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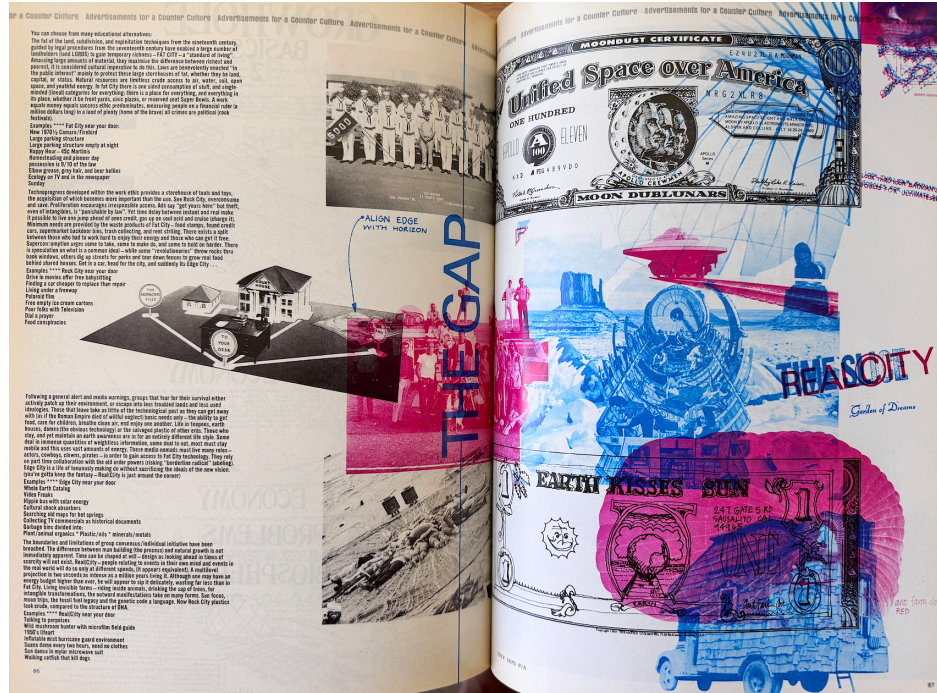
for Farhan Karim and Farahana Ferdous, eds.
Routledge Handbook of Architecture and Social Engagement

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Crediting hippie builders as socially engaged designers seems self-contradictory. The image of the hippie as a stoned, sybaritic loafer preoccupied with sex, drugs, and rock'n'roll was (and is today) the reigning cliché: a trope devised as much to exploit the newsstand appeal of counterculture 'otherness' as to buttress the values of the postwar "consumer's republic" mapped by cultural historian Lizabeth Cohen.¹ Even the term "hippie," the mocking diminutive of "hip" popularized in 1965 by *San Francisco Examiner* columnist Michael Fallon and imposed upon its subjects, diminishes their perceived potential as historical actors.² Marxist critics added a layer of political reproof to mass-media derision. Misinterpreting emblems of alienation as frivolous lifestyle accessories, new left scholarship often portrayed hippies as trailblazers of a consumer culture they abhorred, rather than its exploited subjects.³

That the carcass of the counterculture was subsequently appropriated by corporate interests and gutted for its fleece – the raw material from which to spin profits from music, fashion, herbal cosmetics, and organic granola bars (to mention a few commercial byproducts) – hardly seems surprising given a narrative framework that reifies superficiality and transience. "No wonder then," notes curator Andrew Blauvelt, "that we are left with the meager choice of the clueless flower child, the naïve tree-hugger, or the slacker pothead as the period's troubled ambassadors." Rather than reducing hippie culture to its least common denominator, this essay examines its overlooked initiatives to devise a new materiality of trash. Flouting bourgeois conventions that kept consumer debris "out of sight and out of mind," counterculture builders embraced waste as both a repressed material artifact of ecological degradation and, conversely, an underappreciated resource with which to create alternatives to postwar affluenza.

In essence, salvage provided a path to salvation through recycling and “self-build” practices: the latter implying both the lay acquisition of construction skills and their use as a catalyst for liberated identity formation.

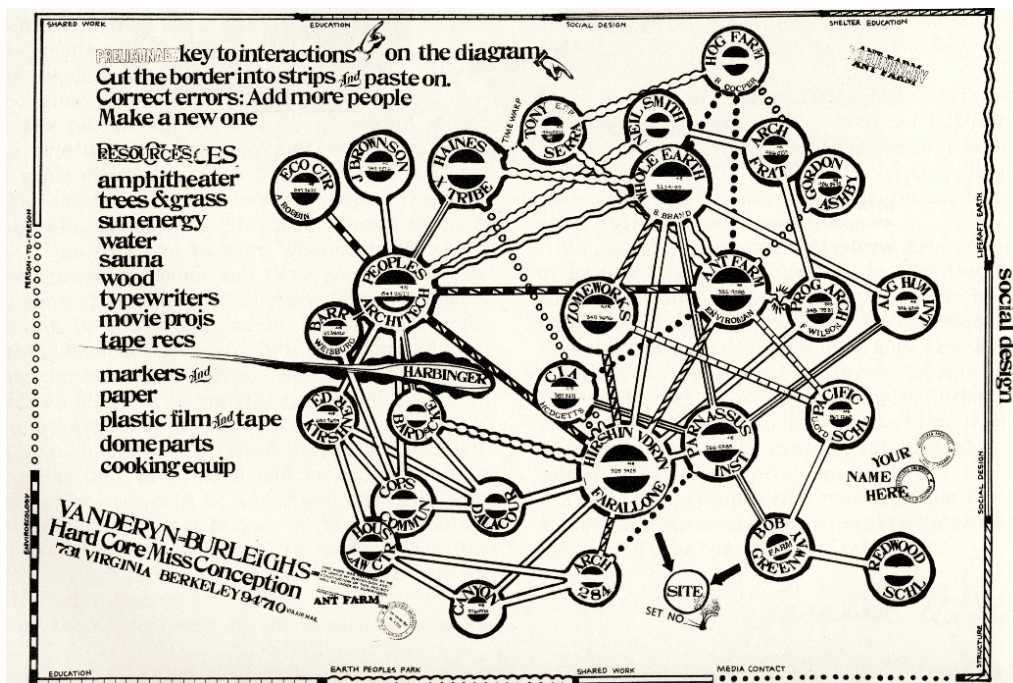


Ant Farm, "Advertisements for a Counter Culture," *Progressive Architecture* 51, No. 6 (July 1970)

Hippie Power/ Knowledge

“Advertisements for a Counter Culture,” a hallucinogenic insert within the otherwise staid July 1970 issue of *Progressive Architecture*, documented the clash of design professionalism and its hippie alternative. A collage of texts, freehand drawings, cut-out photos, and ragged halftones printed in raw process colors provided a glimpse into the varied hippie enterprises presented at the Freestone gathering, a counterculture design festival staged three months earlier on a bucolic farmstead sixty miles north of San Francisco. Held on the vernal equinox, Freestone marked the culmination of three consecutive conclaves offering what *Whole Earth Catalog* impresario Stewart Brand described as “a meld of information on Materials, Structure, Energy, Man, Magic, Evolution, and Consciousness.”⁴ Alloy, staged on the 1969 vernal equinox in New Mexico, celebrated the culture of hippie bricoleurs, as Andrew Kirk defines them: the “polymaths – carpenters, ex-servicemen, engineers,

mathematicians, photographers, and scientists” who, as ‘jacks of all trades’ and without formal design training, pioneered contemporary sustainability practices.⁵ Peredam, the second in the series, sought to connect “those working within establishment research and academic worlds, and those living in intentional communities and working in so-called ‘underground’ enterprises.”⁶ Organized by David Evans of the Augmented Human Intellect Research Center at the Stanford Research Institute and held on a forested site north of Santa Barbara during the 1969 autumnal equinox, Peradam celebrated the cross-fertilization of Bay Area cybernetic and alternative cultures.⁷ In deliberately scheduling these events to coincide with the celestial calendar, organizers synchronized their Aquarian activities with both cosmic and mechanical time: a manifestation of the philosophy that design historian Simon Sadler calls “hippie holism.”⁸



Curtis Schreier, Freestone chart of Bay Area design activism, “Advertisements for a Counter Culture,” *Progressive Architecture* 51, No. 6 (July 1970).

A diagram created by Curtis Schreier of the Ant Farm art collective for “Advertisements for a Counter Culture” represents a key document of hippie design activism. Depicting its endeavors from an insider’s perspective, Schreier mapped the reformist affinities linking architects, planners, ecological activists, and alternative

educational advocates that turned the San Francisco Bay Area into the world's most productive hippie enterprise zone. The chart doubled as a useful phone directory, with network spokes converging upon nodes that, upon closer inspection, reveal themselves to be the circular labels of rotary-dial telephones. Captions inscribed along the rectangular border reveal Shreier's graphic conventions, explaining the differing line configurations symbolizing vectors of interest, including shelter, education, "enviroecology," and social design. Instructions tell users to "cut the border into strips and paste on. Correct errors: Add more people. Make a new one." Two blank circles on the right bear the caption: "YOUR NAME HERE."⁹ Schrier's chart issued an open-ended invitation to participate in radical connectivity: the shared working method of Bay Area hippie design activists and innovators.

An accompanying Ant Farm manifesto provided a crisis assessment of postwar society and a program of interventions. America's vaunted "standard of living," Ant Farm members maintained, was exacerbating "the difference between richest and poorest." Extractive industries and the legal fictions enacted "to protect these storehouses of fat" had spawned an ecologically disastrous consumer culture. Activist responses would launch hippies on a new journey of self-discovery. Banding in ad-hoc tribes, individuals might "either actively patch up their environment, or escape into less troubled lands and ideologies." Departure from "Fat City" augured "life in teepees, earth houses, domes (the obvious technology), or the salvaged plastic of other eras." Those who chose to stay would "rely on part time collaboration with the old order powers" while fighting to "maintain an earth awareness." "Without sacrificing the ideals of the new vision," a new breed of "media nomads" would learn to juggle "immense quantities of weightless information... in order to gain access to Fat City technology."¹⁰ Summoned to Freestone by an invitation circulated by Sim Van der Ryn, a professor of architecture at UC Berkeley, groups and individuals exploring communal life, ecological sustainability, alternative education, guerilla theater, and grassroots urban planning gathered "to learn to design new social forms, new building forms, that are in harmony with life... to build a floating university around the design of our lives."¹¹ The social engagement of Van der Ryn's "floating university" can be traced in a set of

experiments that merged educational and ecological activism through radical recycling, and which connected actors represented by a constellation of hubs in Schrier's chart – including Ant Farm; Hirshen/Van der Ryn Architects, sponsor of the Farallones Institute, a laboratory for sustainable and socially conscious design (and the diagram's most interconnected node); Arch 284, a studio course in design-build activism taught by Van der Ryn at Berkeley; Stewart Brand and the *Whole Earth Catalog*; Zomeworks, a builder of structures derived from geodesics founded by Steve Baer, his wife Holly, and associates; Pacific High School, the alternative academy celebrated for its geodesic building program in Lloyd Kahn's *Domebook* series; and Bob Greenway and his partner Sally Rasberry, alternative education proponents on whose land the Freestone gathering took place. Their deployment of design as an instrument of social change, while driven by a quest for self-awareness and ludic delight, undercuts stereotypes of the indolent, apolitical hippie concerned solely with self-gratification and psychedelic spectacle.



Student builders at an Elementary School in Castro Valley, California, document a geodesic dome project organized by their teacher, Pamela Campe, and her husband, "outlaw builder" Jim Campe, as seen in the *Farallones Scrapbook* (1971), "a memento and manual of our apprenticeship in making places and changing spaces in schools, at home, and within ourselves." Photo courtesy of Jim Campe.

Children of the Revolution

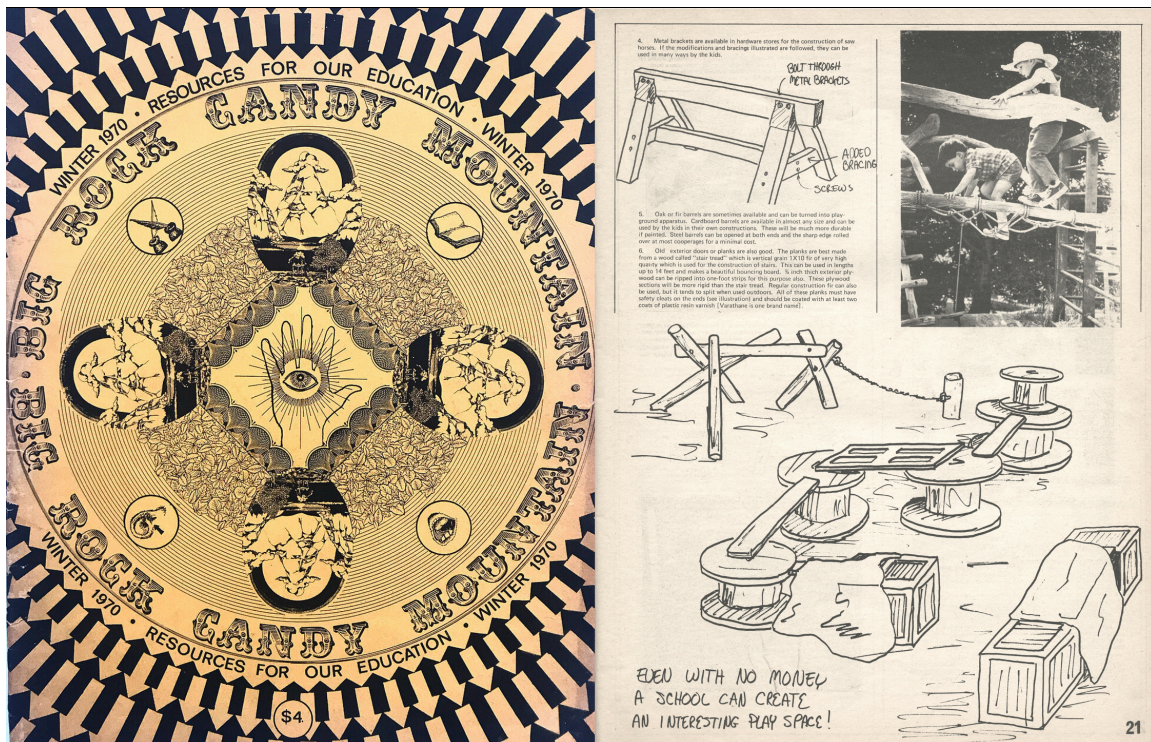
The author Salli Rasberry and her partner Robert Greenway, a disciple of psychologist Abraham Maslow, retreated to the Sonoma County farm that hosted the Freestone gathering in order to embark on a joint project: compiling a catalogue of tactics to “free our children from the controls that warp their growth.”¹² Both were leading figures in a “free school” movement that advocated a revolution in childhood learning practices. Hippies revered the child as the bearer of a privileged subjectivity — one that perhaps echoed their idealized self-portrayal as noble savages. The admiration was mutual, according to Bay Area cultural historian Theodore Roszak. In *The Making of a Counter Culture*, the 1969 bestseller that gave a movement its name, he wrote: “The hippie, real or as imagined, now seems to stand as one of the few images toward which the young can grow without having to give up the childish sense of enchantment and playfulness, perhaps because the hippie keeps one foot in childhood.”¹³ For hippies, the archetypal child took many forms. The peripatetic Shivalila commune, located at the outer limits of the psychedelic cosmos, worshipped the tribe’s babies as incarnations of Neolithic simplicity.¹⁴ At the opposite end of the technological and generational spectrum, the elderly Buckminster Fuller, a visionary inventor and unapologetic technocrat, personified “the childlike innocence that many New Communalists sought to bring into their own adulthoods,” as historian Fred Turner notes.¹⁵ Cultural reactionaries inverted this fascination with the child’s subjectivity, portraying the ‘60s as “no more than a long decade of arrested development that refused to pass into adulthood.”¹⁶ Defamatory as well as nostalgic descriptions of the hippie “youth culture,” while literally correct, remain myopically circumscribed in formulation. As Ron Miller, a scholar of postwar American pedagogy, points out, “nearly all historians of this era have overlooked the radical critique of education below the university level.”¹⁷ Although the free school movement was a central project of Bay Area hippies, historians of the counterculture mention it only in passing, if indeed at all.

Free school doctrine reflected the hippie perception of cultural and political liberation as conjoined goals. “It is a revolutionary act to be involved in a free school,” Rasberry and Greenway declared. The free school rebellion meant “Saying

'no' to the heart of a culture... and establishing an alternative system for learning is an explicit rejection of a *set* of beliefs, and the web of premises, myths, rituals... that goes with [it]." Convinced that public schools had spiraled beyond reform, Rasberry and Greenway dedicated their manifesto, *The Rasberry Exercises*, "To the millions of children still in prison in the United States and to the handful of adults trying to spring them."¹⁸ To appreciate their rhetoric, contemporary readers must be reminded how far from humanist principles the vanguard of U.S. public education had strayed. In the mid-1960s, a novel building type, the windowless school, represented the latest advance in modern functionalism. When a Board of Education in Illinois considered the benefits of including windows in new school construction against "the availability of adequate artificial light," "lower construction costs," and the advantage of "a controlled environment wherein students would have their attention directed upon classroom activities," board members "could not find sufficient reason that windows were absolutely necessary." In 1967, *Time* magazine hailed Harlem's windowless I.S. 201, the most expensive public school built to date in Manhattan, as "the city's finest, an architectural gem and potentially an academic joy."¹⁹ Batteries of psychological tests subsequently revealed what should have been intuitively obvious: that students deprived of any connection with the outside world for most of their waking hours suffered forms of "maladjustment" ranging from institutional estrangement to "serious disturbances."²⁰ Child psychologists implored school boards to prioritize the "mental health and educational growth of children" over "the economy of one building type over another, [or] the desire to be in the *avant-garde* of school architecture."²¹ Having shaped an alternative culture and its values, hippie free schoolers chose to remove their children from an educational assembly line that they believed had been calibrated to nurture docile conformists, and which seemed poised to mass produce a generation of neurotics as well.

