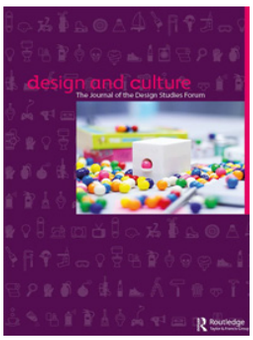

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"Danger in the Smallest Dose": Richard Neutra's Design Theory

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ABSTRACT Over forty years Richard Neutra elaborated a complex design theory to support his architectural practice. At the root of his concerns was the capacity of design elements to both advance and destroy human sensory life. This essay explores the shift that occurs from Neutra's early ideals – centered on notions of open planning, user interactivity and design plasticity – to his later commitment to a psychoanalytically informed architecture. Neutra's postwar structures aimed to recreate the protective sensation of the womb as well as the traumatic experience of birth. Despite a clear shift in aesthetic and rhetoric from interaction to therapy, his basic intentions never changed. Underlying both phases was an emphatic interest in shaping the life of those who inhabited

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his structures through the use of materials that produced effects independent of artistic agency.

KEYWORDS: Neutra, affect, trauma, open plan, Ferenczi, psychoanalysis, plasticity

> You can kill a man with a dwelling just as surely as with an axe.
>
> Heinrich Zille, quoted by Adolf Behne, *New Living–New Building* and Laszlo Moholy-Nagy, *The New Vision*

Design in the Nuclear Age

When Richard Neutra published *Survival Through Design* in 1954 he intended the title to be taken literally. Mankind risked sudden annihilation unless it came to grips with the alternately liberating and devastating effects of architectural design. *Survival Through Design* catalogs the horrors of insalubrious waste that surround us and instructs the reader how the expert designer, by shaping man's most intimate spaces, can heal our wounds. Indeed, Neutra granted them a decisive role in the future survival of humanity. He also suggested that most designers were slowly killing their clients.

Neutra's concern throughout the book is the health of modern dweller's "brains and nerves" (Neutra 1954: 72), which in his view had become diseased. Although the threat of the atomic bomb seems to haunt every page, Neutra more provocatively suggested that Americans were being irradiated along with the Japanese, only at a slower pace. "With the help of alpha particles and gamma rays, we can influence even the innermost chromosomatic base of the species and cause heretofore unheard-of mutations," he explained (82). Although the atomic bomb had "popularized spectacular dangers of this kind, there are many less conspicuous ones," he solemnly observed (83). