted in the cover illustration for his 1937 book, *Count Your Dead: They Are Alive! (A New War in the Making)*. The illustration features two caped figures intimately twirling in what first appears to be a dance. Their arms are draped around each other's shoulders, but the daggers held over each figure's head indicate a deadly struggle. The menacing grins on their masks are nearly touching. The dotted lines arcing from their feet suggest choreographed movement resembling a vortex. And the symbols of a hammer and sickle, and a swastika, respectively, appear between their feet.

546 Wyndham Lewis, *The Art of Being Ruled*, ed. Fred Way Dasenbrock (Santa Rosa: Black Sparrow Press, 1989), 349.
547 Wyndham Lewis, *Paleface: The Philosophy of the 'Melting-Pot'* (London: Chatto & Windus, 1923), 251.
548 Ayers, *Wyndham Lewis and Western Man*, 27; Wyndham Lewis, *The Wild Body: A Soldier of Humour and Other Stories* (New York: Harcourt, Brace and Company), 126.
549 Ayers, *Wyndham Lewis and Western Man*, 27-28.

Lewis' portraits of interpenetrating figures serve to mirror the dissolution of personality that he saw spreading "like a wave"[550] through the metropolitan masses. The new ego of Lewis' critique is not a "new hardened subject"[551] but an amorphous crowd of former selves, the boundaries of which have dissolved into the "vagueness of space."[552] Aside from the troubling archetype of the "civilized savage," it is the very *impersonality* and the primitive formalism of said savage that Lewis admires. It is the *human bullet* to which he aspires. Lewis' elitist hostility is baked into the hardening of his own exterior, both figuratively and psychically. Thus the armoring of the exterior aligns Lewis with the cult of hardness but not in some reified, metallized fashion.

Following Goethe, Lewis divides humanity into two groups, "*Puppets* and *Natures*," which, in Lewis' parlance are "*natural* men" and "*mechanical* men," men and machines.[553] The vast majority of people are machines or puppets and so to call someone a "natural" is to express admiration. The mechanization of daily life and the "freedoms" of consumer society contribute to the machinic character of humankind, which is a problem that fellow Vorticist, Ezra Pound, addressed in the following terms: "in his growing subservience to, and adoration of, and entanglement in machines, in utility, man rounds the circle almost into insect life."[554] Lewis also draws a parallel between insect life and the lives of mechanical men, and worries that

550 Lewis, "The New Egos," 141.
551 Foster, *Prosthetic Gods*, 115.
552 Lewis, "The New Egos," 141.
553 Lewis, *The Art of Being Ruled*, 125.
554 Ezra Pound, quoted in J. Christopher Cunningham, "'To Be Men Not Destroyers': The Making of Men and the Reproduction of Culture in Ezra Pound's Cantos," *Arizona Quarterly A Journal of American Literature, Culture, and Theory* 53, no. 3 (1997): 89, n. 6.

the natural man risks becoming "as mechanical as a tremendous insect world" while all of the "awakened reason" of the "natures" will subsequently disappear.[555] Lewis envisions a war occurring between puppets and natures, machines and men, and warns that within a mechanized society the pressure on natural man increases. And for this worsening situation he seems to blame the expanding freedoms of the puppet masses. "We are *all* slipping back into machinery," he writes, "because we *all* have tried to be free."[556] The threat of the self dissolving into mechanization was, for Lewis, most conspicuously present in what he termed the "insect society"[557] of communism. When the "'self ceases, necessarily," Lewis cautions, "the conditions of an insect communism are achieved."[558]

In *The Art of Being Ruled* Lewis declares that we are "*surface creatures*" and that "it is on a faculty of exteriorization that intellectual life depends."[559] What one finds "*on the surface*" differs markedly from what one would find in the interior, and while most "meaning" is "of a superficial sort," meaning will only be found on the surface. The human surface is "ectodermic," and it is the "most *exterior* material of our body."[560] "The *intellectual* is the ectodermic case," Lewis avers, "the ideality of the animal machine."[561] The use of the term, "case," which in this context refers to a condition or mental state, is curiously neutral as a signifier for the exemplary or ideal

555 Wyndham Lewis, *The Caliph's Design: Architects! Where is your Vortex?*, ed. Paul Edwards (Santa Barbara: Black Sparrow Press, 1986), 76.
556 Lewis, *The Art of Being Ruled*, 125.
557 Ayers, *Wyndham Lewis and Western Man*, 29.
558 Wyndham Lewis, *The Complete Wild Body*, ed. Bernard Lafourcade (Santa Barbara: Black Sparrow Press, 1982), 158.
559 Lewis, *The Art of Being Ruled*, 231.
560 Ibid.
561 Ibid., 349.

model of the human machine, that is, the ectodermic intellectual. But "case" also refers to the exterior of a receptacle, usually consisting of a hardened "shell," a term that is of crucial importance for Lewis. "In writing," Lewis maintains, "the only thing that interests me is *the shell*."[562] Lewis considered his own approach to writing as *external* and "classical," by which he means scientific rather than sentimental.[563] The scientific approach relies on the eyes, which are part of the ectoderm, "rather than the more emotional organs of sense."[564] For Lewis, it is solely with the apparatus of vision that one can face and subsequently embrace "the brutality of mechanical life"[565] without recoil, and make "a healthy and attractive companion" of the world's grotesquerie.[566]

Lewis pits the ectodermic intellectual against the moist, pulsing interior of subjectivity, and thereby thrusts forth his "formal skull or carapace."[567] "We preferred a helmet to a head of hair," he writes, "a scarab to a jelly-fish."[568] Again, the entomological references are salient, but in this case Lewis focuses on the aesthetic attributes of insect life, the geometry of the insect's *shell*. He admires the way certain insects have developed "mesmeric head-dresses," figuratively suggesting that these insect features, whether projections along the thoracic segment or

562 Wyndham Lewis, quoted in Rachel Murray, *The Modernist Exoskeleton: Insects, War, Literary Form* (Edinburgh: Edinburgh University Press, 2020), 27.
563 Ibid.
564 Wyndham Lewis, quoted in Jamie Wood, "Lewis, Satire, and Literature," in *Wyndham Lewis: A Critical Guide*, eds. Andrzej Gasiorek and Nathan Waddell (Edinburgh: University of Edinburgh Press, 2015), 90.
565 Wyndham Lewis, quoted in Miriam Hansen, "T.E. Hulme, Mercenary of Modernism, or, Fragments of Avant-garde Sensibility in Pre-World War I Britain," *ELH* 47, no. 2 (1980): 384, n. 64.
566 Wyndham Lewis, quoted in Wood, "Lewis, Satire, and Literature," 90.
567 Lewis, *The Art of Being Ruled*, 349.
568 Lewis, *Blasting and Bombardiering*, 104.

protruding antennae, are "worn" as "emblems of terror and power" that demonstrate their destructive purpose.[569] The detail about destruction corresponds with the etymology of the word, "insect," which Derrida affirms comes from the Latin "*inseco* which means to cut, to dissect, at times to tear with the teeth *(dentibus aliquid insecare),* to put into small pieces."[570] The insect is also significant for Lewis because, unlike the animal world, insects "have always carried their structure outside," as an *exterior*, in order to "thrust it upon the eye."[571] British author Owen Barfield also noted this peculiar feature of the insect when he said "the trouble about insects is that they….have all the works on the outside."[572] He compares insects to French locomotives and, as discussed in the first chapter, the kinematic components of these machines are conspicuously located on the exterior, and thus dramatically displayed. The public interest in entomology surged before First World War, as evidenced in the sheer number of publications regarding insects, and as Jessica Burstein writes "the militarization of British society was concurrent with the fascination for culture's carapaces."[573] She makes no causal claims about this concurrence, suggesting only that the links between locomotives, insects, and soldiers, are "frustratingly suggestive."[574] Lewis' interest in insects was sustained by the publications of French entomologist Jean Henri Fabre whose works appeared in

569 Lewis, *The Art of Being Ruled*, 61.
570 Jacques Derrida, "Fourmis," in Hélène Cixous and Mireille Calle-Gruber, *Hélène Cixous Rootprints: Memory and Life Writing*, trans. Eric Prenowitz (New York: Routledge, 1994), 121.
571 Lewis, *Paleface*, 251.
572 C. S. Lewis, *Surprised by Joy: The Shape of My Early Life* (New York: Harcourt, Brace & World, Inc., 1955), 8; Jessica Burstein, "Waspish Segments: Lewis, Prosthesis, Fascism," *Modernism/Modernity* 4, no. 2 (1997): 158.
573 Burstein, "Waspish Segments," 157-158.
574 Ibid.

The English Review before the war. Fabre's study and experimentation with the behavior of insects established that it is only "blind instinct" that motivates insect activity rather than some form of insect intelligence or volition.[575] These findings provided grist for the correlation Lewis would draw between insect activity and the puppets and machines in his prose. But Lewis' primary concern was with the shell, the hard exoskeleton of the insect as a model for exteriority.

The fixation on shells and dead exteriors, Foster argues, is a feature of the "binding" component of Lewis' model of "art and subjectivity."[576] Binding is associated with the dread Lewis expresses about the idea of dissolution as noted in the statement: "I resist the process of melting."[577] And so is the necessity of ego armoring which Lewis advocates in the Vorticist manifesto: "bless this hysterical wall built round the ego."[578] Foster interprets Lewis' exteriority and his privileging of surfaces through a Freudian lens with regards to the ego. For Freud, the ego is that modified part of the id that is an extension of the "surface-differentiation"[579] through which the external world (the reality principle) is brought to bear upon the id wherein the pleasure principle is unrestrained. With reference to *The Ego and the Id*, Foster explains that the ego should be "understood as a bodily image whose inside and outside are always in doubt."[580] Indeed, Freud regarded the ego as specifically a bodily ego associated with this surface *exterior*. The bodily ego "is not merely a

575 Lewis, *The Caliph's Design,* 174, n. 66.
576 Foster, *Prosthetic Gods*, 115.
577 Lewis, *Blasting and Bombardiering* , 15.
578 Lewis, *Blas I,* 26.
579 Sigmund Freud, *The Ego and the Id*, trans. Joan Riviere (New York: W. W. Norton & Company, 1960), 19.
580 Foster, *Prosthetic Gods*, 115.

surface entity," Freud writes, "but is itself a projection of this surface."[581] In *Beyond the Pleasure Principle*, Freud determines that the "living vesicle," which is "suspended in the middle of an external world charged with the most powerful energies," is equipped with a "receptive cortical layer."[582] It is the death of this cortical layer that forms an inorganic, exterior that protects the organism from annihilation by said energies. This dead envelope is resistant to stimuli and thus protects the living, underlying layers by limiting the intensity of the stimuli which are given passage within. The stimulus shield maintains its own supply of energy for the preservation of its "special modes"[583] of transforming excessive quantities of energy operating within. In other words, dangerous stimuli are immobilized through the binding of these energies in the form of a projection that is fixed to a specific representation or idea, like hatred.[584] And hatred, in Blum's terms, "seems to be the ultimate binding agent,"[585] and one that Lewis certainly employed.

Foster advances his analysis with a Lacanian interpretation of the bodily ego by adding the factors of alienation and aggression. The bodily image is not just external, it is perceived as *other*, and thus identification with that other is constitutive of alienation, which produces "aggressivity."[586] In other words, aggressiveness is derived from the incongruity between the "alienating I function" [587] and the narcissistic libido. Foster concludes that aggression, which is a consequence of

581 Freud, *The Ego and the Id*, 16.
582 Freud, *Beyond the Pleasure Principle*, 21.
583 Ibid.
584 Earlie, "Derrida's Political Emotions," 391.
585 Blum, *The Other Modernism*, 103.
586 Foster, *Prosthetic Gods*, 115.
587 Jacques Lacan, *Écrits*, trans. Bruce Fink (New York: W. W. Norton and Company, 2006), 99.

alienation, is in opposition to the armoring of the ego just as unbinding works in opposition to binding. And although armoring and exploding (binding and unbinding) seem like apt metaphors for Lewis and Marinetti, respectively, it is important to note that neither form of libidinal energy exists without the shadow of the other. Armoring and exploding function dialectically as part of the same process. Lewis' *shell* is instructive in this context because the term "shell" is a contronym, a word with opposing or contradictory meanings not dissimilar to the deployment of "case" above. Rachel Murray draws this distinction in a passage from Lewis' war autobiography, *Blasting and Bombardiering*, where Lewis endures a barrage of shelling while sheltering in a concrete dugout. With cheerful detachment, Lewis writes the following: "This room was a shell that would take some cracking. I was in it when it was hit. It was as firm as a rock. It was a pleasure to be shelled in it."[588] Murray discloses the "semantic volatility" inherent in the contradictory meanings of the word "shell," first as a noun (defense) and then as a verb (weapon).[589] Perhaps inadvertently, Murray creates a concise parallel to the opposing tendencies of armoring and exploding as she writes "The 'pleasure' of the shell….appears to function both as a means of self-protection and as a form of explosive energy."[590] But Lewis is not opposed to exploding.[591] He calls on artists to "discharge" themselves,

588 Lewis, *Blasting and Bombardiering*, 140.
589 Murray, *The Modernist Exoskeleton*, 31.
590 Ibid.
591 Jessica Burstein writes that Marinetti is compromised "as the one to stress 'blasting'" and cites the titles Lewis chose for the Vorticist journal, *Blast*, and for his autobiography, *Blasting and Bombardiering*. (Jessica Burstein, *Cold Modernism: Literature, Fashion, Art* (University Park, PA: Penn State Press, 2012), 71.)

which is a form of unbinding, and in the Vorticist manifesto he proclaims "we discharge ourselves on both sides."[592]

Lewis addresses the necessity of discharge in the following statement: "We must have the Past and the Future, Life simple, that is, to discharge ourselves in, and keep us pure for non-life, that is Art."[593] The reference to "non-life" is important and not just because the term seems to make something of a double negative in this formulation. The key corollary to armoring is implicit in the ossification of the cortical layer which turns into a dead envelope that Freud construes as *inorganic*, and this is Lewis' essential feature of art: *deadness*. Tarr, the protagonist of Lewis' eponymous novel, elevates "deadness" as the "first condition of art."[594] "The second is absence of soul," he explains, "in the human and sentimental sense."[595] For Lewis, the soul could only live "in a cadaverous activity," satirically mechanized, where its "dramatic corruption thumps us like a racing engine in the body of a car."[596] Satire is a means of freezing the subject and inspecting the resistant and hardened surface features, the lines, proportions, and masses of the work of art. "Good art must have no inside," Tarr explains, "that is capital."[597] The characters in Lewis' prose, the puppets and machines, are vehicles of this deadness.[598] His characters often seem

592 Lewis, *Blast I*, 30.
593 Ibid., 146.
594 Wyndham Lewis, *Tarr*, ed. Scott W. Klein (Oxford: Oxford University Press, 2010), 264-265.
595 Ibid.
596 Lewis, *The Complete Wild Body*, 318.
597 Lewis, *Tarr*, 264-265.
598 T. A. Normand, "'Bless the Hairdresser': A Recently Discovered Drawing by Wyndham Lewis.," *The Burlington Magazine* 128, no. 994 (1986): 36.

deader than the machinery and mechanisms of the surrounding world to which these "inviolable robots"[599] willfully subordinate themselves.