Free schools, according to Len Solo, coordinator of the Teacher Drop-out Center, were democratic, non-compulsory, and culturally and racially heterogeneous communities. All stakeholders shared in decision-making; children chose learning activities from a variety of meaningful experiences.²² A regional surge in grassroots publishing proved crucial in fomenting the free school rebellion,

as indicated by the subtitle of Rasberry and Greenway's primer: *How to Start Your Own School and Make a Book*. New, reasonably priced, user-friendly technologies allowed neophytes to generate justified copy, shoot halftone images, and create camera-ready paste-ups that could be taken to any printer. The weapons of choice for shoestring outfits — an IBM Selectric composer and the Polaroid MP-3 halftone camera — inaugurated desktop publishing decades before digital word processing and internet blogs.²³ The final step in D.I.Y. publishing, a trip to the printer, was easy in the Bay Area, which offered the greatest concentration of small, independent, politically progressive press shops anywhere in the world.²⁴ Grassroots publishing initiates, in a transaction typical of the hippie gift economy, gladly showed ingénues the ropes. Rasberry learned how to make books in the garage of the Rancho Diablo estate in Menlo Park: the graphics studio set up by Stewart Brand for production of the *Whole Earth Catalog*, the first of the region's alternative publications to achieve a sizeable national readership (with revenues to match).

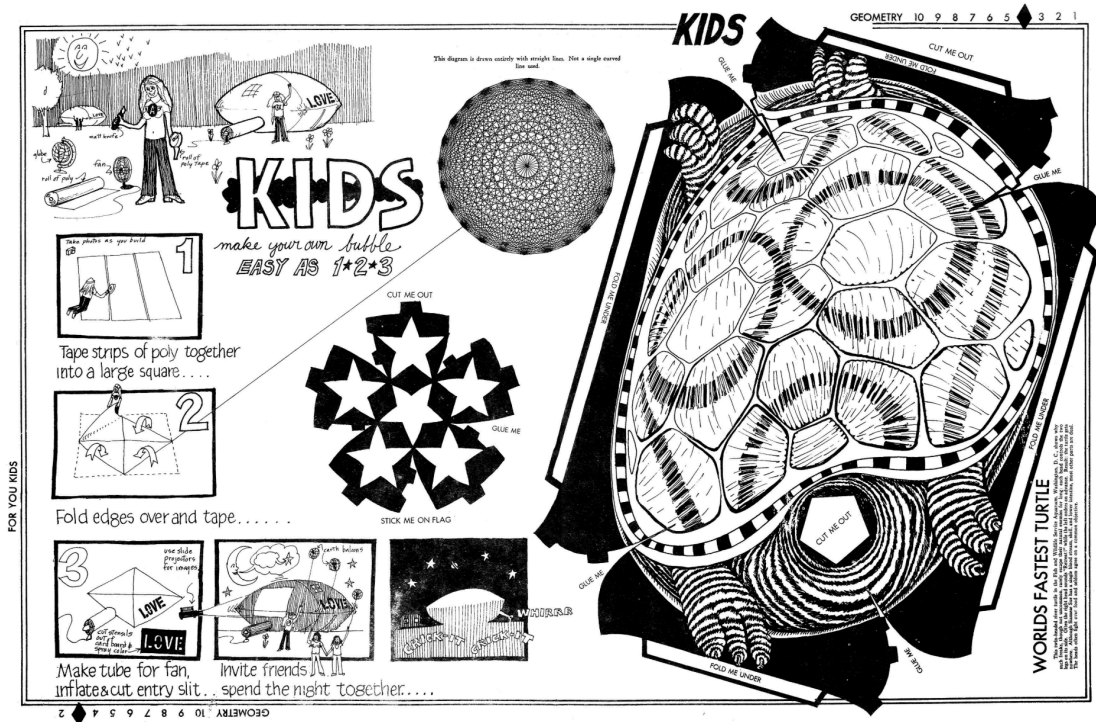


"Educational Environments – Play Sculpture," *Big Rock Candy Mountain: Resources for our Education* (Sam Yanes, editor), Winter 1970.

Big Rock Candy Mountain, a free school analogue of the *Whole Earth Catalog*, traced its origins to an offhand comment Brand had made to Sam Yanes, the groundskeeper at Rancho Diablo: “Would you be interested in tackling the educational part of what I’m doing here?” His query suggests the freewheeling nature of hippie meritocracy, in which credentials did not ordain qualifications, an individual’s calling was defined by whatever a person was passionate about doing rather than what they’d been trained to do; and income served less as a mark of status than a fungible resource.²⁵ Brand’s suggestion, prompted by the recent founding of the New Schools Exchange at a Menlo Park conference a few months before, represented an attempt to make good on his own abortive initiatives predating the *Catalog*’s success. These including Brand’s attempt to launch an “educationist’s newsletter” with related teaching fairs, and “another doomed project,” the “E-I-E-I-O Electronic Interconnect Educated Intellect Operation.”²⁶ Yanes, accepted Brand’s proposition. A Brandeis graduate recovering from his own failed attempt to launch a Northern California commune, Yanes bequeathed its proposed name to the new catalog and procured a production grant from Brand’s benefactor, Dick Raymond of the Portola Institute.

From start to finish, *Big Rock Candy Mountain* epitomized Brand’s motto “Fail young.” Youth was a time for experiments, according to Brand, “and if they didn’t work, so be it.”²⁷ Portola Institute funding echoed his aphorism: projects received a three-year lifeline, after which they were expected to dissolve. Without any prior exposure to free school debates on pedagogy, Yanes absorbed them “on the fly.” His start-up journal duplicated the *Whole Earth Catalogue* format, size, and interior layout; used the same production equipment; contracted printing to the same press; and relied on the same distributor, Book People in Berkeley.²⁸ Both publications elevated the ragged style of political leaflets and underground newspapers — derived from urgent circumstances and skinflint production — as a graphic arts aesthetic. With their cheap saddle binding, cut-and-paste illustrations, and a patchwork of typefaces leavened by snippets of amateur calligraphy and hand lettering, Portola Institute publications exuded a homespun quality that mainstream

publishers found risibly crude, but which telegraphed hippie credentials by embedding traces of the handmade within a mass-produced commodity.²⁹



Ant Farm, *Inflatocookbook: A Pneu-Age Techs Book*, January 1971

Big Rock Candy Mountain echoed Brand's belief that "access to tools," as announced on the cover of the *Whole Earth Catalogue*, would be pivotal in the construction of a counterculture. Yanes's free school analogue showcased structures taylored to "self-build" activities, in both the literal and figurative senses. "Free schools have a fantastic opportunity to enjoy space in new ways, to experiment with indoor-outdoor stuff," Rasberry and Greenway wrote. "Kids building spaces and then learning what's unique to that space" nurtured anti-authoritarian and ecological values, they maintained: "learning how to be active rather than submissive when involved with man-made things; and submissive rather than active when involved with natural environments."³⁰ The tools for creative learning featured in *Big Rock Candy Mountain* also were on display at the Freestone gathering, which resembled a free school trade fair. Children painted on paper, themselves, and each other at an

outdoor “kids art” area. They clambered over a space-frame play structure assembled on site by its makers, Steve Baer and his associates at Zomeworks. They romped with their parents inside and atop Ant Farm’s low-pressure polyethylene “Pillow” inflatable — commissioned by a rock concert promoter in Japan, used as a “bad trips pavilion” for therapy seekers at the Altamont Speedway music festival, and promoted by its makers as the “antithesis to River City Union High’s anti-environment.”

According to Ant Farm confederates, inflatables excelled both functionally and spatially as pedagogically indeterminate objects: “The freedom and instability of an environment where the walls are constantly becoming the ceiling and the ceiling the floor and the door is rolling around the ceiling somewhere releases a lot of energy that is usually confined by the xyz planes of the normal box room,” announced the group’s *Inflatocookbook*, a self-published, do-it-yourself manual.³¹ The spidery playground climbers manufactured by dome-building pioneer Steve Baer boasted similar free school credentials. Baer first experimented with zonahedral structures in the mid-1960s at Drop City, the Colorado commune whose meteoric rise and drugged-out disintegration provided one of the templates for a mass-media “hippie death-trip” master narrative.³² Journalists were far less interested in the story of hippie social activism entailed in Baer’s creation of a joint-stock company specializing in innovative educational resources. Zomeworks climbers, hauled cross-country in a repurposed school bus for on-site demonstrations, arrived in bundles of steel struts and aluminum connectors “easily assembled in almost any shape imaginable” by “a group of kids with wrenches and a brief introduction to the system.”³³

Alternative space-making also built the collective morale called for in free school manifestos. At the troubled Pacific High school in Santa Cruz, too often used by well-heeled parents as a drop zone for difficult teenagers, a singular moment of group cohesion occurred when students began building communal geodesic residences under the tutelage of carpenter-turned-dome-guru Lloyd Kahn. “Last year they were best known for sex and dope, but this year the focus is on building

domes for kids to live in,” announced the unfazed authors of *Progressive Architecture’s* “Advertisements for a Counter Culture.”³⁴



Odyssey School students assembling a geodesic dome in a Lawrence Hall of Science gallery space, 1970. Photograph courtesy of Jim Campe.

Alternative U.

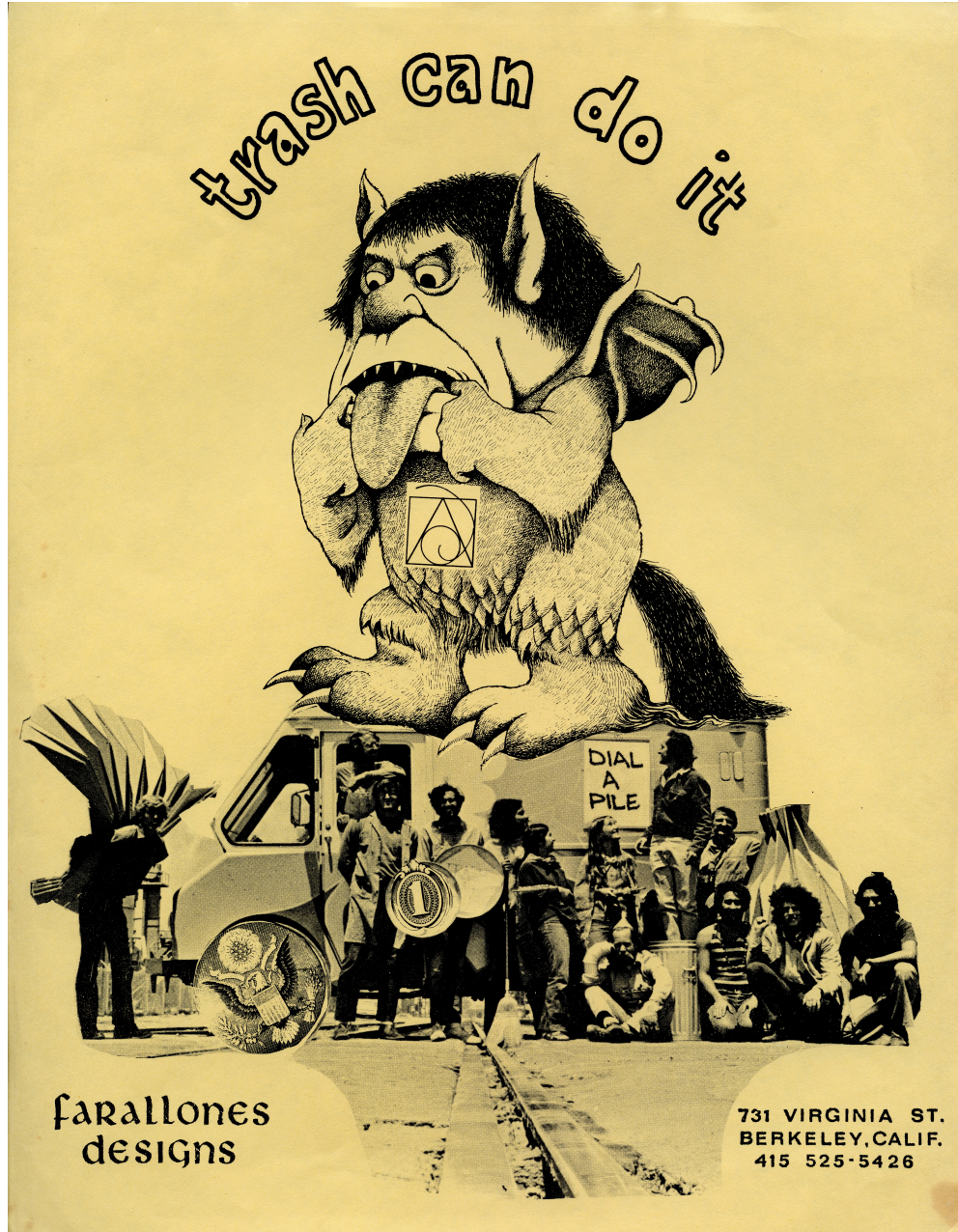
Hippies disdained academia, particularly California’s “multiversity” system, explicitly designed to boost postwar industrial and economic expansion. However, regional universities bankrolled the cognitive capital of Bay Area counterculture. Cheap, state-subsidized tuition brought a continuous stream of intellectually adept and politically impassioned students to contribute volunteer labor to activist ventures. The Berkeley Free Speech Movement of 1964 and the creation of People’s Park in 1969 both demonstrated how shared ideas could forge collective agency among thousands of individual actors (as well as the University’s unintended ability to construct communities through shared antipathy to its policies). While academia may have been reviled, pacts with the leviathan established strategic outposts that straddled “outlaw” and “inlaw” realms, as Stewart Brand called them.³⁵ At UC

Berkeley's Department of Architecture, Sim Van der Ryn conducted an ambitious set of experiments in free school spatial pedagogy beginning with Architecture 284, a 1969 graduate design studio focused on D.I.Y. building systems devised as classroom interventions. The network of participants included hippie free schoolers, University of California scholars, Berkeley Unified School District administrators, and Ford Foundation officers, as revealed by Marta Gutman, an historian of designed environments for children.³⁶

As one of the first U.S. cities to voluntarily integrate its public schools, Berkeley became a case study in the inequities of educational apartheid. Students with incommensurable differences in preparation suddenly shared the same grade level, with chaotic results.³⁷ In a meeting with the local Superintendent of Schools, Van der Ryn prescribed a radical reconfiguration of classrooms and offered to enlist architecture students to designer "liberated spaces" for the foundering school district. A Ford Foundation architect-in-residence grant supported what became known as the "Odyssey" initiative. Its "Active Learning Environments" curriculum proposed craft instruction using recycled materials and new pedagogical methods introduced through classroom consultations staged as "happenings."³⁸ In 1968, architecture students installed a prototype "math-science playground," in the basement of UC Berkeley's new Lawrence Hall of Science, where students learned in "an environment filled with domes, soft inflatables, climbing toys, ropes, and parachutes."³⁹ Citing excessive noise and behavioral incompatibilities, the science facility asked the experimental program to vacate its premises in 1971, exiling Odyssey to the school district's more conventional classroom spaces.⁴⁰

Architecture students charged with devising the Odyssey crafts curriculum not only provided new childhood learning experiences, but in the process also brought free school philosophy into their own graduate student education. Their design interventions included "super-carrels" that parceled homogenous schoolroom space into stacked units occupied in the manner of an informal urban settlement. Within a modular wooden scaffold, children used cardboard or fabric partitions to create personalized environments posted with rules for use, permitting a degree of autonomy previously unknown in primary school settings. "The Quiet

Room — Girls Welcome,” announced one carrel sign, with a list of “restrictions” that included “no socking holes in the wall,” “no banging on the roof,” and “no loud or profane talking.”⁴¹



Jim Campe, “Trash Can Do It,” Farallones Designs poster, ca. 1969.

The Odyssey experiment also introduced children to ecology and recycling through “the Eagle,” a surplus U.S. mail van converted into an ad-hoc “school on

wheels” by Jim Campe, a Van der Ryn student and collaborator. The van roamed the East Bay for scrap materials suitable for reuse in craft projects, dropping off gleanings at participating schools and picking up kids for participatory scavenging.⁴² A promotional flyer features a photo of the van and its road crew in an East Berkeley industrial neighborhood under the headline “Trash Can Do It.” Campe is behind the wheel; Van der Ryn stands on a garbage can pedestal surrounded by architecture students. Some hold bin lids, others gaze at the “Dial a Pile” motto mounted on their “reverse garbage truck.” The group portrait conveys the impact of ecological consciousness in Berkeley, which in the late-’60s was one of the few towns in America where parents could be persuaded that having children collect and reuse rubbish constituted a progressive agenda for educational reform.