Deadness is expressed by Tarr quite literally when he sees his fiancée's "large thigh" slide out of her open dressing-gown "with ugly whiteness."[600] "It looked dead," he says, "and connected with her like a ventriloquist's dummy with its master."[601] In another scene Tarr enters a painting school and sees a group of "torpid," "indifferent," and "mechanical" art students painting a model seated in the center of the room. A clock strikes as the model begins mechanically abandoning "her rigid attitude" and she comes to life "as living statues do in ballets." The sentence "A clock struck" is not incidental. The phrase "clock struck"[602] appears several times throughout the novel, as signals of the mechanism in which these characters are installed. In *The Apes of God*, the characters are given the mechanical attributes of clocks. Lady Fredigonde, the grey-haired "Ex-Gossip-column-belle," whose "arms were of plaster" and whose head and neck rested upon "the ruined clockwork of her trunk," is portrayed as if dead.[603] She calls for her maid, Bridget, who responds "Yes milady." After the call and response, the narration continues: "The response came from the tutelary penguin, clockwork answering clockwork, while it figged out the other as if it had been its big doll."[604] There is no question regarding the puppet status of characters, both referenced as machines (clockworks).

599 Hugh Kenner, *Wyndham Lewis* (Norfolk, CT: New Directions, 1954), 48.
600 Lewis, Tarr, 42.
601 Ibid.
602 Ibid., 64, 81, 102, 152, 163.
603 Wyndham Lewis, *The Apes of God* (Santa Barbara: Black Sparrow Press, 1984), 10.
604 Ibid., 8.

The function of the "tutelary penguin" is what Fredric Jameson would call the "slavish and comic 'obedience' of reality to its own stereotypes."[605] In other words, the autoreferentiality of the sentence is presented in "the assimilation of the unknown, the temporarily new," which in this case would be Bridget, "to the already known, the stereotype," the penguin.[606] Bridget's custodial ("tutelary") uniform of black and white appears only as an afterimage. The "big doll" is a stand-in for the human puppets. In some instances the humanity drained from the characters animates inanimate objects, anthropomorphizing mechanical apparatuses: "The clock struck off a good number of hefty seconds, standing, in the centre of the mantelpiece, upon its bandy bronze legs and claws"[607]

The frequency of clock appearances in literature is not specific to Lewis, especially after the Great War, which was in part managed by men's wristwatches. Cultural enmity toward the clock emerged from anxieties about the quickening pace of a mechanized existence where people were subjugated by timetables, and these sentiments appeared in the literature of the day.[608] (One think only of Ernest Hemingway's character, Quentin Compson, who broke the crystal of his watch and twisted its hands off.[609]) In the nineteen-twenties, an alternative expression for "what's the time" was employed in daily conversation: "How's the enemy?"[610]

605 Fredric Jameson, *Fables of Aggression: Wyndham Lewis, the Modernist as Fascist* (Berkeley: University of California Press, 1979), 71.
606 Ibid.
607 Lewis, *The Apes of God*, 11.
608 Randall Stevenson, "The Clockwork Man: Reification, Relativity, and Redemption in 1920s Fiction," *Journal of Literature and Science* 13, no. 1 (2020): 21.
609 William Faulkner, *The Sound and the Fury* (Middlesex, UK: Penguin, 1964), 76.
610 Stevenson, "The Clockwork Man," 21.

Considering the proximity to the carnage of the Great War this sardonic expression inhabits a special darkness. The expression appears in Lewis' "theological science fiction"[611] novel, *The Childermass*:

> BAILIFF. "How's the enemy?'
> COMMISSARY (jumping to attention: while a movement of instantaneous martial
> watchfulness transfixes the line of blacks and heiduks). "What enemy excellency?"
> BAILIFF. "I mean the time."[612]
>
> *Voices from all sides.* "Eleven A.M. sir."[613]

That Lewis included this expression is unsurprising since *the enemy* had become a sort of persona for him in the nineteen-twenties, a time during which he published a review of art and literature with the same title.

The idea of clockwork, with its pinions and trains of gears with interlocking teeth, connotes a methodical slowness that Lewis exploits in "The Body Leaves the Chair" which gives an account of Lady Fredigonde rising from one chair and sitting down in another chair in an adjacent room. Lady Fredigonde's thought process and subsequent decision to rise from the chair are described in disembodied, hydraulic terms that portray a larger structure extending beyond the seated character as follows: "she directed peremptory injunctions throughout her ruined establishment, to the entire vasomotor system beneath—bells rang hot-temperedly in every basement and galley."[614] There is the intimation of dampness, plumbing, and hot flashes only tangentially associated with the referent, Lady Fredigonde. When she rises from the

611 Jameson, *Fables of Aggression,* 71.
612 Wyndham Lewis, *The Childermass* (New York: Covici Friede, 1928), 264.
613 Ibid.
614 Lewis, *The Apes of God*, 22.

chair, the movement is one of abstraction and decapitation: "without fuss the two masses came apart. They were cut open in two pieces."[615] Again, there is no sense of embodiment in this description. The deadness of the "veteran gossip star," with her "mid-victorian wasp-waist," is inscribed in a precise, mechanical diction that portrays not so much the lady-as-puppet, but her function in a mechanism in which she is a component:

> The unsteady solid rose a few inches, like the levitation of a narwhal. Seconded by alpenstock and body-servant (holding her humble breath), the escaping half began to move out from the deep vent. It abstracted itself slowly. Something imperfectly animate had cast off from a portion of its self. It was departing, with a grim paralytic toddle, elsewhere. The socket of the enormous chair yawned just short of her hindparts. It was a sort of shell that had been, according to some natural law, suddenly vacated by its animal. But this occupant, who never went far, moved from trough to trough—another everywhere stood hollow and ready throughout the compartments of its elaborate animal dwelling.[616]

Lewis inserts the images of vent, socket, and shell, hardened receptacles that allude to the hollowness and deadness of the automaton. The conceit of the world as an enormous mechanism is implied in the oft-quoted list of items that approach deadness in the natural world: "the armoured hide of the hippopotamus, the shell of the tortoise, feathers and machinery."[617] The inclusion of "machinery" corresponds to a natural world that Lewis describes as "indiscriminate, mechanical and unprogressive."[618] All living forms are mechanisms and these "mechanical arrangements" are produced in "Nature's workshop."[619]

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615 Ibid.
616 Ibid.
617 Lewis, *Tarr*, 265.
618 Lewis, *The Caliph's Design*, 77.
619 Ibid.

The sado-mechanistic bent of Lewis' prose is manifest in the satirical portrayals of humans as imbecilic "creaking men machines"[620] plied by external forces. Lewis developed a series of satirical puppets named *Tyros*, which are machinic caricatures with immense vitality but severely limited, "about that of a puppet worked with deft fingers, with a screaming voice underneath." [621] In Lewis paintings of Tyros the malignant figures are typically featured with sardonic grins (including his self-portrait as a Tyro). Lewis viewed these grotesques dispassionately, in his terms, "underneath the world of the camera,"[622] where they were "snapshotted,"[623] "Kodacked,"[624] or fixed. The synonyms employed for "to photograph" or "to take a picture" portray a sort of mechanical aggression or violence with regards to these characters and the prosthetic device of the camera is thus weaponized. The world of the camera then is a mechanical apparatus and it is the *technique of the setting* that moves the limbs of the characters rather than their own volition. Lewis uses the "wheel at Carisbrooke" as an analogy for automatons embedded in a larger mechanism, oblivious to the imposition of the machine. In the well-house there is a tread-wheel that "imposes a set of movements upon the donkey inside it, in drawing water from the well."[625] And while this is "easy to grasp" in larger, more complicated mechanisms, like a metropolis or a war, the "complexity of the rhythmic scheme" is so vast that for the spectator it seems to merge with Nature

620 Lewis, *The Complete Wild Body*, 149.
621 Ibid., 354.
622 Ibid., 318.
623 Ibid., 152.
624 Ibid., 318.
625 Ibid., 315.

and "pass….as untrammeled life." Lewis proposes that most people are puppets, mechanically bound in a spectacle that is as circumscribed as a Euclidean theorem.[626]

In *The Childermass*, the character Hyperides implicates people (puppets) as constituent elements bound in a mechanism when he says "It is not people that interest me so much, as the principles that determine their actions."[627] It is the principles on which the schematic for said mechanism is based rather than the movements of puppets that is compelling. Lewis transposes some of his war experience into the surreal underworld of *The Childermass* wherein the two protagonists are soldiers who have died in the war, Satters and Pullman. The characters are automatons, seemingly unaware that they are dead. Pullman is patting the dust from Satters' garments when a hollow sound thumps up from his chest and he exclaims "One would say one was hollow!" Satters strikes his chest again, "sounds somehow empty, doesn't it?"[628] The status of the characters is adjudicated by the Bailiff, a sort of envoy from Hell, who presides over this underworld. "I like to see a few corpses about," the Bailiff opines, "it makes the others seem almost alive."[629] The image of scattered corpses suggests a battlefield setting reminiscent of Lewis' observation written while *in* the war: "You meet plenty of dead men."[630]

Great Britain entered the war just two months after the publication of the first issue of *Blast*. In his autobiography Lewis claims that this issue registers "with

626 Ibid.
627 Lewis, *The Childermass*, 360.
628 Ibid., 4.
629Ibid., 362.
630 Wyndham Lewis, quoted in Paul Edwards, "Wyndham Lewis and the Uses of Shellshock: Meat and Postmodernism," in *Wyndham Lewis and the Cultures of Modernity* (Farnham, UK: Ashgate, 2011), 229.

surprising sharpness" and a butcher-like directness" the first stages of a "great war."[631] "It makes a dream and a lullaby of those dark happenings," he writes, "which plunged us like a school of pet gold fish, out of our immaculate 'pre-war' tank, into the raging ocean." These reflections, written twenty years after the war, are couched in levity as suggested by the goldfish analogy and the choice of the indefinite article which makes a double entendre of "great war." Lewis recounts the "romance of battle" and suggests that there is an "exceedingly romantic character" to all of his writings on war while claiming that he is not a romantic himself. But he makes an important distinction regarding his understanding of "romance," not just that romance is a narcissistic experience that has little to do with the "romantic object," but that romance is a drug. In Lewis' terms, "it partakes of the action of a drug." Lewis herein hints at the narcotic pleasure of war as phantasmagoria.[632]

Lewis struck a different tone in the years immediately following a war that he condemned as a "remarkable retrogression," which people had misinterpreted as a "speeding up."[633] The change in his painting from mechanomorphism to figuration was by dint of the war. This shift may have been the simple consequence of the requirements of his position as an official War Artist for the governments of Great Britain and Canada.[634] His war paintings were displayed in an exhibit titled *Guns* in 1919 and in the foreword to the catalogue he made note of the probability that the

631 Lewis, *Blasting and Bombardiering*, 115.
632 Ibid.
633 Wyndham Lewis, quoted in Udith Dematagoda, "'Machinic Desire': Wyndham Lewis, Masculinity and the Sublime Horror of Technological War," *Modernist Cultures* 15, no. 4 (2020): 504.
634 Paul Edwards, "Wyndham Lewis and the Uses of Shellshock: Meat and Postmodernism," in *Wyndham Lewis and the Cultures of Modernity*, eds. Andrzej Gasiorek, Alice Reeve-Tucker, and Nathan Waddell (Birmingham, VT: Ashgate Publishing, 2011), 223-224.

public would be surprised that he had eschewed his "vexing diagrams" and "conceded Nature."[635] Lewis also instructed that his paintings pretend nothing but "to give a personal and immediate expression of a tragic event."[636] But this tragedy would become the "new subject-matter" for artists, not war in general but this war specifically, the modern, technological war.[637] Lewis wrote a letter to Pound in 1917 from the front in which he detailed a recent barrage of shelling he had endured. The shelling persisted for hours. Then Lewis embarked on the two hour journey to the next observation post, being "shelled for half that distance," and stumbled into the body of a Scottish soldier with his "head blown off so that his neck" was "level with the collar of his tunic."[638] He compares the headless corpse to "sheep in butchers' shops, or a French Salon painting of a Moroccan headsman."[639] That the aestheticization of the scene is a distancing technique is self-evident, a way of transforming the horror into something benign and familiar. The aestheticization of war is a form of psychic armor.

IV.

Gertrude Stein and Pablo Picasso were standing on a Paris street when they first saw a camouflaged truck. They had heard about camouflaged trucks but this was their first sighting. Picasso was amazed. "Yes it was we who made it," he cried out,

635 Dematagoda, "'Machinic Desire,'" 504.
636 Ibid.
637 Wyndham Lewis, quoted in Ibid., 500.
638 Wyndham Lewis, quoted in Edwards, "Wyndham Lewis and the Uses of Shellshock, 229.
639 Ibid.

"that is Cubism."[640] Stein also saw Cubist attributes in the composition of the Great War, which she considered as intrinsically Cubist:

> Really the composition of this war, 1914-1918, was not the composition of all previous wars, the composition was not a composition in which there was one man in the centre surrounded by a lot of other men but a composition that had neither a beginning nor an end, a composition of which one corner was as important as another corner, in fact the composition of cubism.[641]

For many, the war was viewed in terms of art. The obliteration of the landscape and the sheer volume of machines and industrial armaments made this conflict a war of visual fragmentation and roboticization.[642] The ineffability of the war was such that viewing it through an aesthetic lens made it more comprehensible. And in spite of (or, rather, because of) the monumental force of the war, there was an enduring fascination for both spectators and soldiers. The Futurists also claimed the First World War as their own: for them the war was *intrinsically Futurist*. The dehumanization, the sense of disorientation, and the mechanized violence of the ahistorical moment for the Futurists represented, in Lucia Re's terms, "violence and destruction brought to a transcendent peak."[643] Boccioni's diaries were replete with anguished descriptions of trench life, but there were as many expressions of enthusiasm, enchantment and a moving recognition of the sublimity of battle.[644] Robert Graves regarded the brain tissue clinging to a friend's cap as "a poetical

640 Gertrude Stein, *Picasso*, 11.
641 Ibid.
642 Lucia Re, "Futurism, Seduction, and the Strange Sublimity of War," *Italian Studies* 59, no. 1 (2004): 85.
643 Ibid., 84.
644 Ibid., 83-84.

figment."[645] And Marcel Proust expressed his quasi-sacralized bemusement in the following statement: "As people used to live in God, I live in the war."[646]

During the Zeppelin raids over Paris, Jacques-Émile Blanche, Misia Sert, and others watched from a balcony, completely mesmerized. In the sky they saw "whales, sharks….the monster Fafner over the Louvre, waddling along with his giant body of aluminum and gutta-percha, darting electric rays from his beacon eyes over the sleeping Ile de la Cite."[647] Blanche remarked that "these props of terror belong in the theatre, as do the artillery's polyphony."[648] On the battlefield, Percy Jones of the Queen's Westminster Rifles infantry regiment observed the destruction of Ypres and found "something horribly fascinating about such appalling devastation."[649] Months later Jones was still spellbound. "The fascination of Ypres grows upon me," he remarked, "and I am still searching for a house that has not had a direct hit from a shell."[650] Another soldier fighting in the Second Battle of Ypres, W. Gamble, recalled that it was "really a wonderful sight—weird, grotesque, and desolate of course—but really interesting." Gamble was so dazzled by the ravaged town that he expected the place to be "flooded with sight-seers and tourists after the war, and they will be amazed by what they see."[651]

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645 Eksteins, *Rites of Spring*, 214.
646 Marcel Proust, quoted in Ibid., 209.
647 Arthur Gold and Robert Fizdale, *Misia: The Life of Misia Sert* (New York: Alfred A. Knopf, 1980), 166.
648 Ibid.
649 Eksteins, *Rites of Spring*, 214.
650 Ibid.
651 Ibid.