Free school theory, hippie environmentalism, communitarian idealism, and salvage bricolage came together as an integrated architectural practice in a studio offered by Van der Ryn and Campe during the 1971-72 academic year. Listed in the Berkeley course catalog as Arch102: “Integrated Synthesis of the Design Determinants of Architecture,” the course recruited participants for an entire academic year of research and construction on a forested hillside adjacent to the Point Reyes National Seashore in Marin County. This “on-site experience in the theory and practice of basic building design, land use, and village technology,” offered practical know-how on “Making a Place in the Country”: a nod to the hippie back-to-the-land movement.⁴³ The course content also acknowledged disenchantment among hippie builders with their homegrown versions of Buckminster Fuller’s geodesics. With scores of roofing seams, low-tech domes had turned out to be particularly unsuited to rainy climates. After two installations of his bestselling *Domebook*, created on the model established by the *Whole Earth Catalogue*, Lloyd Kahn repudiated geodesics as the all-purpose solution to counterculture housing. Persuading him that Fuller’s domes were a form of industrial design rather than architecture, Kahn’s co-editor, Bob Easton, introduced him to Bernard Rudofsky’s 1964 exhibition catalogue *Architecture without Architects: A Short Introduction to Non-Pedigreed Architecture*.⁴⁴ “In the past year,” Kahn wrote in 1972, “we have discovered that there is far more to learn from the

wisdom of the past: from structures shaped by imagination, not mathematics, and built of materials appearing naturally on the earth, than from any further extension of whiteman technoplastic prowess.”⁴⁵ In addition to being cheap and dependable, low-tech construction also coincided with counterculture politics, according to Kahn’s analysis. “In addition to the *practical* and *aesthetic* disadvantages I’ve found in plastics, there is the idea that one is dealing with Dow and the oil industry – that is, the people [U.S. President Richard] Nixon works for.” A demonstration by MIT’s Architecture Machine Group at a construction technology conference in Cambridge, Massachusetts completed Kahn’s conversion to vernacular building. “I was particularly disturbed by the vision of the architect sitting at the cathode tube, drawing his design into the computer, the computer causing the [polyurethane] foam truck to build the house. The ultimate in laziness, machine worship.”⁴⁶ In Berkeley, reformist design pedagogy, as conceived by Van der Ryn and Campe, would instead explore hands-on vernacular building methods using salvaged materials: practices antithetical to the cybernetic future being invented at MIT.

Far from rejecting advances in science and technology, the skills advanced in “Making a Place in the Country” fused new ecological modes of analysis with older building traditions and cultures of land custodianship. Mornings were devoted to workshops in skills needed to establish a rural foothold, including “adapting to the natural environment,” site mapping, shelter design, tool use, carpentry and wood frame construction, and “energy and waste systems.” These fundamentals were supplemented by afternoon and evening seminars conducted by visitors “expert in areas of knowledge or technique relevant to our interests.” The course syllabus lists on-site talks on “Mobile Life Styles” by members of the Ant Farm collective; graphic documentation by Gordon Ashby, an alumnus of the Eames design office and special issue editor of the *Whole Earth Catalog*; material properties of wood by the sculptor J.B. Blunk; regional ecology by Gordon Onslow Ford, a former member of André’s Breton’s circle of Paris surrealists and a disciple of the San Francisco Zen master Hodo Tobase; ecopsychology from free school and wilderness-therapy advocate Robert Greenway; and “scrounging” by Doug Hall, a member of the San Francisco

T.R. Uthco art collective.⁴⁷ The variety of guests and breadth of their lectures perfectly convey the expanded field of counterculture design theory and practice and its heady mix of empirical, spiritual, and aesthetic epistemologies.



"The Arc" communal room and drafting studio under construction, UC Berkeley "Outlaw Builder Studio," Inverness, California, 1972. Photo courtesy of Jim Campe.

Over the course of the academic year, the architecture students constructed what amounted to a D.I.Y. village. It coalesced around "the Arc," a building workshop and drafting studio that also served as a communal dining room and lounge. Surrounding it sprang up personal sleeping cabins and treehouse roosts, a sauna, a cookhouse, an outdoor oven, collective shower facilities, a composting outhouse, and a self-composting chicken coop. Building progress conformed to the stages of embodied knowledge acquisition outlined by Kahn in *Shelter*. "There is wisdom, especially for a new builder, in starting small, simply, and heeding local advice," he counseled. "You can watch the rising and setting of the sun and moon, study outlook and orientation, learn about seasonal temperatures and wind direction, rainfall: the

many considerations that should help you decide what kind of house will suit your needs and fit the site.... *You will change during the building process.*"⁴⁸

Acquiring building materials through scrounging rather than a cash transaction also proved transformative, imparting a new skill set that internalized abstract understandings of environmental sustainability. "Wrecking is a way of thinking, a totally different approach to building than working with new materials," Kahn maintained in his catalogue of vernacular shelters.⁴⁹ Under the heading "The Only Growing Resource Is Trash," he advised: "If you find a condemned or abandoned building you can often arrange with the owner to tear it down and clean the site in exchange for salvaged materials."⁵⁰ Berkeley studio communards scavenged old-growth redwood planks from chicken coops abandoned by the local poultry industry in its switch to factory farming. Dismantling ramshackle sheds, scraping chicken shit from salvaged wood, and trucking the hard-won gleanings back to camp, each student earned a new *nom de guerre*, celebrated with certificates that entitled holders "to be known to all as an outlaw builder, with all the rights and privileges attached thereto."⁵¹ In one sense, the "outlaw" moniker was no joke: nothing that the students built conformed to code requirements or had been granted a building permit. Salvaged wooden doors, windows, and siding made the student village a case study in funky hippie bricolage.

Students produced a joint-authored final report on the experimental studio in the form of an underground publication, *Outlaw Building News*, that sold out as fast as it could be printed. Assessing her hippie apprenticeship, a participant wrote: "This... was the first in 13 years of school where community and environment were not contradicted but constructed."⁵² It was a "life architecture class," reflected another; an opportunity to "build a house in which my physical self could exist and... a consciousness in which my spiritual self could exist."⁵³ The studio's idyllic alternative to the violence and social turmoil gripping campuses engaged in protest against the Vietnam War struck some as escapist: "My social conscience tells me that I'm playing elitist games," commented an outlaw builder.⁵⁴ "We share some belief in what we are doing as a way to learn about ourselves and about building," Van der Ryn reflected. "We shared few explicit esthetics except perhaps a common regard

for the land, and a desire to use as many salvaged and native materials as possible.”⁵⁵ Mixing formal instruction in scrounging, nomadics, and eco-metaphysics with a blithe disregard for zoning regulations and building codes, Van der Ryn’s course offering epitomized the “disturbance of the sensible” associated with acts of dissensus, as defined by Jacques Rancière, a belated contributor to free school philosophy.⁵⁶ Van der Ryn’s experiments in design pedagogy, conducted within an academic program certified by the National Architectural Accrediting Board, created to regulate and reproduce established professional competencies, established his preeminence as a go-between linking students enrolled in an accredited school of architecture with Bay Area purveyors of hippie expertise in environmentalism, philosophy, and aesthetics.