Gamble's enthusiastic speculation about post-war tourism was prescient, although this sort of dark tourism was advertised before the hostilities even ended. The horror and depravity of war was first marketed as a tourist excursion by Michelin, already well known for publishing guidebooks with details regarding hotels and restaurants for the express purpose of encouraging motoring. In 1917 they changed the format and published guides to the major battlefields, albeit without listings of accommodations because the infrastructure in these places had been reduced to rubble.[652] An advertisement appeared in the Swiss *Basler Nachrichten* newspaper (Switzerland) with the heading "Battle Field Excursion Trips by Car," which Karl Kraus discusses in a 1920 essay titled "Tourist Trips to Hell."[653] The advertisement promises a train ride through the battlefield of Verdun that will convey to the visitor "the quintessence of the horror of modern warfare" and create "an unbelievably impressive picture of horror and frightfulness."[654] The following summary of the trip is included in the advertisement: "600 kilometers by rail, second class. An entire day through the battlefields in a comfortable car, overnight stay, first-class meals, wine, coffee, tips, passport formalities and visas from Basel round trip, all included in the price of 117 Swiss francs." The tour would cross the few square kilometers "where perhaps more than 1,500,000 bled to death," and where

652 Mark Connelly, "The Language of Battlefield Guidebooks, 1919-25," in *Multilingual Environments in the Great War*, eds. Julian Walker and Christophe Declercq (New York: Bloomsbury Publishing, 2021), 198.
653 Karl Kraus, "Tourist Trips to Hell," in No Compromise: Selected Writings of Karl Kraus, ed. Frederick Ungar (New York: Frederick Ungar Publishing Co., 1977), 70-71.
654 Ibid.

"there is no square centimeter not rutted by shells," the latter detail of which mirrors Jones' fascination.[655]

Even Dada, an art movement formed in reaction to the "orgy of self-destruction"[656] of the Great War, seemed to luxuriate in the very destruction that surrounded the country in which they sought refuge. Hugo Ball, in the *Dada Manifesto* (1916) called the movement "a world war without end, dada revolution without beginning,"[657] (somehow echoing Stein's remarks above). But he referenced the war more directly by stating "the war is our brothel."[658] As an anti-art movement against anything that was taken seriously, who opposed both the pacifists and the leaders who started the war, dada injected an asymmetric nihilism into the dialectic of war and peace, siding with neither.[659] Dadaist Richard Huelsenbeck expressed this penchant for catastrophilia in a 1918 speech in Berlin: "We were for the war, and today Dadaism is still for war. Things have to collide; things are not proceeding nearly as horribly as they should."[660]

The enthusiasm for technological destruction was not the purview of a right wing or left wing politics, just as the avant-garde and modernism diverged across political boundaries. The motivating impulse behind these movements was the liberation of creativity against tradition. And this leaning corresponds to the

655 Ibid.
656 Eksteins, *Rites of Spring*, 210.
657 Hugo Ball, quoted in John D. Erickson, "The Apocalyptic Mind: The Dada Manifesto and Classic Anarchism," in *Manifestoes and Movements*, Vol. VII, French Lit. Series (Columbia: University of South Carolina, 1980), 100.
658 Eksteins, *Rites of Spring*, 210.
659 Sami Khatib, "Barbaric Salvage: Benjamin and the Dialectics of Destruction," *Parallax* 24, no. 2 (2018): 146-147.
660 Richard Huelsenbeck, quoted in Sloterdijk, *Critique of Cynical Reason*, 392.

"modernist credo" described by Herf as the "triumph of spirit and will over reason and the subsequent fusion of this will to an aesthetic mode."[661] But there were a number of illiberal cultural revolutionaries who were under the spell of a sort of technological unconscious and a fascist imaginary; who eschewed parliamentary democracy, which was considered ineffectual and effeminate; and who indulged in a virulent nationalism as a bastion against both capitalism and communism. Herf calls this vision "reactionary modernism." Reactionary modernists, like Marinetti and Jünger, were "technological modernizers" who sought to liberate technologies that had been bogged down in a bourgeois economy hampered by the fixation on short term profits. Reactionary modernism is constitutive of the destructive vitality invested in the machine and aligned with the belief that technology would advance the aestheticization of politics and address the crisis of cultural decay. The reactionary modernists articulated the will of vanguard modernists in terms of crushing tradition and seeking aesthetic experience as the quintessential organizing principle of life. But more importantly, the centrality of the aesthetic experience transcended the "moral norms" of polite society and ushered in fantasies of violence and horror that were a refreshing departure from bourgeois ennui. [662]

The seductive aestheticization of war, or even the technological world at large, induces an intoxication from the spectacle that subsequently numbs (or deadens) one's relationship with the social realm or even the fabric of reality that is

661 Herf, *Reactionary Modernism*, 12.
662 Ibid.

not subsumed in the aesthetic.[663] Jünger imparts the enchantment of the battlefield in terms of an acute sensory overload that precipitates "a fever dream of supreme reality." In the midst of the maelstrom where "objects tremble and dance like the images of a flickering film" one is transported, as if by the intervention of some "foreign will," into a "fabulous world" where "everyone is drunk without wine."[664] This is a manifestation of the anaesthetic component in the aesthetics of technological destruction. Susan Buck-Morss delineates the crucial relationship between aesthetics and *anaesthetics* in her eponymously titled essay, wherein she revisits Benjamin's contemplations regarding perceptual shock and phantasmagoria.

Buck-Morss begins with the etymological definition of "aesthetics" from the Greek term *aisthesis* which means "the sensory experience of perception," in other words, the entire range of sensation and perception as distinguished from the narrower region of conceptual thinking.[665] The notion that the human nervous system is encased within the surfaces of the body, separate from the outside world, is imprecise because the circuit of sense-perception and motor response "begins and ends" in the arena *exterior* to the body. That the internal components of the system in the absence of external stimuli (sensory deprivation) will begin to degenerate attests to the fact that the outside world is needed to complete the circuit. Aesthetic cognition is the result of the mimetic concurrence between perception, established by the "outer stimulus," and the "inner stimulus," which is comprised of bodily sensation

663 Mikkonen, *The Plot Machine*, 26.
664 Ernst Jünger, *Fire and Blood*, trans. Kasey James Elliott (U.S.: Anarch Books, 2021), 46-47.
665 Susan Buck-Morss, "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered," *October* 62 (1992): 13; Terry Eagleton, *The Ideology of the Aesthetic* (Malden, MA: Blackwell Publishing, 1990), 13.

and sense memories.[666] Buck-Morss calls this "aesthetic system of sense-consciousness," where external perceptions coalesce with mental images fused with memory and expectancy, the "synaesthetic system." The synaesthetic system is a cognitive process facilitated through the entire "corporeal sensorium," which is located on the surface of the body and mediates between inside and outside. Buck-Morss clarifies that this "physical-cognitive apparatus" encounters the world pre-linguistically, "'out front' of the mind," and primarily serves instinctual exigencies.[667]

Benjamin recognized that the human sensorium had become increasingly inundated by excessive amounts of stimuli and deduced that the "threat from these energies is one of shocks."[668] He also determined, per Freud, that the protection against excessive stimuli is more important than their reception. Under duress, the ego employs consciousness as a shield against the barrage of shocks and thus precludes the retention of said shocks in the form of "memory traces."[669] In other words, the "openness" of the synaesthetic system is blocked so that no memory is recorded. Within a mechanized, technologized environment, whether in the theater of war or at the site of industrial production, the "human sensorium" is exposed to "physical shocks" that correspond to "psychic shock."[670] And under these conditions the survival of the individual is contingent upon responding to the shocks "*without* thinking."[671] Consciousness of the present moment (perception) is isolated from

666 Ibid., 17, n. 53.
667 Ibid., 6, 13.
668 Walter Benjamin, "On Some Motifs in Baudelaire," in *Illuminations: Essays and Reflections*, trans. Harry Zohn, ed. Hannah Arendt (New York - Schocken Books, 2007), 161.
669 Ibid.
670 Buck-Morss, "Aesthetics and Anaesthetics," 16-17.
671 Ibid., 16.

memory and thus mechanical perception fails to become actual experience. In Benjamin's terms, the "protective eye" averts the impression of sense-memories and memory itself becomes impoverished.[672] Buck-Morss cites neurological research which points to the "contradiction" between the "reflective calm necessary to be creative (and to invent machines)"[673] and the destruction of said calm by the "very machines….the reflective mind creates."[674] This conclusion corroborates Benjamin's observation and serves as a testament to the double logic of the technological prosthesis.

The synaesthetic system has been mobilized to deflect "technological stimuli" in order to protect the body from the trauma of injury, and the psyche from the "trauma of perceptual shock."[675] This psychic armoring has triggered the degradation of experience, which Buck-Morss views as the general state of modernity. In response to the constant state of overstimulation, the synaesthetic system has reversed its role, and now the system's objective is to "numb the organism," "deaden the senses," and "repress memory." "Thus the simultaneity of overstimulation and numbness," Buck-Morss concludes, "is characteristic of the new synaesthetic organization as *an*aesthetics." Technology has become an extension of the human sensorium, increasing the depth of perception, and thus revealing more of the world to the senses; but because the senses are left open to dangerous stimuli, technology assumes the role of the ego and provides "defensive insulation" in the form of an

672 Benjamin, "On Some Motifs in Baudelaire," 191.
673 Buck-Morss, "Aesthetics and Anaesthetics," 18, n. 60.
674 Frederick Mettler, quoted in Ibid.
675 Buck-Morss, "Aesthetics and Anaesthetics," 18.

illusion. Overstimulation and numbness are the result of a technological anaesthetic that is best understood in terms of phantasmagoria, or "the appearance of reality that tricks the senses through technical manipulation."[676]

Buck-Morss argues that beginning in the late nineteenth century the experience of intoxication, rather than being chemically induced, became a product of reality. It was also at this time that "anaesthetics became an elaborate technics" as an arsenal of drugs was added to the previously standard forms of narcotics. Some of these drugs and treatments were used to treat "neurasthenia," which is the "disintegration of the capacity of experience." Buck-Morss maintains that beginning with the "phantasmagoria of textures" and tones in bourgeois interiors which provided a "protective shield" for the elite occupants, phantasmagorias took the form of shopping arcades, simulated environments (panoramas, dioramas), World Fairs "the size of small cities," the metropolis, and finally war. She maintains that "a narcotic was made out of reality itself" in the form of phantasmagoria, and as technology became more advanced so did the potential of its allure.[677] Siegfried Kracauer offers a depiction of metropolitan spectacle as he notes "the lights have gathered for their own pleasure, instead of shining for man," which intimates the manner in which phantasmagoria tends to mask its instrumental source of power.[678] "Their advertisements sink into the mind without allowing one to decipher them," he

676 Buck-Morss, "Aesthetics and Anaesthetics," 18, 22.
677 Ibid., 19, 22.
678 Siegfried Kracauer, "Analysis of a City Map," in *The Mass Ornament: Weimar Essays*, trans. Thomas Y. Levin (Cambridge, MA: Harvard University Press, 1995), 43; Buck-Morss, "Aesthetics and Anaesthetics," 33.

writes, "the reddish gleam that lingers settles like a cloak over one's thoughts."[679] As Kracauer exhibits, the inability to decipher the signs is coupled with the enticement these signs solicit.

Phantasmagoria also takes the form of technological war. Jünger refers to this spectacle as *materialschlachten* (battles of material), borrowing a term coined by historian Hans Delbruck to signify battles of technological armaments, and offers rapt descriptions of the entire war and the

war industry as one massive mechanism in which the soldiers are inscribed:

> This is the material. Wide industrial districts with the winding towers of coal shafts and the nightly gleam of blast furnaces appear before the eye—machine halls with drive belts and flashing flywheels, mighty freight stations with flashing tracks, the flurry of colorful signal lanterns and the order of the white arc lamps that geometrically illuminate the room. Yes, back there it is joined and forged in the meticulously regulated operations of a gigantic production, and then it rolls along the great transport routes to the front as a sum of power, as stored force that is discharged devastatingly against man.[680]

Jünger describes a phantasmagoria in terms of gleaming and blasting and flashing geometric illumination, or rather he describes the whole war machine, *the material*, in phantasmagoric terms. As evidenced in Jünger's observations, the aestheticized destruction of war has an intoxicating, anaesthetic effect, especially with regards to the First World War which was subjectively and quantifiably different than previous wars in terms of the hegemony of machines and the subsequent dehumanization of the soldiers. The anonymity of the unseen enemy who had disappeared into the trenches was compounded by the fact that the surrounding bodies were deindividualized and unrecognizable behind their gas masks which appeared as

679 Kracauer, "Analysis of a City Map," 43.
680 Jünger, *Fire and Blood*, 9.

"white rubber skulls," with gawking "quadratic glass eyes," and "fantastic beaks."[681] "I had the icy sensation of conversing not with people," Jünger writes, "but with demons."[682] Dehumanization wrought by the war machine shifted agency from the component parts (the roboticized soldiers) to the real protagonist which was the machinery itself, war as spectacle. To use Alfred de Vigny's phrasing, "technology sublimates suffering."[683]

Lewis frames dehumanization in terms of "anaesthesia and mechanization," and he attributes the phenomenon to the New Nihilists. He regards the "paralysis of our civilized or human instincts" that has "crept over the whole of humanity" as the result of the "nihilist orthodoxy" of anaesthesia and mechanization. The adherents of anaesthesia and mechanization, he argues, consider the "colossal welter of brutality" of the Great War as some form of emancipation.[684] And this statement corresponds with Hewitt's distinction regarding the Futurist proclivity for bodily destruction: "self-destruction is not the opposite but the fulfillment of liberation"[685] The technological "alienation of the senses,"[686] or in Benjamin's terms "self-alienation," has created a crisis of perception and a crisis of cognitive experience. Benjamin

681 Doris Kaufmann, "'Gas, Gas, Gaas!' The Poison Gas War in the Literature and Visual Arts of Interwar Europe," *One Hundred Years of Chemical Warfare: Research, Deployment, Consequences*, eds. Bretislav Friedrich, Dieter Hoffmann, Jürgen Renn, Florian Schmaltz, and Martin Wolf, eds. (Cham, Switzerland: Springer Open ebook, 2017), 181; Jünger, *Fire and Blood*, 43.
682 Ernst Junger, *Storm of Steel*, trans. Michael Hofmann (New York: Penguin Books, 2016.
683 Mikkonen, *The Plot Machine*, 26.
684 Wyndham Lewis, *The Diabolical Principle and the Dithyrambic Spectator* (New York: Haskell House Publishers, Ltd., 1971), 47.
685 Ernst Jünger, "On Danger," in *Ernst Junger*, special issue, *New German Critique* 59 (Spring-Summer 1993): 31; Andrew Hewitt, "Fascist Modernism, Futurism, and Post-modernity," in *Fascism, Aesthetics, and Culture*, ed. Richard J. Goslan (Hanover, NH: University Press of New England, 1992), 49.
686 Buck-Morss, "Aesthetics and Anaesthetics," 37.

maintains that the phantasmagoria of war provides its adherents with the "artistic gratification of a sense perception that has been altered by technology."[687] The individual, Benjamin argues, has become its own "object of spectacle," and this experiential disengagement provides the locus where one can experience one's own destruction "as an aesthetic pleasure of the first order."[688] The illusory desire to be "vitally present at one's own annihilation"[689] is a consequence of the incapacity to comprehend the spectrum of destruction from which the subject is anaesthetized. But the anaesthetic detachment of the individual occurs not only from becoming the object of spectacle but from the sheer enormity of the phantasmagoria itself. "We were no longer afraid," Jünger writes, "for the spectacle was of a magnitude that no longer allowed any human feeling to arise."[690]

V.