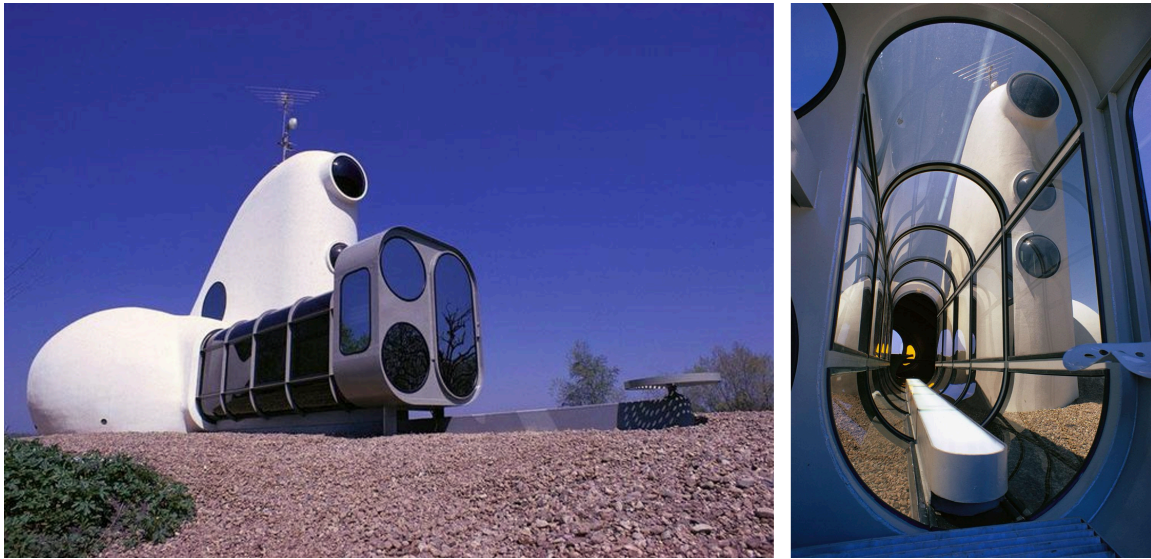


An unpublished position paper of 1968, “Notes on Institution Building,” by Van der Ryn and a recent Dartmouth graduate, Robert Reich, had addressed the question of how to “scale up” grassroots attempts to devise a new culture of social and ecological transformation like that of the Outlaw Builder Studio. Pondering “the defensive status quo-ism of those in power, and the inability of institutions to be sufficiently responsive to change,” they proposed a new agent of reform, “the radical planner,” who would infiltrate “the system” to act as an advocate for the reformist causes it suppressed. “In the process of radical planning, barriers between client/user, administrator and planner are broken down. The planner becomes all three,” Van der Ryn and Reich wrote. “His commitment is total, direct, passionate.”⁵⁷ Unlike the specialized bureaucrat, whose arid expertise severed connections with broader issues and communities, the radical planner would be a systems bricoleur who, “although his skills are not highly developed,” was better positioned to effect holistic change.⁵⁸ It was a job description for Van der Ryn’s subsequent career as a whole design *passeur*, a professional generalist whose design competencies united the architecture of buildings, institutions, communities, and ecosystems.

Countertrajectories

In the weeks following the Freestone gathering, the Ant Farm art collective hit the road. Driving a customized Media Van and armed with Sony Portapak units, the group left California to live out the “Video Freak” lifestyle it extolled in “Advertisements for a Counter Culture.” “Media nomads must live many roles,” the Ant Farm manifesto declared. “They rely on part time collaboration with the old order powers.”⁵⁹ As prophesized, the art collective’s 1970 *Truckstop Network* relied upon the help of a wealthy patron, Marilyn Lubetkin (née Oshman), the heir to a retail sporting goods fortune and the president of the board of trustees at Houston’s Contemporary Arts Museum, to secure a grant for the group’s cross-country performance art tour.⁶⁰ Ant Farm’s project engaged the network of agents described in Howard Becker’s *Art World*: actors crucial to the production, consumption, and legitimation of aesthetic production.⁶¹ As the collective gained fame for its sculpture,

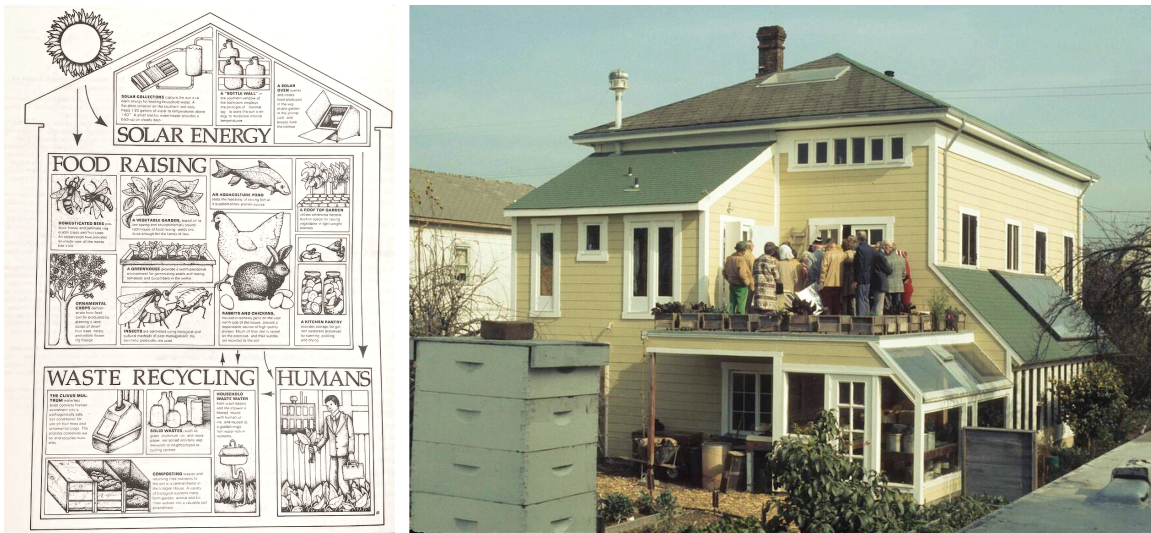
performances, and avant-garde architecture, the eco-freak ideals espoused at Freestone receded in the rear view mirror.



Ant Farm (Doug Michels, Chip Lord, with Richard Jost), *House of the Century*, Angleton, Texas, 1972

Ant Farm's *House of the Century*, a design-build project for clients Marilyn and Alvin Lubetkin, deployed a time-honored building type, the holiday villa, as a test bed for architectural experimentation. Executed in thin-shell concrete, it echoed the curvaceous forms of Detroit autos of the 1930s as well as Ant Farm's own inflatables. Outfitted with an interior featuring hippie handcrafted furnishings, the extravagant lakefront pavilion won a 1973 design award from *Progressive Architecture* and was also featured in *Playboy* – appropriately enough, as its giant inoperable plastic portholes made the interior “so hot you couldn’t wear clothes in it,” as Schreier later recalled.⁶² When Lake Chenango flooded its banks in 1985, the villa filled with fetid water, rotting the wooden interiors. The *House of the Century*, rendered inhabitable in just over a decade, had applied counterculture design semaphores to a patrician landscape folly while ignoring time-consuming hippie ritual of acquiring haptic and empirical knowledge of the building site. The ecologically illiteracy and catastrophic demise of the award-winning villa turned the Lubetkins into the unwitting clients of an exercise in disposable architecture, and at the same proved that “earth awareness,” the ecological consciousness that Ant Farm

had praised at Freestone, was irrelevant to the fame of an “internationally known architecture and design group” celebrated for its avant-garde aesthetics.⁶³



Farallones Institute, *Integral Urban House*, Berkeley, California, 1974. Left: Andy Thram, “Habitat and Life Support System of an Integral Urban House,” from Farallones Institute, *The Integral Urban House: Self-reliant Living in the City* (San Francisco: Sierra Club Books, 1979); right: visitors in backyard, photo courtesy of Jim Campe.

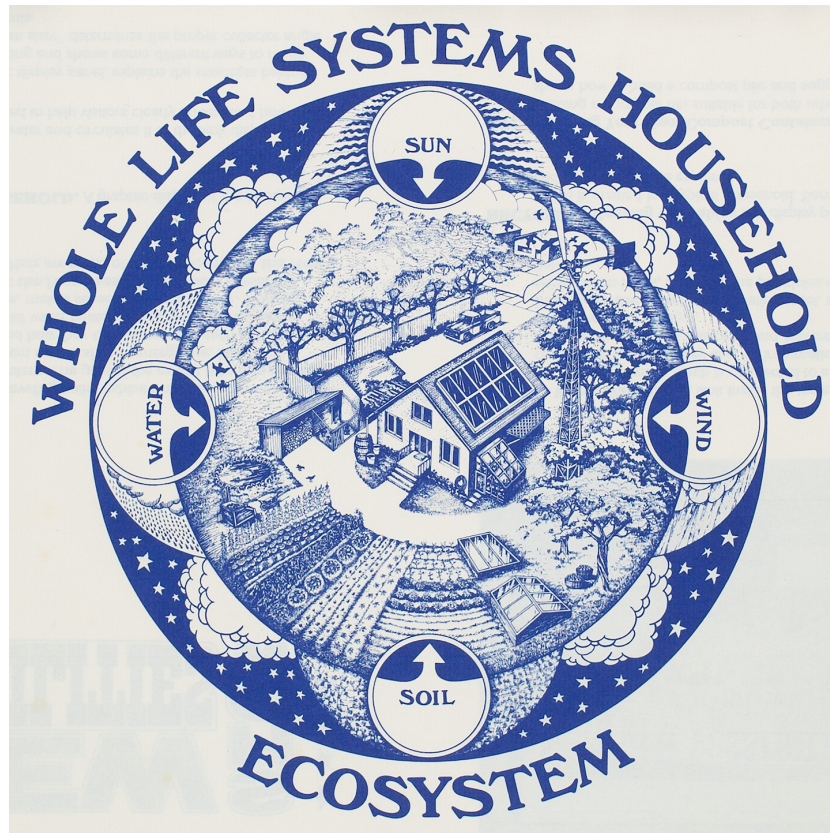
Just as Ant Farm was putting the finishing touches on its *House of the Century*, Sim Van der Ryn was drafting a proposal for “an ecotectural house.” He knew that many of his contemporaries would find its features alienating – not aesthetically, but in terms of the prevailing norms of domesticity. Rather than accepting the role of the postwar American home as a platform for affluent consumption, he called for homes that facilitated energy and food production as well as waste recycling. The project’s twin goals were to reduce resource use and, just as important, to make conspicuous the resident’s place within broader ecological structures. “The idea of ecotecture is to design in terms of the smallest coherent system, so that we become aware and thus responsible for the effects of our actions,” Van der Ryn asserted. Encouraging residents to see holistically would redefine the communal household as “a mini ecosystem in which rabbits, chickens, fish, honeybees, plants, microbes, and people interact in a flourishing example of interrelated self-reliance.”⁶⁴ In contrast to the Foucauldian notion of biopower and biopolitics, in which human subjects are the sole sources of animate agency, Van der Ryn’s philosophical

grounding in “hippie holism,” as design historian Simon Sadler calls it, regarded the biological community – from plants, animals, and insects to the microorganisms breaking down composting toilet waste – as “a *partner* in life on Earth.”⁶⁵

Graduate architecture students at Berkeley provided the research and development talent required to create a prototype for ecotectural home technology. In 1973 they erected a multi-story timber scaffold supporting a patchwork of machine parts as the final project for Van der Ryn’s “Natural Energy Design” studio. Built largely from lumber salvaged from a demolished barn, their “Energy Pavilion” incorporated a wind-driven electrical generator, homemade solar collectors, rain water reservoir barrels, a greenhouse bedded with lettuce and snow peas, and a composting toilet. The ungainly structure was, in fact, the freestanding service core of Van der Ryn’s planned ecotectural house. Local news reports attracted long lines of visitors as well as the unwelcome attention of the Campus Committee on Grounds and Buildings, which demanded the structure’s immediate demolition — but not before a wealthy young donor, Harlow Daugherty, offered funds to continue the project through the Farallones Institute, headquartered at the Hirshen/Van der Ryn design office.⁶⁶

As word of Van der Ryn’s experiment spread, his counterculture enterprise network expanded to include Sterling Bunnell, a psychiatrist; Helga Olkowski, an ecologist and avid gardener; and her husband Bill Olkowski, an entomologist and co-founder of the Berkeley Ecology Center. With enthusiastic Berkeley students again providing labor, they created an urban demonstration home as a foil to the “back to the land” rural commune movement.⁶⁷ A run-down worker’s cottage previously used as a drug rehab center in Berkeley’s industrial district became an ecotectural demonstration home through the addition of a greenhouse, solar collectors, rabbit and chicken pens, raised vegetable beds, beehives, an aquaculture pond, a windmill built of recycled oil drums and a composting toilet. Despite its conceptually radical remodeling, the unassuming exterior form of the cottage assured that it would be ignored by professional architecture journals. For over a decade, a resident student collective gathered data, hosted weekend visitors, and contributed to the 1979

Sierra Club monograph *The Integral Urban House: Self-Reliant Living in the City*, one of the earliest guides to sustainable household design.⁶⁸



Gordon Ashby for the California Office of Appropriate Technology, New Possibilities Show poster (detail), 1977. Gordon Ashby Papers, Environmental Design Archives, College of Environmental Design, University of California, Berkeley.

As the first California State Architect, a new office created by Governor Edmund (Jerry) Brown Jr., Van der Ryn took the campaign for sustainable domestic technology into the streets, quite literally. Moving his field of action from design studios to public service, he organized the Office of Appropriate Technology, a state organization promoting innovations in alternative energy production and resource conservation across all scales of consumption. Van der Ryn commissioned another alumnus of the Freestone gathering, Gordon Ashby, to design a traveling exhibition on home energy efficiency. In May 1977, the brightly painted trailer of “The New Possibilities Show” began its statewide circuit. (Figure 6) Five years later it still was making rounds of schools and colleges, corporate parks, and shopping centers,

demonstrating simple home technologies of solar energy, water conservation, and recycling to 250,000 visitors yearly.⁶⁹ Ashby's promotional graphics for the New Possibility show remained true to the project's hippie roots: a genealogy apparent in his use of the mandala as a means of visualizing ecological holism. While "Notes on Institution Building," the position paper Van der Ryn co-authored with Robert Reich, may have remained unpublished, both authors in their subsequent careers brilliantly demonstrated how institutional positions could be used strategically to advance the concept of the "radical planner" as an agent of change and progressive social reform.

¹ Elizabeth Cohen, *A Consumer's Republic* (New York: Vintage, 2004).

² Michael Fallon, "A New Paradise for Beatniks," *San Francisco Examiner*, 5 September 1965.

³ For example, Thomas Frank describes the counterculture as "a stage in the development of the values of the American middle class, a colorful installment in the twentieth century drama of consumer subjectivity." Frank, *The Conquest of Cool* (Chicago: University of Chicago Press, 1997), 29.

⁴ Stewart Brand, "Alloy," in Stewart Brand, ed., *The Last Whole Earth Catalog* (New York: Random House, 1971), 112.

⁵ Andrew Kirk, "Alloyed: Countercultural Bricoleurs and the Design Science Revival," in David Kaiser and W. Patrick McCray, eds., *Groovy Science: The Countercultural Embrace of Science and Technology over the Long 1970s* (University of Chicago Press, 2016), 352.

⁶ David Evans, Peradam invitation, undated (September 1969), <http://who1615.com/pdfs/EarlyContactwithSBrandplus5pp.pdf>, accessed 22 April 2016. The document provides evidence that the Peradam event occurred in September 1969 rather than "the fall of 1970," as stated by Chip Lord in an oral history interview: Linda Kallipoliti, "Interview with Chip Lord and Curtis Shreier," in Beatriz Colomina, Craig Buckley, and Urtzi Grau, eds., *Clip, Stamp, Fold: The Radical Architecture of Little Magazines, 196X to 197X* (Barcelona: Actar, 2010), 411.409.

⁷ These overlapping worlds are documented in Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006).

⁸ Simon Sadler, "An Architecture of the Whole," *Journal of Architectural Education* 61, No. 4 (2008): 108-129; "Mandalas or Raised Fists? Hippie Holism, Panther Totality, and Another Modernism," in Andrew Blauvelt, ed., *Hippie Modernism: The Struggle for Utopia* (Minneapolis: Walker Art Center, 2015), 114-125.

⁹ Curtis Schreier, "Advertisements for a Counter Culture," *Progressive Architecture* 51, No. 6 (June, 1970): 86.

¹⁰ Ant Farm, "Advertisements for a Counter Culture," *Progressive Architecture* 51, No. 6 (June, 1970): 86.

¹¹ Forest Wilson, Editorial introduction, "Advertisements for a Counterculture": 70.

¹² Salli Rasberry and Robert Greenway, *Rasberry Exercises: How to Start Your Own School and Make a Book* (Freestone: Freestone Publishing, 1970), i.

¹³ Roszak, *The Making of a Counter Culture: Reflections on the Technocratic Society and its Youthful Opposition* (Garden City: Doubleday & Co., 1969), 39-40.

¹⁴ Shivalila members are interviewed in the documentary *Commune*, DVD, 78 min., Five Points Media, New York, 2005; the cult's philosophy is reviewed on a website dedicated to its founder, Gridley Wright: gridleywright.com, accessed 2 February 2015.

¹⁵ Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006), 55.

¹⁶ Michael Watts, "Caught on the Hop of History: Communes and Communards on the Canvas of '68," in Iain Boal, Jennifer Stone, Michael Watts, and Cal Winslow, eds., *West of Eden: Communes and Utopia in Northern California* (Oakland, CA: PM Press, 2012), 223.

¹⁷ Ron Miller, *Free Schools For Free People: Education and Democracy after the 1960s* (Albany: University of New York Press, 2002), 6.

¹⁸ Rasberry and Greenway, *Rasberry Exercises*, 37; frontispiece.

¹⁹ "Integration: The Sorry Struggle of I.S. 201," *Time* 88, no. 4 (30 September 1966); "Who Builds a School Without Windows?"

<http://newyorkers.livejournal.com/4706084.html> (accessed 11 March 2015); Marta Gutman, "Spaces of Childhood: A Radical Agenda for Design and Research," paper presented at Townsend Center for the Humanities, University of California, Berkeley, 30 October 2014; "Radical by Design: The Odyssey School in Berkeley," paper presented at the Society of Architectural Historians conference, Pasadena, 7 April 2016.