Jünger's armor and his totalizing vision are encapsulated in the statement, "Technology is our uniform."[691] At the root of this utopian conception of human engineering is the problem of pain, which is only eliminated through the convergence with technology. Jünger contends that nothing is more ineluctable than the persistence of pain, but pain afflicts most severely those who attempt to consign it to the "realm of chance," as if pain were something one could avoid or evade. In order

687 Marinetti, quoted in Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*. trans. Harry Zohn. ed. Hannah Arendt (New York: Schocken Books, 2007), 242.
688 Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 242.
689 Alberto Toscano, "The Promethean Gap: Modernism, Machines, and the Obsolescence of Man," *Modernism/Modernity* 23, no. 3 (2016): 596.
690 Jünger, *Fire and Blood*, 10.
691 Ernst Jünger, *On Pain*, trans. David C. Durst (New York: Telos Press Publishing, 2008), 31.

to obstruct "feeling" one must grit one's teeth and master the "objective grip" that both the doctor and the warrior have at their disposal.[692] For Jünger, one needs examine the "smaller processes of life condensed into short time-intervals" like the path of the insect, and consider the immense obstacles it must face while acknowledging that the insect's path "is but a likeness of our own."[693] The technically measured intervals of reduction in Jünger's formulation are suggestive of the objectivity required to become detached from pain, and the analogue of human life to that of the insect implies a distancing effect in the sense that its destruction, and that of human life, is inconsequential. Jünger advances the necessity of objectifying the body and relegating it to some "distant outpost" so that the body "can be deployed and sacrificed in battle."[694] One suffers pain only because in "modern sensitivity" the body is viewed as "the highest value"[695] rather than an outpost, a "hard tool of a hard will" that can be forthwith pressed into service.[696]

Jünger envisioned a new type of human being taking form, an iteration of the *new man* and the most salient feature of this being is its possession of a "second and colder consciousness," which becomes manifest with ever increasing powers of self-objectification.[697] Not be confused with "self-reflection," which Jünger associates with psychology and its object of analysis, the "sensitive human being," this second consciousness is achieved by "standing outside the zone of pain." If second

692 Jünger, *Fire and Blood*, 35.
693 Jünger, *On Pain*, 3.
694 Ibid., 16.
695 Ibid., 17.
696 Jünger, *Fire and Blood*, 19.
697 Jünger, *On Pain*, trans. David C. Durst (New York: Telos Press Publishing, 2008), 38.

consciousness is to be identical to the moments of highest achievement then "life's technology, i.e., discipline" must at all times be extraordinary. "The growing objectification of our life appears most distinctly in technology," Jünger writes, "which is sealed off in a unique way from the grip of pain." In the "great mirror" of technology one can see the machinic character that shapes human existence as evidenced in the symbols that the second consciousness reveals: prostheses, artificial limbs, and "artificial sense organs." The detachment from pain is synonymous with higher degrees of "accord between man and machine."[698] For Jünger, the machine performs in a frictionless, seamless manner the functions of which the body is incapable. Analogous to the Futurist reification of the machine, Jünger understands the machine "not as a pragmatic collection of parts" but as a "totality."[699] The satisfaction of the "pitiful basic needs"[700] of the body will not only be replaced but *transcended* by the machine.

While fighting at the front, Jünger recognized that man had fallen "victim to the superiority of the machine."[701] But the brutality of the front experience is apprehended as an integral hardening within the technological maelstrom. Jünger conceives of war as a "return to nature" in the sense that only in "tragic conflict" does one approach "the elemental," which is an eternal, vital force that emerges only in zones of absolute danger.[702] In the transcendent experience of battle, Jünger upholds that "we are simultaneously civilized and barbaric" and thus equipped to approach the

698 Ibid., 31, 38.
699 Jünger, quoted in Theweleit, *Male Fantasies Vol. 2*, 197.
700 Ibid.
701 Jünger, *Fire and Blood*, 15.
702 Jünger, "On Danger," 31.

elemental without sacrificing the acuity of consciousness. In battle, a new form of danger emerges and forms a bridge between the elemental and consciousness. The ever-present machine is the "most powerful servant of consciousness," and it is through the machine in its temporal form as a "supremely complicated mechanical contrivance" that the elemental reveals itself.[703] The motor of battle is a vital process, a "triumphal procession of a deadly will," through which armored machines move fighting men "like a mighty fist pushing masses forward….enveloped in a roaring steel cloud."[704] In Jünger's metaphysical vision, technology is by no means a "neutral power" or reservoir of resources.[705] "Behind this very appearance of neutrality," Jünger declares, "hides the mysterious and seductive logic with which technology knows how to appeal to man."[706]

For Jünger, the new zone of danger that emerged in the war had now spread across the globe. The persistent presence of danger was the lifeblood of Jünger's technological utopia. He advocated for the perpetuation of the new form of danger with the resolve to make the front experience permanent, dissolving the distinctions between war and modern life.[707] The war was poised as the exemplar for the manner in which the metropolis would begin to annex the entire domain of contemporary existence. Jünger observed the "history of inventions" and concluded that the "final aim concealed in technology" was not a state of security and comfort, but "a space of

703 Ibid.
704 Ibid.; Jünger, *Fire and Blood*, 27.
705 Ernst Jünger, *The Worker: Dominion and Form*, trans. Laurence Paul Hemming and Bogdan Costea (Evanston, IL: Northwestern Press, 2017), 102.
706 Ibid.
707 Herf, *Reactionary Modernism*, 81.

absolute danger."[708] Moreover, all of the advancements in terms of the sciences and technology had fulfilled, "directly or indirectly," the "dangerous functions of war." In particular, he points to the automobile engine and its capacity for carnage both in war and civilian life, noting the daily reports of car crashes and other catastrophes of the "technological type" in the newspapers.[709] Jünger did not relinquish the apocalyptic experience of the front when the war was over, but returned with a predication of metropolitan life infused with a danger that fractured the bourgeois logic of security.

Jünger published over a hundred essays between 1925-1933 in right-wing journals, advocating for the total mobilization of society and espousing the romantic and irrationalist qualities of technology even while the German industry was undergoing progressive *rationalization* and proliferation.[710] In the Weimar Republic, prophecies of doom regarding the dark future of aerial bombardment were prominent and bolstered (rather than diminished) the ethos of military readiness promoted by nationalist spokespersons. In fact, the horrors of First World War only inspired a more vigilant, military posture.[711] In the interwar years, Jünger saw the continuing expansion of military power and the buildup of weaponry among hostile states as the "opening act" in a spectacle in which the will to power will appear. In his words,

> The war is not the end but rather the emergence of violence. It is the forge in which the world will be hammered into new limits and new communities.

708 Jünger, "On danger," 30.
709 Ibid., 31.
710 Herf, *Reactionary Modernism,* 81.
711 Peter Fritzsche, "Dreams: Airmindedness and the Reinvention of Germany," *The American Historical Review* 98, no. 3 (1993): 686-688.

> New forms filled with blood and power will be packed with a hard fist. The war is a great school and the new man will be taken from our race.[712]

The metaphysical register in Jünger's writing frequently appears with references to blood and technology, e.g., the "iron weapons"[713] with which the nerves are intertwined and machines with blood flowing around the axles, and this signals a libidinal cathexis onto the machine, or onto technology itself.[714] The imprecision or ambiguity regarding the exact, intended meaning of terms like "machine," "technology," even "war," alludes to this shadowy dimension. War takes its purest form when the "economic and progressive elements" are chipped away and one can see the "inherent power-character of technology" as its dominion is revealed.[715] But for Jünger, "dominion and duty are one and the same."[716] The spirit that emerged from the war was "indubitably cruel" and precipitated the transformation of a new, deindividuated being, inscribed with technology and representing neither person nor individual, but *typus*.[717] This idealized worker-soldier is bound by duty, discipline, violence and death. In Jünger's conservative utopia, life is disassociated from itself in an act of technological self-sacrifice.

The objectification of Jünger's second consciousness is a diagnostic for a realm of absolute danger. This colder consciousness reinforces vision, which is calculated and invulnerable, like the mechanical eye of the camera. The prosthesis of

712 Herf, *Reactionary Modernism*, 76.
713 Jünger, quoted in Grigoris Panoutsopoulos, "The Current of Neoromanticism in the Weimar Republic: the Re-enchantment of Science and Technology." *Journal of History of Science and Technology* 9 (2014): 52.
714 Herf, *Reactionary Modernism*, 78.
715 Jünger, *The Worker*, 102.
716 Ibid., 6.
717 Ibid., 69.

photography is an armoring of perception, isolating the individual from the zone of sensitivity. The action of the camera is telescopic; its depiction is precise; and, as Jünger famously declared, it "records the bullet in mid-flight just as easily as it captures a man at the moment an explosion tears him apart."[718] The written accounts of Jünger's experience as an observation officer contextualize the detached point of focus of a soldier who seems to view himself as if through a pair of binoculars. The only distractions from the enjoyment of battle are his "watering eyes and inflamed mucous membranes"[719] in an otherwise pellucid landscape. "My function was a little like that of an antenna," he explains, "I was a sort of advance sensory organ."[720] Jünger refers to the trope of the organ as prosthesis in terms of "artificial limbs" and "artificial sense organs" but he is particularly beholden to the "artificial eye" of the camera.[721] A segment of the living world is immobilized and in this sense vision is weaponized.

In Jünger's index of the "high level of technical precision" required to wage the First World War the camera figures prominently. Alongside weaponry that "can locate the enemy to the exact second and meter" there is the camera, the optical lenses aimed at the combat zone "alongside the mouths of rifles and cannons."[722] The camera is an instrument of "a technological consciousness" which preserves optical documents that show "the face of the battlefield" and "the altitude of flight."[723] "Its

718 Ibid.
719 Jünger, *Storm of Steel*, 229.
720 Ibid., 118.
721 Jünger, *On Pain* , 38-39.
722 Ernst Jünger, "War and Photography," trans. Anthony Nassar, in *Ernst Jünger*, special issue, *New German Critique* 59 (Spring - Summer, 1993): 25.
723 Ibid. 25-26.

detailed impressions of the surface of events," Jünger avers, "are like the impressions left behind in stone of the existence of certain strange creatures."[724] The reference to the fossil is illustrative of the permanent, petrified captures of the camera, and the interest in capture and classification is implicative of Jünger's training in natural science. Entomology, in particular, is a persistent reference point in his writing, not just in terms of coleopteran forms but as a descriptive metaphor for the scientific register of his prose in which the world is presented in precise, detailed arrangements.

Jünger maintains that "the seeing of forms is a revolutionary act" because it captures a being in the "totality and unitary abundance of life."[725] The notion of the specific, separate unit included in the architectonic of classification that Jünger so extols has its origins in Linnaeus' system as expressed in the "orderly world of insects."[726] Of course, he appreciates the aesthetic qualities of the shiny, angular carapaces of insects like Lewis, but Jünger's lifelong interest in collecting insects is informed by Linnaean taxonomy and the persistence of form. As Marcus Bullock explains, the Linnaean system is the "expression of a transcendent order" that "gives meaning to each characteristic of a species," but only as an indicator in a grid that serves "as confirmation of the grand design."[727] The modernist fixation on measurement and quantification is evident in Jünger's peroration on *typus*:

> When we address a particular animal, such as an insect, as "scarabaeus," this is preceded by the encounter with a transient entity. We set and designate it as *typus*: the name now delimits a category in which we can easily accommodate

724 Ibid., 26.
725 Jünger, *The Worker*, 23.
726 Marcus Paul Bullock, *The Violent Eye: Ernst Jünger's Visions and Revisions on the European Right* (Detroit: Wayne State University Press, 1992), 66.
727 Ibid., 83.

> all other specimen of this type, whether we encounter them in nature or not, even if they are only experiments in thought. Legions fit into it. *Typus* is the model by which we take measure.[728]

Bullock argues that the "coldness and deadness" of Jünger's entomological style of writing is indicative of the attempt to "fix and hold living moments" as in photography and insect collection. Insects are euthanized with ether, impaled with a pin, and "mounted in a glass-topped case" for easy viewing. In Marcus' terms, the "self-possession" of the collected gives way to the "complete possession of the collector."[729] Drawing an analogy from pornography (of which Marcus claims Jünger was "likewise a collector"), the pleasure in viewing the erotic image arises "from the disproportion of power between the observer and the portrayed form."[730] In Jünger's oeuvre, this is an emblem of "dominion and form."

Jünger considered photography not only in terms of objectification and a colder consciousness, but as an "evil eye" or form of "magical possession," a rendering that clearly exceeds the confines of the camera.[731] This metaphysical conceptualization of the mechanical prosthesis is informed by a *stereoscopic vision*, which in its simplest form functions like Jünger's binoculars or a stereoscope through which two images fuse, creating the illusion of three-dimensionality; but in another sense the two images, or registers of reality, fuse into a single vision from which

728 Jünger, quoted in Fabienne Collignon, "Homme-Insecte: Form, Typus, Fetish," *Modernism/Modernity* 29, no. 1 (2021): 107.
729 Bullock, *The Violent Eye*, 307.
730 Marcus Paul Bullock, *The Violent Eye: Ernst Jünger's Visions and Revisions on the European Right* (Detroit: Wayne State University Press, 1992), 307.
731 Jünger, *On Pain*, 40.

emerges something greater, "a new dimension of depth."[732] Stereoscopic vision is thus a prerequisite for Jünger's *gestalt*, which is a figure or form, the whole of which is greater than the sum of its parts. For Jünger, stereoscopic vision reveals with microscopic precision the details of the material world (e.g., "the grain on a wooden table, the fired clay of a vase, or the chalky porosity of a plastered wall"[733]) but it is through this presentation that the uncanny, unseen essence of reality is unveiled. Carsten Strathausen describes Jünger's stereoscopic vision succinctly as "a means of uncovering what Jünger calls the '*Urbilder*,' i.e., the eternal, underlying essence of being."[734] What is conveyed through the stereoscope then is not merely the fusion of two images but the gestalt of an "animating force"[735] and this is *magical realism*, the play of hidden forces lurking beneath the surface, enchanting material reality.

Jünger's capacity for "double vision," as seen in the antitheses of depth and surface, functionalism and adventure, and "what is becoming" and "what has become," was developed while fighting in the Great War. In Jünger's terms, "war has taught us this vision."[736] Stereoscopic vision is itself a form of armoring assembled through the distancing effect of Jünger's disembodied perspective. The passive, scientific observation of the "gnawing labor of the mandibles" separating "caterpillar and leaf" is intercut with the surreal sequence of a squadron that "melts as

732 Ernst Jünger, *The Adventurous Heart*, trans. Thomas Frieze (Candor, NY: Telos Press Publishing, 2012), 130.
733 Ibid., 16.
734 Carsten Strathausen, "The Return of the Gaze: Stereoscopic Vision in Jünger and Benjamin," *New German Critique* 80, Special Issue on the Holocaust (Spring-Summer, 2000): 127.
735 Ernst Jünger, *Interwar Articles* (Wewelsburg Archives, 2017), 106.
736 Ibid.

if under a tempest of steel and fire."[737] The self-objectified voyeur stares through the lens of magical realism provoking an ontological disruption that occludes the natural revulsion or rational disinclination toward violence. It is a cinematic means of mythologizing disaster. Jünger's science fiction visions of the robotic worker-soldier dovetail with his scopophilic excavations of horror, and in either instance the aestheticization functions as a mechanism of psychic displacement. Sloterdijk elucidates this posture by proposing that Jünger's "coldness is the price of staying awake in the middle of the horror."[738]

The mediation of this oblique vision is often couched in the narrative of trauma. For Jünger, this would unravel as a sort of post-traumatic magical realism. Andreas Huyssen argues that the fusion of this cult of hardness with a fantasy of power betrays a fractured male subjectivity resulting from the emasculation of having lost the war.[739] He sees Jünger's scabrous illustrations of violence and mutilation as a way of transforming the material horrors of war into metaphysically acceptable features of a natural world that overdetermine memories of the battlefield. By this logic, Jünger translates terror into familiar tropes drawn from the literary traditions of decadence and horror that infuse his prose, from the Marquis de Sade to Octave Mirbeau. Jünger's scopophilia is also shaped by his subjects whose mechanical movements are motivated by will rather than introspection, so that the violence inflicted on these figures lacks force or emotional depth. The influence of de Sade

737 Jünger, *The Adventurous Heart*, 42.
738 Sloterdijk, *Critique of Cynical Reason*, 462.
739 Andreas Huyssen, *Twilight Memories*: *Marking Time in a Culture of Amnesia* (New York: Routledge, 1995), 132.

with his rule-bound world of mechanized perversion is ostensible, and in a definitional sense apposite as Benjamin had articulated the "exposure of the mechanistic aspects of the organism is a persistent tendency of the sadist."[740] The sadomasochism with which Jünger describes de Sade's prose as something to be hungrily groped with its language that "bores its red-hot spines into the flesh"[741] is reminiscent of the enthusiasm with which Marinetti recounts his car crash and "being slashed with the red-hot iron of joy!"[742] What these dispositions share is the intoxication of shock and a proclivity for catastrophilia. In this sense the trauma narrative is limited because such explanations risk portraying Jünger's aesthetics of horror solely as a reaction against catastrophe without acknowledging his indulgence enhanced by the rapidly expanding mediation through visual technologies and the attendant thrill of disaster.