²⁰ Syd Salt and L. J. Karmel, "The Windowless School," *The Clearing House* 42, no. 3 (Nov. 1967): 176-77. See also Louis J. Karmel, "Effects of Windowless Classroom Environment on High School Students," *Perceptual and Motor Skills*, no. 20 (1965): 277-278.

²¹ Salt and Karmel, "The Windowless School." See also: "Windowless School Under Siege as Negroes, City Fight for Control," *The Lewiston Daily Sun* (26 Sept. 1966); and Vincent Cannato, *The Ungovernable City: John Lindsay and His Struggle to Save New York* (New York: Basic Books, 2001), 272-4..

²² Len Solo, "Some of our children may live: A study of students in alternative and innovative schools" (Ed.D. dissertation, University of Massachusetts, 1972; cited in Miller, *Free Schools For Free People*, 60.

²³ Sam Binkley, *Getting Loose: Lifestyle Consumption in the 1970s* (Durham NC: Duke University Press, 2007), 109; Sam Yanes, interview with author, 1 February 2015.

²⁴ Lincoln Cushing, "Red All Over: Political and Countercultural Printshops of the SF Bay Area," lecture at San Francisco Public Library, 13 April 2014:

<https://www.youtube.com/watch?v=tU9CsU0aZfQ&feature=youtu.be>, accessed 1 February 2015.

²⁵ Sam Yanes, interview with author, 1 February 2015.

²⁶ Guide to the New Schools Exchange Records, MS 889, Yale University Library <http://drs.library.yale.edu/HLTransformer/HLTransServlet?style=yul.ead2002.xhtml.xsl&pid=mssa:ms.0889&clear-stylesheet-cache=yes>, accessed 1 February 2015.

²⁷ Sam Yanes, interview with author, 1 February 2015. Salli Rasberry and Michael Phillips canonized Brand's aphorism in a counterculture business bestseller, *The Seven Laws of Money* (Menlo Park: Word Wheel, 1974).

²⁸ Andrew Kirk, *Counterculture Green: The Whole Earth Catalog and American Environmentalism* (Lawrence: University Press of Kansas, 2007), 47; Michael Phillips, Dick Raymond, Salli Rasberry, and Stewart Brand, *The Seven Laws of Money* (New York: Random House, 1974); Sam Yanes, interview with author, 1 February 2015.

²⁹ On 1970s lifestyle print culture and its West Coast origins, see Binkley, *Getting Loose*, 101-128.

³⁰ Rasberry and Greenway, *Rasberry Exercises*, 105, 108.

³¹ Ant Farm, *Inflatocookbook*, 1970, n.p.

³² Drop City's substantial literature includes: Peter Rabbit, *Drop City* (New York: Olympia Press, 1971); Simon Sadler, "Drop City Revisited," *Journal of Architectural Education*, 58, no. 1 (2006): 5-14; John Curl, *Memories of Drop City, the first hippie commune of the 1960s and the summer of love: a memoir* (New York: Universe, 2007); Richard Farifield, *The Modern Utopian: Alternative Communities of the '60s and '70s* (Los Angeles: Process, 2010); Mark Matthews, *Droppers: America's first hippie commune, Drop City* (Norman OK: University of Oklahoma Press, 2010); and Erin Elder, "How to Build a Commune: Drop City's Influence on the Southwestern Commune Movement," in Elissa Auther and Adam Lerner, eds., *West of Center: Art and the Counterculture Experiment in America, 1965-1977* (Minneapolis: University of Minnesota Press, 2012), 3-20.

³³ "Zomeworks," *Big Rock Candy Mountain* (Winter 1970): 27.

³⁴ "Advertisements for a Counter Culture": 73. See also Michael S. Kaye, *The Teacher Was the Sea: The Story of Pacific High School* (New York: Links, 1972).

³⁵ Interview with Gordon Ashby, Pt. Reyes Station, CA, 14 November 2014.

³⁶ Gutman, "Spaces of Childhood."

³⁷ Ibid. A brief oral history of school desegregation in Berkeley by Gabrielle Morris, "Carol Sibley: A School Board Member Champions the Integration of the Berkeley Public Schools," can be found at <https://www.youtube.com/watch?v=-aw194sEeCQ#t=13>, accessed 31 January 2015.

³⁸ Gutman, "Spaces of Childhood."

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Photo 12-073-261, Jim Campe collection, Environmental Design Archives, University of California, Berkeley.

⁴² “Advertisements for a Counter Culture”: 76; Photos 12-073-169-186 and 12-073-278, Jim Campe collection, Environmental Design Archives, University of California, Berkeley.

⁴³ Sim Van der Ryn and Jim Campe, “Course Description” for Architecture 102ABC, Fall 1971, 1-2.

⁴⁴ Author interview with Bob Easton, Berkeley, 6 May 2016.

⁴⁵ Lloyd Kahn and Bob Easton, eds., *Shelter* (Bolinis: Shelter Publications, 1973), 112.

⁴⁶ *Ibid*, 113.

⁴⁷ Van der Ryn and Campe, “Course Description,” 5.

⁴⁸ Kahn and Easton, eds., *Shelter*, 37.

⁴⁹ *Ibid*, 80.

⁵⁰ Lloyd Kahn and Bob Easton, eds., *Domebook 2* (Bolinis: Shelter Publications, 1971), 65.

⁵¹ Sim Van der Ryn, *Design for Life: The Architecture of Sim Van der Ryn* (Salt Lake City: Gibbs Smith, 2005), 40.

⁵² Terri Martin, *Outlaw Building News* (1972), n.p.

⁵³ Anonymous, *Outlaw Building News* (1972), n.p.

⁵⁴ Gail Morrison, *Outlaw Building News* (1972), n.p.

⁵⁵ Sim Van der Ryn, *Outlaw Building News* (1972), n.p.

⁵⁶ In *The Ignorant Schoolmaster*, published a generation after the free school movement swept American counterculture, Rancière argued for educators to abandon any notion that children suffer from a knowledge deficit and instead approaching the classroom as a collective of equals pursuing intellectual self-fulfillment in virtually unlimited directions. Jaques Rancière, *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation* (Stanford: Stanford University Press, 1991). His theory of dissensus is elaborated in Jaques Rancière, *Dissensus: On Politics and Aesthetics* (New York: Continuum, 2010).

⁵⁷ Sim Van der Ryn and Robert Reich, “Notes on Institution Building,” September 1968, 29-31. I am grateful to Simon Sadler for locating and sharing this typescript, long assumed by Van der Ryn to be lost.

⁵⁸ *Ibid*.

⁵⁹ Ant Farm, “Advertisements for a Counter Culture,” 86.

⁶⁰ Chip Lord, quoted in “Interview with Ant Farm. Constance M. Lewallen in conversation with Chip Lord, Doug Michaels, and Curtis Schreier,” in Constance Lewallen and Steve Seid, eds., *Ant Farm, 1968-1978* (Berkeley: University of California Press, 2004), 55.

⁶¹ A sociological analysis of the actors involved in the production, consumption, and evaluation of art is outlined in Howard S. Becker, *Art Worlds* (Berkeley: University of California Press, 1982).

⁶² Curtis Schreier, quoted in “Interview with Ant Farm,” 61.

⁶³ Ant Farm, “Advertisements for a Counter Culture,” 86; Doug Michaels, “20:20 Living Room of the Future,” in Lewallen and Seid, eds., *Ant Farm*, 8.

⁶⁴ Sim Van der Ryn, “Abstract of a proposal to build an ecotectural house,” November 1972, unpaginated; Sim Van der Ryn papers (uncatalogued), University

of California Environmental Design Archives; Julie Reynolds, "Urban Homesteading: The Integral Urban House," *Mother Earth News*, November/December 1976 (<http://www.motherearthnews.com/homesteading-and-livestock/urban-homesteading-zmaz76ndztak.aspx>, accessed 20 March 2015).

⁶⁵ Simon Sadler, "Mandalas or Raised Fists? Hippie Holism, Panther Totality, and Another Modernism," in Andrew Blauvelt, ed., *Hippie Modernism: The Struggle for Utopia* (Minneapolis: Walker Art Center, 2015), 118.

⁶⁶ Sim Van der Ryn, *Design for Life: The Architecture of Sim Van der Ryn* (Salt Lake City: Gibbs Smith, 2005), 45-6.

⁶⁷ Lee Stickells, "The Integral Urban House: Architecture and Sustainable Living Experiments," paper presented at the Society of Architectural Historians conference, Pasadena, 7 April 2016.

⁶⁸ Ibid, 47-51; Reynolds, "Urban Homesteading."

⁶⁹ Office of Appropriate Technology, "Oat's Sixth Year: Summary of Accomplishments," December 1982: 25-6.