Jünger wanted to enshrine with the "demoniacal precision"[743] of photography the daily technological disasters that riddled the pages of newspapers. In 1931, Jünger collaborated on a book of photographs featuring motorcar crashes, aviation disasters, sporting accidents, etc., titled *The Dangerous Moment*.[744] The preoccupation with the unseen forces at play beyond the technological terrain that is evident in his writing is not similarly rendered in photographs. The cold abstraction

740 Walter Benjamin, *The Arcades Project*, trans. Howard Eiland and Kevin McLaughlin (Cambridge, MA.: The Belknap Press of Harvard University Press, 1999), 354.
741 Jünger, *The Adventurous Heart*, 39.
742 Marinetti, quoted in *Futurism: An Anthology*, 50.
743 Ibid., 31
744 The other collaborators were Edmund Schultz and Ferdinand Bucholtz. (Gil, Isabel Capeloa. "The Visuality of Catastrophe in Ernst Jünger's Der gefährliche Augenblick and Dieveränderte Welt," *Kultur Poetik*, Bd. 10, H. 1 (2010): 83.)

of his prose is infused with a free-floating danger that betrays a deepening *affect*, thus obscuring the lucidity of distantiation and detachment. The shock photography also registers the overt sense of danger and insecurity, but the effect is ephemeral, and through the trick of mediation the images risk becoming fossilized as cultural tropes. Kracauer alludes to the limits of this optical regime by claiming that through the visual technologies of photography and film "palpable life becomes an apparition," and the "multifold pictures" affirm an arbitrary set of ornamental images rather than an authentication of life.[745] For Kracauer, the "'image-idea' drives away the idea" because the photograph portrays the "spatial configuration of a moment" that is devoid of truth content.[746] The viewer of shock photographs becomes inoculated from the visceral depictions of horror because the photograph, as Roland Barthes concluded, "introduces us to the scandal of horror, not to horror itself."[747] The motley selection of shock photographs in the photo book produces a propaganda of danger in a form that is not without a scopophilic engagement, and this is by design. Brigitte Werneburg makes the distinction that for Jünger (and for Barthes) the prosthesis of photography effectuates through mediation not so much the "aesthetics of the object" but the "aesthetics of perception itself."[748]

Jünger collaborated on another book of photographs in 1933 titled *The Transformed World*, which conveys the anticipated shift in mass culture toward an

745 Siegfried Kracauer, *From Caligari to Hitler: A Psychological History of the German Film* (U.S.: Princeton University Press, 1947), 308.
746 Kracauer, "Photography," in *The Mass Ornament*, 56-58.
747 Roland Barthes, *Mythologies: The Complete Edition*, trans. Howard and Annette Lavers (New York: Hill and Wang, 2013), 118.
748 Brigitte Werneburg, "Ernst Jünger and the Transformed World," trans. Christopher Phillips, *October* 62 (Autumn, 1992): 53.

increasingly deindividuated and functionalized typus, distinguished ideally by the masses' "voluntary entry into uniform."[749] The book displays documentary photographs, largely drawn from commercial agencies, with provocative captions, slogans, and explanatory notes. There is a particular emphasis on the linear distribution of almost featureless subjects whose physiognomy is vacant, uniform, and defined by a "mask-like rigidity of the face."[750] The metallic visage of the male and the cosmetic impression of the female are replicated in geometric arrangements of soldiers with goggles, industrial workers in welding helmets, and women in beauty parlors seated under semi-hemispherical hair dryers. Jünger notes that in this techno-society the homogeneity of types will be static even when enhanced externally by "beardlessness, hairstyle, and close-fitting headgear."[751]

The photographic representations of undifferentiated character types are produced through a melding of mass media and Weimar *girlkultur* captioned variously as "cosmetic masking," "the empire of cosmetics," and "artificial mannequin."[752] *Girlkultur* was a phenomenon in Weimar cultural life that emphasized the fashionable "girl" image that appeared in popular magazines and publications covering theater and dance. But this new aesthetic was popular throughout Europe in the nineteen-twenties in the form of music hall revues that featured "the staging of half-naked dancers in highly ornamental patterns," or in

749 Jünger, quoted in Ibid., 52.
750 Jünger, *The Worker*, 80.
751 Ibid. 75.
752 Werneburg, "Ernst Jünger and the Transformed World," 58.

Kracauer's terms, ""sexless bodies in bathing suits."[753] As Terri J. Gordon accounts, the mechanized routines performed by these troupes of girls exhibited features of both "a conveyer belt and a military parade."[754] The replication of synchronized dancing girls resembling automatons provides the backdrop for the uniformity in Jünger's photographs. An arc of dismembered mannequin legs adorned with silk stockings appears as an amalgamation of latent eroticism and industrial production. "The decay of the individual physiognomy," the caption says, "brings forth a strange world of marionettes."[755] Jünger gestures toward the uncanny persistence of the mannequin, a human form transformed into a product or an inanimate salesperson. The inspiration for the mannequin form itself was a vulgarization of the hollow headed, geometric figures in the metaphysical paintings of De Chirico remodeled for consumerism.[756] The project of deindividuation is manifest in each portrait of social activity, from mannequins to masks, cast in quasi-formalized and abstracted human forms, amassed from an expanding visual media typifying the hardened, honed physique of sports culture, the geometric configurations of gymnastics, and the model of beauty in advertisements. In another instance, the headshot of Greta Garbo is set against a row of women reclining in exfoliating masks, the objectification of the film star highlighted by the caption "the prototype….and its copies."[757]

753 Terri J. Gordon, "Girls, Girls, Girls: Re-Membering the Body," in *Rhine Crossings: France and Germany in Love and War*, eds. Aminia M. Brueggemann and Peter Schulman (Albany, NY: SUNY Press, 2006), 91; Kracauer, "The Mass Ornament," in *The Mass Ornament*, 76.
754 Gordon, "Girls, Girls, Girls," 91.
755 Ibid.
756 Karen Pinkus, *Bodily Regimes: Italian Advertising under Fascism* (Minneapolis: University of Minnesota Press, 1995), 87, 91.
757 Werneburg, "Ernst Jünger and the Transformed World," 59.

Kracauer described Jünger's work in disparaging terms as a "gestalt-show,"[758] noting that photo book propaganda such as *The Transformed World*, designed to engage wide audiences with the intimations of what the technological utopia might consist, was a construction that was anything but political. The gestalt-show was metaphysical rather than political, signaling instead "a line of flight leading away from politics."[759] Kracauer's appraisal had little to do with the photo book's exclusion from the realm of high art or its tacit endorsement of mass culture (for Jünger even saw "forms of discipline" hidden within the "entertaining aspect of communications technologies"[760]), but because Jünger succumbed to the enchantment of snapshots. Kracauer was also influenced by this "blizzard of photographs,"[761] but he was concerned that the distraction of images would induce a disregard for their meaning and thus sought to exorcise these tendencies. It is not "without good reason," Kracauer suggests, that the world is equated "with the quintessence of photographs," but the crucial point is to recognize that the analysis of these surface features provides an illumination of the historical process. Jünger's detachment was symptomatic of the way the world would be viewed increasingly through the prosthesis of photography, and that general mode of thought is *ambivalence*. Both figures recognized the atmosphere of ambivalence but for Kracauer this was a point of departure.

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758 Huyssen, Andreask Huyssen, "Fortifying the Heart: Totally Ernst Jünger's Armored Texts," *New German Critique* 59 (1993): 9.
759 Kracauer, quoted in Huyssen, *Twilight Memories*, 132.
760 Jünger, *On Pain*, #14.
761 Kracauer, "Photography," 58.

Jünger used the technological prosthesis to dissociate himself from his bodily sensorium, leaving him dazed in the face of the phantasmagoria.[762] In an analogous sense, the dancing troupes of the revues created for Europeans in the inter-war period both a commemoration of the trauma of war and the means to escape contemplation through distraction.[763] The dancers' uniformity of movement foreshadowed Nazi spectacles in which the masses were mobilized, the surface features of which provided visual pleasure for the whole.[764] Forty years after Kracauer's analysis of Weimar culture, the alienation of sensory perception would be addressed in terms of spectacular society by Guy Debord, for whom Kracauer was a forerunner. Alienation hinges upon the spectator's identification with the "dominant images" of the spectacle, which reinforces the spectacle's embrace. "The spectacle's estrangement from the acting subject is expressed by the fact that the individual's gestures are no longer his own," Debord writes, "they are the gestures of someone else who represents them to him."[765] The crisis in perception of that Kracauer documents becomes a crisis in representation in the postmodern era.

762 Tyler Schroeder, "Siegfried Kracauer and Ernst Jünger: Writing between History and the Beyond," *New German Critique* 46, no. 1 (2019): 181.
763 Gordon, "Girls, Girls, Girls," 89.
764 Buck-Morss, "Aesthetics and Anaesthetics," 38.
765 Guy Debord, *Society of the Spectacle*, trans. Ken Knabb (London: Rebel Press, 2005), 16.

Chapter Four

Abstraction and Ambivalence in J. G. Ballard's Perverse Dystopias

The disaster novels of J. G. Ballard provide a locus in which there are reflections of each of the authors and artists who inhabit this technological trajectory that began with the mechanical posturing and motley registers of Jarry. Ballard's dystopian fiction consummates the libidinal impulse with which this story of technology is infused through clinical indices of violence and perversion. These transgressions, inscribed in a thoroughly mediated and technologized lifeworld, are requisite for the arousal of his most ambivalent characters, whose death of affect is a new ghostly armor. Kracauer's theory of the mass ornament is the connective tissue that draws from Jünger's crisis of perception and creates a template for the society of the spectacle that is the setting for an examination of Ballard's fiction.

I.

The capitalist epoch is a path toward demystification, marked by abstraction, and Kracauer considered its "surface-level expressions" to be more revealing, due to their unconscious and thus unmediated nature, than the "epoch's judgments about itself."[766] Kracauer conceived the *mass ornament* as an emblem of these surface features. The mass ornament, exemplified in the geometric precision of dancing troupes such as the Tiller Girls, is a reciprocal illumination of the functional logic of capitalist production. The superficial enchantments furnished by these popular spectacles were not dismissed by Kracauer, who recognized that the unfulfilling daily

766 Kracauer, "The Mass Ornament," in *The Mass Ornament*, 75.

grind of mechanized labor would warrant compensation in the form of light entertainment, and that this restitution must be articulated through the contours of the socio-economic system from which this lack was inflicted. The mass ornament was a welcome distraction for the workers who daily endured a similarly dehumanizing mechanization. The performance of dancing bodies fractured into moving parts of the mass ornament is an illustration of the body-machine complex in which agency is stripped from the figures, mechanized, and subsumed by the machine. The formalized lines and patterns of the choreographed spectacle are constructed from the arms and legs of hundreds of bodies in bathing suits, conspicuously sexless, and whose movements conform to the machinic ideal. "As the mechanism pounds," Kracauer writes, "the oil of smiling continually drips into the joints so that none of the gears breaks down."[767] The bodies are no longer "individual girls, but indissoluble girl clusters"[768] and their mobility is a manifestation of mathematics. Just as each worker tends to their specific task along the conveyor belt of Taylorist production "without grasping the totality," the contortions of the girls are fractions of the mass ornament, but "they are not involved in thinking it through."[769] The recognition of a coherent whole is foregone in service to the arrangement of linearity.

The goal of the mass ornament is to "train the broadest mass of people"[770] and form patterns of increasing dimensions, while that of capitalist production is for laborers to function as components in the expansion of profit. The mass ornament

767 Siegfried Kracauer, "Loitering: Four Encounters in Berlin," trans. Thomas Y. Levin and Courtney Federle, *Qui Parle* 5, no. 2. Distractions (Spring/Summer 1992): 51.
768 Kracauer, *The Mass Ornament*, 76.
769 Ibid., 78.
770 Ibid., 77

and capitalist *ratio* are ends in themselves; they do not serve humanity; they are *ambivalent*. Although the geometric abstraction of the Tiller Girls appears as rationalization, it is the aesthetic reflex of capitalist *ratio* masquerading as rationality, and the persistence of abstraction is confirmation that the process of demythologization is incomplete. For Kracauer, the mass ornament offers a distorted mirror in which society can see its own process of rationalization unfold, with the promise that this configuration is provisional. Thus Kracauer cautions against obstructing the course of rationalization by returning to a "false mythological concreteness," (as in the case of Jünger) whose purpose is "organism and form," because this move would sacrifice the "capacity for abstraction" before abstraction is overcome. Kracauer advocates following the path "directly through the center of the mass ornament" where the project of rationalization can be fulfilled. "Capitalism's core defect," Kracauer concludes, is that "it rationalizes not too much but *too little*."[771]

The fracturing and dismemberment of the body in the mechanical arrangements of arms and legs of the Tiller Girls are constitutive of a "linear system,"[772] which Kracauer reminds us is without erotic meaning. "At best," he says, it may point to the "locus of the erotic." [773] Jünger references a similarly cloaked eroticism while discussing the "galvanizing of the human physique" and the appearance of the "naked body" in sports, dancing, and advertisements, wherein one

771 Ibid., 81, 86.
772 Ibid., 76.
773 Ibid., 76.

is dealing with "forays into the erotic zone, whose meaning has yet to be revealed."[774] As sensual experience is recoded through mechanization, the tactile human form is superseded with a sort of denatured, fetish body, whose smile is "as rigid and perpetual"[775] as that of a plastic mannequin. Or the body is mediated as the representation of a film star held up like a mirror for the masses to view themselves, as Kracauer contends, not as they appear but as they wish to be.[776] "This is what the *film diva* looks like," Kracauer explains, and "if one were to look through a magnifying glass one could make out the grain, the millions of little dots that constitute the diva."[777] Correspondingly, the thousands of spectators consuming mindless ornamental patterns themselves become reflections of the mass ornament, and they are as detached from their self-organization as the "dot matrix" is to the "living diva."[778] Kracauer notes the seductive angle of the diva's head, "the twelve eyelashes right and left," and suggests that she is "perhaps only one twelfth of a dozen Tiller Girls."[779]

Jen Hui Bon Hoa points to a parallel logic of celebrity abstraction in the figure of Elizabeth Taylor as she appears in the fiction of J. G. Ballard.[780] In Ballard's experimental novel, *The Atrocity Exhibition*, colossal magnifications of the movie star appear on billboards:

774 Jünger, *On Pain*, 44.
775 Kracauer, "Photography," 48.
776 Kracauer, "Photography," 52.
777 Ibid., 47.
778 Ibid..
779 Ibid.
780 Jen Hui Bon Hoa, "Pornographic Geometries: The Spectacle as Pathology and as Therapy in *The Atrocity Exhibition*," in *J. G. Ballard: Visions and Revisions*, edited by Jeannette Baxter and Rowland Wymer (New York: Palgrave Macmillon, 2012), 76.

> The magnification was enormous. The wall on his right, the size of a tennis court, contained little more than the right eye and cheekbone. He recognized the woman from the billboards he had seen near the hospital –the screen actress, Elizabeth Taylor. Yet these designs were more than enormous replicas. They were equations that embodied the relationship between the identity of the film actress and the audiences who were distant reflections of her. The planes of their lives interlocked at oblique angles, fragments of personal myths fusing with the commercial cosmologies. The presiding deity of their lives, the film actress provided a set of operating formulae for their passage through consciousness.[781]

The sense of alienation that occurs when the masses see themselves as "distant reflections" in the mass ornament is manifest in this passage. Jünger inadvertently remarks on this phenomenon in his caption, "the prototype…. and its copies." And Kracauer uses the metaphor of the "magic mirror" that reflects the viewer "not as they appear but rather as they wish to be." The objectification of a Ballard character who appears "like a tattered mannequin," with a face "as rigid as a plaster mask," corresponds to the magnification of surface-level distortions.[782] Inanimate objects metamorphosed through the close-up of Kracauer's photographic apparatus are imbued with a force similar to the partial objects of bodies whose fragmentation is facilitated by the magnification of Ballard's clinical prose. But the desexualized, dehumanized bodies of the mass ornament are not exactly recapitulated in Ballard,

781 J. G. Ballard, *The Atrocity Exhibition* (London: Harper Collins Publishers, 2001), 19.
782 Ballard, *The Atrocity Exhibition*, 2.

whose mechanized bodies are re-sexualized and violated. Their salacious ordeals are then examined with the exactitude of exploded-view schematics.

Ballard's novel, *The Atrocity Exhibition*, and the subsequent disaster trilogy consisting of the novels *Crash*, *Concrete Island*, and *High-Rise*, were published in the early 1970s, following a decade that had, in his words, "effortlessly turned the tables on reality."[783] These works were animated by a "media landscape" that Ballard believed "had sealed a Technicolor umbrella around the planet and then redefined reality as itself."[784] Ballard's observations are reminiscent of Debord's statement in *Society of the Spectacle* that the world had "really been turned on its head," and a new pseudo-world "invented a visual form for itself." [785] For Ballard, the radical expansion of communication technologies and the sinister corollaries of "thermo-nuclear weapons systems and soft-drink commercials," "advertising and pseudo-events," and "science and pornography," appeared as specters in an overlit realm against the backdrop of airport parking lots, office blocks, and strip malls. The shift in consciousness precipitated by capitalist spectacle was marked by the dissolution of feeling and emotion, which Ballard termed the *death of affect*.[786] The general sense of self-alienation precipitated a cognitive reconfiguration characterized by ambivalence, which is something Simmel had diagnosed, and whose work was influential for Kracauer. The mass ornament was formative for Debord's spectacular society, marking a shift from the lived experience of capitalism dominated by Taylorist

783 J. G. Ballard, *The Kindness of Women* (New York: Picador, 1991), 180.
784 Ibid.
785 Guy Debord, *Society of the Spectacle*, trans. Ken Knabb (London: Rebel Press), 2—10.
786 J. G. Ballard, "Some Words about Crash," *Foundation* 9 (1975), 45.

production to an immersion in the voracious image consumption of late capitalism.[787] In the mass ornament, individuals recognize that they are taking part in its construction but are unable to grasp its totality and so remain as isolated components, whereas in spectacular society spectators are linked by a one-way, monopolized communication to the center of the spectacle and so remain separate from one another. "The spectacle thus unites what is separate," Debord declares, "but it unites only in its separateness."[788] The disaffected characters in Ballard's disaster fiction maintain a studious fixation on the persistent stream of billboards, television commercials and magazine advertisements, as if restlessly consuming the process of commodification itself. Jameson refers to this procedure, "the consumption of sheer modification," as postmodernism.[789] Whether or not Ballard was familiar with these figures, he was clearly addressing a similar contemporary disequilibrium wrought by the intensification of hypnotic spectacle. Moreover, Ballard was responding to the limits of rationalization, or what he perceived as the "marriage of reason and nightmare"[790] that had dominated the twentieth century along its path toward the culmination of this profound ambivalence.

Ballard viewed the world as "an enormous novel"[791] emanating from a technological landscape that he inspected with a calculated interest. He saw a

787 Jen Hui Bon Hoa contends that Debord suggestively dated the origins of the society of the spectacle to coincide with the publication of "The Mass Ornament" forty years previous. (Jen Hui Bon Hoa, "Pornographic Geometries," 76.)
788 Debord, *Society of the Spectacle*, #29.
789 Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (Durham, NC: Duke University, 1991), *x*.
790 J. G. Ballard, "Some Words about Crash," 45.
791 Ibid., 48.

fictional cast at the level of public events at once sensational and toxic, from the Kennedy assassination to the wars in Indo-China, and from the consolidation of mass marketing and politics to the immediate reduction of science and technology into the images of popular culture. The domestic tokens of daily life were connected obliquely to the material world through a network of mediated fragments of celebrity icons and news reels that were, in the words of the protean protagonist of *The Atrocity Exhibition*, "as unreal as the war the film companies had restarted in Vietnam."[792] In Ballard's terms, "Freud's classic distinction between the manifest and latent content of the inner world of the psyche" should be applied to the outer material world whose primary features consist of "technology and its instrument, the machine."[793] The assumption that the external world is reality and that the internal domain of thought is a "realm of fantasy and the imagination" has been reversed, and he would recommend that "the most prudent and effective method of dealing with the world around us is to assume that it is a complete fiction."[794] In Ballard's disaster novels, the vicissitudes of social life disintegrate before motorway embankments, suburban enclaves, and cloverleaf freeway interchanges, onto which the nervous systems of the characters are projected. The hardware of late capitalism itself becomes a sort of derelict nervous system through which the planes of fiction and reality intersect.

In Ballard's work one finds intimations of Marshall McLuhan's prosthetic media apparatus, *extensions of man*. D. Harlan Wilson describes this technological

792 Ballard, *The Atrocity Exhibition*, 4.
793 Ibid., 156.
794 Ballard, "Some Words about *Crash*," 48.

prosthesis (or "extension") in Ballard as the transmission of our "electronically charged desires" into the cultural sphere which reverses the drive and reformulates people as "machinic beings."[795] Ballard's ambivalent characters regard the technological world as vivifying yet disjointed, beset by an "existential dread"[796] which is constitutive of the double logic of the prosthesis, concurrently amputated and extended. The "unswerving geometry"[797] of transportation networks in which Ballard revels are both a source of freedom and constriction, anchored in an elaborately signaled landscape. The predictable movement, purpose, and direction of traffic mirrors the depthless lives of the inhabitants. And their psychopathologies are inscribed in the technological environment, confounding the boundaries between human and machine.

The cold precision of Ballard's prose is both an aftereffect and a response to the world of capitalist spectacle, which he approached with the analytical bent of the scientist, in his terms, "testing, putting sensors out, charting various parameters."[798] The close-ups and magnifications of concrete and chromium, musculature and posture, are persistently abstracted and rendered geometric through Ballard's photographic gaze. Ballard's observations are similar to Jünger's entomological vision, and his *death of affect* echoes Jünger's prognostication about the "signs that point to a great detachment."[799] For Ballard, the death of affect is inextricably tied to

795 D. Harlan Wilson, *J. G. Ballard* (Chicago: University of Illinois Press, 2017), 122.
796 Ibid., 123.
797 J. G. Ballard, *Crash* (London: Jonathan Cape Ltd., 1973), 39
798 Andrzej Gasiorek, *J. G. Ballard* (New York: Manchester University Press, 2005), 13
799 Jünger, quoted in Kaes, Anton, "The Cold Gaze: Notes on Mobilization and Modernity," *New German Critique* 59.
Special Issue on Ernst Jünger (Spring-Summer, 1993): 110.

the sphere of electronic communications. The persistent flicker of graphic televisual images reproduce a violent flux severed from human intercession, which paves the world with the materials of an atrocity exhibition. Jünger's shock photography and the violence and perversion of Ballard's disaster fiction both indulge in a similar aesthetic of catastrophe, although for Jünger the imagery represents the welcome dangers of his state of exception and for Ballard the material is considered in terms of its psychopathological consequences. Long before the Debord's society of the spectacle or McLuhan's proverb, "the medium is the message,"[800] Jünger recounted the way events "worthy of notice" were photographed, recorded, and transmitted, then mirrored everywhere so that the event was subordinate to its transmission.[801] Jünger's conception of the *great detachment* and Ballard's death of affect are valences of the objectification of human experience through electronic simulation. In Ballard's work, however, the spectators of these noteworthy tragedies, like political assassinations and warfare, are discernibly bored because the real violence has been obscured through the prism of capitalist spectacle.

Ballard scrutinized the spurious ornaments of the televisual world, wondering what effect a political assassination followed directly by "an injured child….carried from a crash" within seconds on the same TV screen would have on the viewer, "prepackaged emotions already in place."[802] Cruel imagery that would elicit shock one day becomes "stylized into media emblems"[803] on the following; the tilt of a

800 McLuhan, *Understanding Media*, 7.
801 Jünger, quoted in Kaes, "The Cold Gaze," 110.
802 Ballard, *The Atrocity Exhibition*, 145.
803 Ibid., 37.

corpse's head is eyeline-matched with a Coke bottle and then a tail fin. The "stylization of televised violence," for Ballard, is converted into "an anthology of design statements."[804] Death itself is stylized, anaesthetized through the procedure of its aestheticization, which is a symptom of the death of affect. The stylized poses of traffic fatalities that Ballard details, attest to the detachment learned from the rehearsals of televised disasters in which victims are quickly converted into images. Stylization is a sort of postmodern armoring for the society of the spectacle. Its quickening flourish is commensurate with the flow of new machines, the excision of sentiment, and the pursuit of psychopathology "as a game" in which the technologized psyche derives "ever greater powers of abstraction."[805] Ballard was struck by the "stylized grace" of slow motion shots in films of automobile test crashes, remarking on the "immense classical dignity" of these powerful machines crashing into walls and utility poles, anthropomorphized, taking part in "some strange technological ballet."[806] Such films are functionalist in every detail, much like Ballard's prose, and display mechanical procedures that arrest the staid voyeurism of the spectator. People are not just detached emotionally but bear an ambivalence to the danger embedded in the technological landscape. The eminently stylized format of the automobile serves to defuse any anxieties regarding the violence and instability of these machines, and the occupants are ambivalent spectators seated behind windshields that serve as movie screens.[807] The habit of objectification is reinforced

804 J. G. Ballard, *The Kindness of Women*, 185.
805 Ballard, *The Atrocity Exhibition*, 116.
806 *Towards Crash (J. G. Ballard and the Motorcar)*, BBC, 1970.
807 Both Paul Virilio and Jean Baudrillard suggest a correspondence between the film screen and the windshield of the automobile. (Paul Virilio, *The Aesthetics of Disappearance*, trans. Philip Beitchman

through digital technologies that aestheticized experience with a prosthetic glaze so that the scopophilic consumption of violence is relieved of some of its horror, and abstracted into the phantasmagoria of cultural forms.[808] This is the stuff of *The Atrocity Exhibition*.

II.

The Atrocity Exhibition is a disjunctive aggregate of trenchant prose pieces akin to prose poems each with titular headings in bold print like encyclopedia entries. It is defamiliarizing in the sense that the narrative is nonlinear and the connection between sections is unclear, a format Ballard termed the *condensed novel*. The text is constructed with contrasting registers of prose (fragments from medical textbooks, advertising copy, and questionnaires are insinuated into the narrative) and the ambiguity is reinforced by the apparent interchangeability of various protagonists with similar, disyllabic names (Travers, Talbot, Travis, Trabert, Tallis), all of which refer to the dissociative identity disorder of Traven, the central character. Traven takes part in various "psychodramas"[809] created by Dr. Nathan, who observes him from a cold distance, pontificating and formulating prognoses while remaining transfixed on the purgative aspects of modern catastrophe. Celebrity culture, the Vietnam War, pornography, car crashes, and the space race are some of the motley themes permeating therein, with frequent references to JFK and Marilyn Monroe. Cultural and political figures are often portrayed in violent situations consistent with

(U.S.: Semiotext(e), 1991), 67-68, and Jean Baudrillard, *America*, trans. Chris Turner (New York: Verso, 1988), 55.)

808 Hoa, "Pornographic Geometries," 81.

809 J. G. Ballard, *J. G. Ballard*, (San Francisco: *Re/Search* Publications, 1991):

the "Plan for the Assassination of Jacqueline Kennedy" or "experimental auto-disasters"[810] involving automobile safety advocate Ralph Nader. Ballard gestures to Pop Art and the avant-garde, referencing Alfred Jarry's *The Crucifixion Considered as an Uphill Bicycle Race* by imitation in the final chapter titled "The Assassination of John Fitzgerald Kennedy Considered as a Downhill Motor Race." Prose registers clash throughout this text, much of which is satirical or parodic, and Ballard employs what Barthes referred to as "metonymic violence"[811] which is the conjoining of disparate textual fragments from domains of language that are typically kept separate, like science and pornography. Metonymic violence augments the offensive force of Ballard's deadpan prose. Thus the chapter titled "Why I Want to Fuck Ronald Reagan" is written in the methodical style of an itemized research survey in which politics, celebrity culture, and obscenity are juxtaposed in ordered lists.

Dr. Nathan admits that to call Einstein a pornographer must appear "as something of a bad joke" but advances his correlation between science and pornography, analogizing Lautréamont's classic juxtaposition of the union of a sewing machine and an umbrella on an operating table with the identification of "the pudenda of the carpet with the woof of the cadaver."[812] Both science and pornography, he argues, could be described as an analytic endeavor in which one isolates objects and events from their specific contexts, while examining the quantified functions of said activity in time and space. "Science is the ultimate

810 Ballard, *The Atrocity Exhibition*, 32.
811 Barthes, *Sade, Fourier, Loyola*. trans. Richard Miller (Berkeley: University of California Press, 1976), 33.
812 Ballard, *The Atrocity Exhibition*, 49

pornography,"[813] he concludes. Ballard describes his own writing as "the language of an anatomist"[814] and his obsessive fixation on the isolated object is a function of magnification. "The keynote of *The Atrocity Exhibition*," William S. Burroughs avers, is the "magnification of the image to the point where it becomes unrecognizable."[815] Therein, Dr. Nathan traverses a car park while examining the billboards erected along the freeway below; the massive panels feature magnified sections of images, "a segment of lower lip, a right nostril, a portion of female perineum."[816] The doctor speculates that no one but an anatomist would be able to distinguish these human fragments, each flattened into a geometric form. "The young woman was a geometric equation," Ballard writes, "her breasts and buttocks illustrated Enneper's surface of negative constant curve."[817] The alienation in spectacular society is typified by the unstable link between the abstract mode of pornography and material life on the technological plane. Ballard's penchant for magnification is not merely a scopophilic measure but a mode of abstraction, the reduction of image to grain. Hoa observes that "the scopophilic will to magnification….dissolves the image's ability to evoke any relationship with lived reality."[818] These images are split by Ballard's "pornographic gaze" [819] through which the cropping of a frame breaks the image in close-up into partial objects.

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813 Ibid.
814 Ballard, quoted in Gasiorek, *J. G. Ballard*, 13.
815 William S. Burroughs, quoted in *The Atrocity Exhibition*, *vii*.
816 Ballard, *The Atrocity Exhibition*, 11.
817 Ibid., 56.
818 Hoa, "Pornographic Geometries," 74-75.
819 Ibid.

Ballard performs an analogous fragmentation in terms of character in *The Atrocity Exhibition*. The levels of fiction that Ballard envisioned in the material world are reformulated therein, exemplified in the layers of situations that the characters or variations of the same character endure. In addition to the protagonist(s) there are the multiple fates of Karen Novotny who dies in a gruesome car crash, which leaves her dismembered, "hanging face-down from the rear window,"[820] only to reappear fully reconstituted in the next psychodrama. In this death she appears in a stylized pose, just as in her next death where she is found lifeless on the floor of an empty swimming pool. She returns in the following chapter walking past a burning helicopter. The line "once again Karen Novotny had died"[821] signals the transmutation by design, highlighting Ballard's conceptualization of characters as features of specific situations rather than stable, grounded figures acting upon their own volition, hence the names of the protagonist(s) which are similar but not identical.

Ballard's characters are not unlike Lewis' puppets who are oblivious to the "complexity of the rhythmic scheme"[822] or the "parameters of a speculative geometry,"[823] respectively, that make up the technological landscape. The machinic setting is constitutive of mechanisms whose operation is undetected by the spectators. Lewis chronicles a "human arithmetic," depicting the spectacle of life "circumscribed and complete as a theorem of Euclid,"[824] in a framework that is echoed in Ballard's

820 Ballard, *The Atrocity Exhibition*, 35.
821 Ibid.
822 Lewis, *The Wild Body*, 234
823 Ballard, *The Atrocity Exhibition*, 118.
824 Lewis, *The Wild Body*, 234

"deformed marriage of Freud and Euclid."[825] In either case, the technical environment is mirrored in the often stilted, mechanical movements of characters who strike a wooden pose and undergo varying degrees of dehumanization. Within these "peculiar geometric elements" Ballard finds the "possibilities of an ugly violence" which recalls the tension of antagonism behind Lewis' grinning puppets.[826] The necessity of deadness in art is grafted onto the death postures in Ballard's prose, along with the puppet rigidity of mannequins that undertake human activities, such as assuming the roles of driver and occupant in automobile test crashes. The flat, two-dimensionality of Ballard's characters is almost photographic in the manner in which they are conceptualized and ambiguously snapshot. The act of seeing requires a level of human interest and concentration that is substituted by the mechanical capture of the photograph and affectless looking.[827] The significance of this aggressive narrative process echoes Kracauer's observation that the photograph "annihilates the person by portraying him or her,"[828] although in this case the term "annihilation" would be interchangeable with "abstraction" or "conceptualization." The characters themselves display a preference for visual representation over the grit of everyday reality, as epitomized by the persistence of photographic equipment in the narrative and the objectivist precision of the prose.

The abstraction of lived experience alleviates the subject from having to freight human interactions with ideas, emotions, or even morals, so that reality

825 Ballard, *The Atrocity Exhibition*, 118.
826 Ibid.
827 Fromm, *The Anatomy of Human Destructiveness*, 343.
828 Kracauer, "Photography," 57.

becomes a disorienting juncture of soft bodies and the hard geometry of the technological world. Neither physiology or mechanization takes precedent. Sex is calculated. As Burroughs had observed, in *The Atrocity Exhibition* the "nonsexual roots of sexuality are explored with a surgeon's precision."[829] The deadening of affect is epitomized in terms of sex as a conceptual act, increasingly distanced and, in a perverse sense, *armored* through its abstraction. The stylization of sex becomes its representation. Human relationships are oblique, "lunar and abstract," in which people act as extensions of "the geometries of situations" often associated with boredom and distraction.[830] In a chapter titled "The Great American Nude," Talbert devises a "sex kit" in the form of a numbered sequence of items (e.g., "six detachable mouths," "a list of dialogue samples, of inane chatter," "an analysis of odor traces (from various vents), mostly purines," and "a torn anal detrusor muscle"), the inventory of which is said to be "more stimulating than the real thing."[831] The conceptualization of the sex kit itself is enough. Talbert's collection of "cheap photo-pornography" is considered a "vital literature" because it kindles "the few taste buds left in the jaded palates" of the characters' "so-called sexuality."[832] For Ballard, sexual intercourse is no longer an intimate activity as the procedure has become a function of applied geometry, or a vector in the spectacle of "automobile styling, politics and mass communications."[833] Whatever remains of affect is diverted from

829 Burroughs, quoted in *The Atrocity Exhibition, vii*.
830 Ballard, *The Atrocity Exhibition*, 120.
831 Ibid., 84-85.
832 Ibid.
833 Ibid., 120.

human relations and reinvested in capitalist consumption, with the automobile as the most conspicuous industrial product.

Marcuse reported on the "systematic manipulation and control of the psyche in the advanced industrial society"[834] designed to familiarize and domesticate the subject in this technological mode of existence. According to Marcuse, the remainder of *surplus-repression* is reconciled through the libidinal cathexis unto the products the subject is enticed to purchase, the services used, the fun enjoyed, and the status symbols coveted.[835] Ballard describes this process as the "increasing blurring and intermingling of identities within the realm of consumer goods,"[836] especially the crowning commodity of the motorcar. For Ballard's disenchanted characters, libidinal satisfaction is deferred and reinvested in the death instincts, the perverse fixation on the melding of bodies and machines, and the sadomasochistic thrills that fill the vacuum left by the death of affect. The visuality of violence in sundry forms, including the "biomorphic horror of our own bodies,"[837] is not only exteriorized through mediation but also through self-alienation; the "human organism," in Ballard's terms, "is an atrocity exhibition" at which each individual is an "unwilling spectator."[838] The gutting of affect provides each individual with the moral liberty to pursue their most pathological compulsions. Pain, mutilation, voyeurism, and self-disgust are enacted in terms of conceptualizations occurring in a metallized arena of sex and technology. The glut of mediated violence of which the death of affect is a

834 Marcuse, "Aggressiveness in Advanced Industrial Societies," 190.
835 Ibid., 191.
836 Ballard, "Some Words about *Crash*," 48.
837 Ballard, *The Atrocity Exhibition*, 116.
838 Ibid., 9.

symptom, is also a path to its antidote, which is the libidinal cathexis of consumption and the consequent playing out of the game of psychopathology. Aside from the technological fellowship of traffic congestion or crowded elevators, the only way people make contact with one another is through these conceptualizations. "Violence is the conceptualization of pain," Dr. Nathan postulates, and "by the same token psychopathology is the conceptual system of sex."[839]

There is something of the mad scientist to Dr. Nathan, and while Ballard's work is not science fiction in the traditional sense, the "deviant curiosity"[840] exhibited by the doctor exemplifies a standard trope of science fiction in that rationalization is driven toward its further reaches where elements of the irrational begin to materialize in propinquity to disaster. From his "armchair view of damnation"[841] Dr. Nathan demonstrates an exacting rationalism and a professional distance from his patients and from the horrific events that he chronicles in medicalese. The idée fixe of *The Atrocity Exhibition* and the urban disaster trilogy is the notion, as described by Colin Greenland, that "modern technology satisfies the irrational urges of the human mind more than the rational purposes for which it was apparently designed."[842] Dr. Nathan is a sort of spokesperson for this perverse rationalism. As Ballard affirms, "reason rationalizes reality for him" by providing a "reasonable" explanation for topics that one should not find reasonable, and therein lies the rub: Dr. Nathan follows the

839 Ibid., 116-117.
840 Ballard, *The Kindness of Women*, 185.
841 J. G. Ballard, quoted in *The Imagination on Trial*, eds. Alan Burns and Charles Sugnet (New York: Allison & Busby, 1982); https://www.jgballard.ca/media/1974_imagination_on_trial.html.
842 Colin Greenland, *The Entropy Exhibition: Michael Moorcock and the British "New Wave" in Science Fiction* (Boston: Routledge, 1983), 120.

reductive mode of the scientific text toward its collision with pornography.[843] The doctor monitors his patients with a calculated gaze while the fetish of technical procedure is paramount. For the scientist, the patient's well-being is of nugatory concern.

Dr. Nathan's observational method of extreme detachment is reminiscent of the nihilistic practice of Burroughs' mad physician, Dr. Benway.[844] In *Naked Lunch*, Dr. Benway performs surgeries that have "no medical value"[845] in an operating theater with an audience of students, vaunting these disinterested procedures as artistic creations. "We're scientists," he exclaims, "pure scientists."[846] Dr. Benway conducts these operations merely because he wields the requisite technical skills to do so, regardless of the outcome. Similarly, Dr. Nathan's cold, speculative demeanor is focused exclusively on the articulation of his diagnoses while disavowing any hint of concern for the proxy subject. In these texts, the scientists' necrophilous proclivities involve machines, data, and technical procedures as they ascribe to the maxim of *can implies ought* which Fromm designated as an axiomatic standard of a technological society: "something ought to be done because it is technically possible to do it."[847] This principle constitutes the negation of humanistic considerations, which have been

843 Ballard, *The Atrocity Exhibition*, 89.

844 Ballard acknowledged the influence of Burroughs and recognized the relevance of Dr. Benway for his disaster fiction. More specifically, he considered Dr. Nathan to be a minor character by comparison to Dr. Benway. Both D. Harlan Wilson and Andrzej Gasiorek reference Dr. Benway in relation to J. G. Ballard in their books of the same title. (D. Harlan Wilson, *J. G. Ballard* (Chicago: University of Illinois Press, 2017), 77.) (Andrzej Gasiorek, *J. G. Ballard* (Manchester: Manchester University Press, 2005), 86.)

845 William S. Burroughs, *Naked Lunch* (New York, NY: Grove Press, 1959), 34.

846 Ibid., 66

847 Fromm, *The Anatomy of Human Destructiveness,* 37.

supplanted by the logic of technological development. In medical practice, the enthusiasm for technique would necessitate the construction and use of "gadgets regardless of their real importance for a specific case."[848] Burroughs parodies this technocratic tendency through the figure of Dr. Benway, who is indifferent if not enthusiastic about the destructive consequences of science. The primacy of the mechanical world over human interests is codified in Dr. Benway's conclusion that "Western man is externalizing himself in the form of gadgets."[849] Andrzej Gasiorek suggests that for Ballard this *externalization* is manifest in the "extreme identification of subjects with machines" [850] to the extent that human desires are subordinated to the imperatives of technology. In this iteration of the body-machine complex the machines take precedence over bodies or, more directly, bodies are subsumed and libidinally driven by the total machinery. The fractured and frequently perverse representations in *The Atrocity Exhibition* not only exemplify the psychological implications and libidinal investment within spectacular society, but demonstrate through its machinic exhibits the way subjectivities are technologically produced. The retooling of subjectivities as predicated through the enmeshment of bodies and machines and the myriad ways they are eroticized and violated takes its most dramatic narrative form in Ballard's novel *Crash*.

III.

The automobile, which Ballard viewed as the quintessential image of the twentieth century, follows a line of flight from the Futurist reification of the machine

848 Ibid.
849 Burroughs, *Naked Lunch*, 18.
850 Andrzej Gasiorek, *J. G. Ballard*, 86

to the stylized products of late capitalism. Ballard proposed that one could come to an understanding of this cult of the machine most effectively through a study of the motorcar. He regarded the automobile as "one of the most beautiful objects ever made,"[851] referencing Marinetti's dictum that the racing car surpassed the beauty of the *Winged Victory of Samothrace*. "The ultimate concept car," Ballard speculates, "will move so fast, even at rest, as to be invisible."[852] The motorcar is an emblem of the quickening pace of the twentieth century in which one could see "the elements of speed, drama, aggression," and "the junction of advertising and consumer goods" within the technological landscape.[853] Ballard fetishizes the automobile as a vehicle of violence and desire, a prosthesis that serves as a medium for destruction and repressed sexuality. Even within the rigidity of the transportation system to which the automobile is constrained, Ballard considers the car as a reservoir of freedom, and not merely the freedom of movement, but the freedom to act upon one's own psychopathologies with the force of a powerful machine. The option of provoking the most dramatic event in one's life, "the freedom to kill oneself, for example," exists "on a second-by-second basis" behind the wheel of an automobile.[854] And was not the automobile crash, Ballard asks, the only way one could "legally take another person's life?"[855] For Ballard, the car crash is the embodiment of a "conceptualized

851 Ballard*, The Atrocity Exhibition*, 158.
852 This formulation would be an apt description of a sculpture by Futurist Renato Bertelli, titled "Profilo Continuo," a ceramic bust featuring a three hundred and sixty degree rotation of Mussolini's profile which appears blurred as if spinning on its axis, a metaphor for Lewis' vortex. (Ballard*, The Atrocity Exhibition*, 158.)
853 *Towards Crash (J. G. Ballard and the Motorcar)*, BBC, 1970.
854 Ballard, *Re/Search*, 157.
855 Ballard, *Crash*, 36.

psychopathology."[856] If the supreme image of the twentieth century is the automobile on the highway, then the car crash must be the most crucial technological experience. In Ballard's world, the crash is a libidinal discharge mobilizing eroticism, hostility, self-sacrifice, kinesthesia, and the stylization of motion culminating in a single event. The car crash is a sexually charged incident, "a liberation of human and machine libido,"[857] and Ballard reasons that the crash death of a celebrity, in particular, is a seminal event because our personal lives are then conjoined with the sensational features of the prurient imagination.

The genesis of Ballard's infamous 1973 novel was a chapter in *The Atrocity Exhibition* titled "Crash!" in which the marriage of sex and technology is portrayed in terms of celebrities as automobile crash fatalities, statistical analyses of the sexual behavior of crash spectators, and the preferences of survey respondents regarding the optimal auto-disaster.[858] Similar themes of capitalist spectacle, clinical abstraction, and catastrophilia play out in the more coherent, narrative form of the novel *Crash*. The narrator, James Ballard, is a television producer who causes a high-speed head-on collision in which the passenger in the opposing car is catapulted fatally through the windshield and lands on the hood of James' car in a spray of blood and shattered glass. Both the driver of the other car, Dr. Helen Remington (the dead man's wife), and James are seriously injured and spend the next weeks convalescing in the airport casualty hospital. There is an echo of Marinetti's originary car crash in James' experience in the sense that the crash triggers an epiphany. The protagonist becomes

856 Ballard, *The Atrocity Exhibition*, 156.
857 Ballard, *Re/Search*, 156
858 Ballard, *The Atrocity Exhibition*, 153-157.

immediately enthralled with the intersections of sex and technology, from the chromium bars of his leg harness to the slopes and contours of the nurses' bodies. He imagines the crash between Dr. Remington's car and his own as "a model of some ultimate and yet undreamt sexual union."[859] Upon release, James and Dr. Remington begin an affair, having sex exclusively in cars, while being followed and photographed by Vaughan, the "hoodlum scientist,"[860] (a sort of Benway avatar) whose scarification and limping gait betray a history of car crashes. Vaughan drives a battered Lincoln Continental, the same model and year as the vehicle in which Kennedy was assassinated, as he plots a fatal car crash between himself and the screen actress Elizabeth Taylor wherein both would experience their final orgasm as they are crushed within the buckling metal. Vaughan's symphorophilia is also conveyed in his exhibitions of historical crash reenactments and a sinister film project on sex and the car crash (hence, his interest in James and Dr. Remington). James falls into Vaughan's orbit and they spend their days roaming the freeways, listening to ambulance broadcasts in search of the next car crash, and engaging in various sexual scenarios all within the confines of the automobile. Vaughan dies in an unintended car crash with which the novel begins: "Vaughan died yesterday in his last car crash."[861]

In *Crash* everything is machinic. The air is metallized; the sky is metallized; there are "metallized excitements."[862] The dehumanizing logic that frames the death

859 Ballard, *Crash*, 23.
860 Ballard, *Crash*, 16.
861 Ibid., 6.
862 Ibid., 33.

of affect is sutured into the technical prose, wherein the functionality of the characters is secondary only to the architectonic of technology in which they are installed. The text itself merges the orders of bodies and machines through Ballard's use of "linguistic inversion"[863] so that bodywork is lacerated, wounds annealed, and the "waxy carapace" of a woman's "lipcoat" is "dented."[864] Similarly, the marbled bruise on James' chest gradually moves through an array of tone changes "like the color spectrum of automobile varnishes."[865] Seltzer describes the body-machine complex as a "migration"[866] between the registers of physiology and technology that solicit violence and eroticism, a conceptualization that is concretized in *Crash*. The chaotic crash scene is the inception of James' perverse technophilia, which is mechanically rendered as a projection of his technologized psyche. James surveys the situation with a geometric gaze, noting the "angular movements" of Dr. Remington's head that seem to mimic the streamlining of their automobiles, and he sees "the narrow angle between the bonnet and fenders" replicated in the posture of spectators, the slant of the on-ramp, and the flight paths of airliners overhead.[867] As a component in a technological landscape in which psychopathology is enshrined, the narrator is frequently unreliable, troubling the distinction between his own psychopathology and that of his surroundings. This slippage in perspective is evidenced in James' observation that "the junction of her mucous membranes and the vehicle, my own

863 Mark Thomas, "The Rules of Autogeddon," *Griffith Law Review* 20, no. 2 (2011): 344.
864 Ballard, *Crash*, 62.
865 Ibid., 22.
866 Mark Seltzer, "Serial Killers (II): The Pathological Public Sphere," *Critical Inquiry* 22, no. 1 (Autumn 1995): 123.
867 Ballard, *Crash*, 18.

metal body, was celebrated by the cars speeding past us."[868] Thus, James appears to undergo a quasi-Futurist metallization while responding to the anthropomorphosis of traffic. This crossing of paths between the psychological and the geographical, between technology and the natural world, and between bodies and machines, is reminiscent of Seltzer's psychotopography of machine culture. Ballard refers to his fiction as "inner space,"[869] that is, the intersection of the psychic terrain and the technological environment, which is a symptom of the technological unconscious.

Embedded within the realm of automobile interiors and highway architecture, the bodies and machines of *Crash* function in roles of equal importance and the narration addresses the features and fixtures of each with the same obsessive gaze. Mechanically performed coital acts are matched with the eroticization of technology. The libidinal cathexis unto the products of capitalism that Marcuse had described is developed into a fetish in *Crash*, as evidenced when James is reunited with his automobile and senses a deepening junction between his body and the interior of the car, stimulated by the "aggressive stylization" of the "cockpit" and "the exaggerated moldings of the instrument binnacles."[870] For Ballard, the stylization of automobiles is a product of the carefully considered relationship between the design of the automobile body and human sexuality. The same "primitive algebra of recognition"[871] applies to both organic and inorganic forms. The interest in the specific details of automotive design, e.g., the rake of the windshield pillars or precise

868 Ibid., 88.
869 Ballard, *Crash*, 7.
870 Ibid., 43.
871 *Towards Crash (J. G. Ballard and the Motorcar)*, BBC, 1970.

angle of the steering column, are as compelling to Vaughan as the bodily contours of the prostitutes he picks up at the airport. "The smallest styling details contained an organic life," James explains, "as meaningful as the limbs and sense organs of the human beings who drove these vehicles."[872] The merger of the human subject and the machine, mechanized and eroticized, respectively, corresponds with a process of dehumanization that is not just the result of the technological environment but already inherent in its structure.

For Ballard, the automobile in *Crash* is "a total metaphor for man's life in today's society," and while he described the work as "the first pornographic novel based on technology," the way Ballard conceived of pornography was as a "political form of fiction" involving a set of exploitative relations between characters in a lifeless technological matrix, who use one another in "the most urgent and ruthless way."[873] The copious sex acts that take place in automobiles are routinely devoid of sexuality, and they are rendered not in the lewd idiom of pornography but with a clinical detachment. Jean Baudrillard observes that in *Crash* "all the erotic vocabulary is technical….no slang, no intimacy….only functional language."[874] The narrator's voyeurism is precise, and bodies are depicted in terms of their "angular contours….unexpected junctions of mucous membrane and hairline, detrusor muscle and erectile tissue." The violent collisions of bodies and machines are diagrammed in biological and technological registers, forming a grotesque catalogue of "blood-

872 Ballard, *Crash*, 132.
873 Ballard, "Some Words about *Crash*," 49.
874 Jean Baudrillard, "Ballard's *Crash*," trans. Arthur B. Evans, *Science Fiction Studies*18, no. 3 (November 1991): 316.

soaked instrument panels, seat-belts smeared with excrement, sun-visors lined with brain tissue," and injuries caused by "manufacturer's medallions, safety belt pinions, and quarter window latches."[875] This deadly tableau of automobile disasters is consummated through Ballard's pornographic gaze and provide a range of scopophilic pleasures for the disenchanted characters in *Crash*, who partake of a concupiscent preoccupation with crash injuries.

The libidinal imbrication of bodies and machines in *Crash* complicates the status of the motorcar in terms of the double logic of the prosthesis as either an extension or constriction of instrumentality. In Ballard's state of exception wherein the polished gadgetry of a "benevolent technology"[876] lords over the characters who welcome bodily disfigurement wrought by auto-disaster, it becomes less clear if the bodies are driving the machines or being driven by machines. In one sense, the role of the prosthesis in *Crash* has been inverted, so that the mortal occupant has become, in Paul Youngquist's words, "the prosthesis of a speed machine."[877] In a similarly provocative manner, McLuhan intimates ambivalently that "men have always been the sex organs of the technological world."[878] The specter of technology is disclosed in Ballard's suggestion that auto-disasters are not infrequently "arranged"[879] by the machinations of unconscious fantasies of power and aggression, as if some haphazard urge overran the rationality of the driver, perpetuating a crash. These destructive

875 Ballard, *Crash*, 12, 104.
876 Ibid., 63.
877 Paul Youngquist, "Ballard's Crash-Body." *Postmodern Culture* 11, no. 1 (September 2000): https://muse-jhu-edu.oca.ucsc.edu/article/27724
878 McLuhan, *Understanding Media*, 220.
879 *Towards Crash (J. G. Ballard and the Motorcar)*, BBC, 1970.

tendencies are often aligned with an interest in all that is mechanical, as the obsession with automotive design would attest. As James Sey aptly remarks, Freud's fundamental shift from the organic to the inorganic "entails technology as part of the inorganic realm," and this is literalized in Ballard's "death machines."[880] The characters in *Crash* are attracted to "clean, shining machines" and "structures of aluminum and glass," which are features Fromm considered as symbols of death ("no-life").[881] In *Crash* it is clear that the death drive is behind the steering wheel.

There is a note of literary decadence in Ballard's death-driven novel, *Crash*, as exemplified by the excessive description of Vaughan's wound profiles matched with the corresponding automobile fixtures that caused the injuries, and the sundry images that "hung in the gallery of Vaughan's mind like exhibits in the museum of a slaughterhouse."[882] The numerous references to the flowering of wounds bear a resemblance to the realm of horror, and more specifically to Jünger's war horror. The flowering hemorrhages of brain tissue in *Crash* are reminiscent of Jünger's dreamlike scenes involving exotic plants and dead bodies in *Storm of Steel*. Huyssen has duly noted the similarities between Jünger's magical realism and Mirbeau's decadent novel, *The Torture Garden*.[883] Mirbeau, exhibits a "close affinity of exotic flowers to sexuality, mutilation, and death,"[884] and this tradition of aestheticized destruction is palpable in Ballard. The description of Jünger's "erudite entomological notations

880 James Sey, "Psychopathology, Inner Space, and the Automotive Death Drive: J. G. Ballard," *South Africa Journal of Psychology* 32, no. 2 (2002): 59.
881 Fromm, *The Anatomy of Human Destructiveness*, 350.
882 Ballard, *Crash*, 11.
883 Huyssen, *Twilight Memories*, 136.
884 Ibid.

combined with lusciously erotic color schemes"[885] could as easily reference Ballard's prose, and this semblance between the clinical detachment of both authors is self-evident as Jünger lauds the individual who "does not shrink back from the bloody incision"[886] and Ballard accepts the "perverse eroticism" of the automobile disaster, likened to "the drawing of an exposed organ through the aperture of a surgical wound."[887]

IV.

Vaughan's reenactments of car crashes follow the historical trajectory from the deliberate collisions of locomotives in the late nineteenth-century to the automobile crash tests that so fascinated Ballard. The exhibition titled "The Recreation of a Spectacular Road Accident," is an illustration of the penchant for catastrophilia in thrill-based entertainments, although Vaughan's productions are significantly more nihilistic. His display of onanism at the show, whether this was witnessed by anyone but James, bestows a sense of debauchery to the scene, and reaffirms symphorophilia as a central theme. The tranquilizing effect of violence exhibited in James' observation that Vaughan's hostility was significantly reduced after witnessing a car crash on the freeway. The assuaging influence of violence turns quickly to arousal as the characters sit on cushions in a darkened room in Vaughan's apartment, watching slow-motion films of test crashes. Ballard maintains variously that we are *excited* by violence, that behind the horror of the deadly crash

885 Ibid.
886 Jünger, *The Adventurous Heart*, 42.
887 Ballard, *Crash*, 14.

"lies an undeniable fascination,"[888] and that, while mutilation and death at the speedway may be "slightly shocking,"[889] the experience is one of pleasure. For Ballard, this is why we go to the races. Jünger had astutely observed that "it no longer accords with our style to stop a flying show or a car race simply because of a deadly accident," and this is a testament to the ambivalence surrounding the destructive collisions of bodies and machines.[890] The more reserved catastrophilia of Jünger, which is incidental to his utopian zone of danger, is distinct from the malignant aggression of Marinetti, and both are of a different order from the catastrophilia of Ballard, for whom the welcoming of disaster and the violent disruption of the rational world is means of puncturing the logic of capitalist spectacle.

As if in response to the surfeit rationality of his surroundings, James ruminates about his deadly collision with Dr. Remington, and concedes that after withstanding the monotonous stream of "road-safety propaganda,"[891] it was a welcome relief to finally experience a car crash. James' recognition that he was acting out his own psychopathologies when expediting this brutal wreck comes as an afterthought. Ballard's characters accept the breakdown of society through its own technological overload, and then embrace the unbinding of social norms in a revolt against hyper-rationalization. As Leonard Orr explains, the protagonists in Ballard's fiction typically prefer the "disastrous heterocosm" to the world of safety and

888 Ballard, *Re/Search*, 154.
889 Ibid., 160.
890 Junger, *On Pain*, 75.
891 Ballard, *Crash*, 31.

domesticity.[892] These anti-heroes, "whose most heroic act is to submit to the disaster,"[893] experience the immersion in a world of danger and irrationality in terms of liberation. In Ballard's short story, "The Terminal Beach," published in 1964, the protagonist interprets the hydrogen bomb as a symbol of amoral freedom. "I feel it's given me the right," Traven says, "—the obligation, even—to do anything I want."[894] It is not always clear whether such statements are to be taken seriously in the narrative structure, but in this case the dissociated protagonist is an earlier iteration of the protean protagonist in *The Atrocity Exhibition*, delivering a parodic critique of the technological society.

Ballard asks whether within these violent intersections of industrial products, concrete, and bodies, one might find some catalyst for transformation, and whether "this harnessing of our innate perversity" might conceivably be "of benefit to us."[895] The affirmative response is demonstrated in the activities of James and Vaughan as they explore the grim scene of a car crash in which the expected revulsion regarding the horrors of victims "pinned against their instrument panels" is reconstituted by a "sense of professional detachment" like that of the surgeon to whom Jünger refers. These "appalling injuries" are translated in terms of the victims' "fantasies and sexual behavior," that may have the effect of reinvigoration.[896] The injuries of the occupants are transmuted into objects of desire. For James, the car crash has inscribed new

892 Leonard Orr, "The Utopian Disasters of J. G. Ballard," *CLA Journal* 43, no 4 (June 2000): 479.
893 Ibid., 483.
894 The repetition of similar or identical names in Ballard's fiction extends beyond *The Atrocity Exhibition*. (J. G. Ballard, *The Terminal Beach* (Middlesex, Eng.: Penguin Books, 1966), 150.)
895 Ballard, "Some Words about *Crash*," 49.
896 Ballard, *Crash*, 148.

erogenous zones on these bodies in the form of scars, welts, and the callused troughs pressed into the skin from the straps of spinal braces and leg supports, all of which contribute to a "repertory of orifices."[897] The emergence of orifices as new sex organs draws on the trope of the prosthetic organ. For Ballard, the emergence of orifices in the bodies of crash victims generate new libidinal zones, sex organs disassociated from the genitalia. "These descriptions seemed to be a language in search of objects," James speculates, "or even, perhaps, the beginnings of a new sexuality divorced from any possible physical expression."[898] The auxiliary organs are metaphors for machinic embodiment and its adaptation to the world of technology. New organs emerge from the fusion of bodies and machines and, for Ballard, this metamorphosis occurs in the erotic dimension of the automobile crash.

Even in the midst of Ballard's most brutal technological dystopias one finds a transformational grammar inscribed on the surface of technology itself. The transgressions in Ballard's disaster fiction are framed as a celebration of the most violent and perverse forms of machinic embodiment, and indeed the characters behave as if they espouse this descent into barbarism, with the tacit recognition that the technological terrain in which they are immersed is the source of this psychopathy and the alienation of which it is a symptom. Ballard suggests that we are all "innately perverse," violent, and obscene, but that our "talent" for perversion and violence and obscenity "may be a good thing," and he justifies this sentiment by defining these attributes as part of a process.[899] Alienation, for Ballard, is addressed dialectically

897 Ibid., 140.
898 Ballard, *Crash*, 28.
899 Ballard, *Re/Search*, 161.

with the affirmation that "rather than fearing alienation, people should *embrace* it," because "it may be the doorway to something more interesting."[900] In a similar manner, Kracauer addresses the antinomies of capitalist rationalization by proposing that there is not *enough* rationalization, and that one can surpass the mass ornament by pushing rationalization to its limit. Figures like Traven in *The Atrocity Exhibition* accept fragmentation not necessarily to escape subjectivity but to experience the new subjectivities inherent in the process of abstraction which, for Kracauer, is a necessary step toward demystification. These transformations must be articulated through the contours of the technological environment from which alienation emerges. The exploration of total alienation is capital. Ballard addresses the deadlock of capitalist spectacle by rupturing its monopoly of representation through transgressive stories of technological apocalypse in which characters surmount the obstacle by immersing themselves in its troubling dynamic. And it was only through dehumanization, the death of affect, and the subsequent armoring of the exterior as propounded by Marinetti, Lewis, and Jünger, that these characters were emboldened to get close enough to the disaster to see the cataclysm as a regenerative rather than a diminutive experience.

That the spectacular society in which Ballard crafted his cultural disaster novels is far more pervasive today, with expanding digital capacities for media saturation far more encompassing than any previous constellation of consumer capitalism, is self-evident. The ambivalence regarding the colonization of the world

900 Ballard, quoted in Iain Sinclair, *Crash: David Cronenberg's Post-mortem on J. G. Ballard's 'Trajectory of Fate'* (London: British Film Institute, 1999): 42.

by machines that is an idée fixe of machinic embodiment and the cult of disaster continues apace although the trepidation once focused around the disenchantment of the world has been fragmented into other concerns, some of which Ballard addresses obliquely, like the appropriation of the human will by the technological landscape. Ballard's allegorical dystopia gestures to the double logic of machinic embodiment, both empowering and dismembering, which is instructive regarding an attempt to historicize the nexus of bodies and machines in the twenty-first century. The mythologies of disaster and vitality that erupted in the early part of the last century provide another important point of influence along this historical trajectory, especially in terms of the heightened insensitivity to violence. The process by which violence is gradually inoculated through the prosthesis of visual technology works in concert with an attendant scopophilic consumption, as evidenced in internet porn and drone warfare, and the subsequent supersession of bodily experience in the current system of representation is a remnant of this legacy.

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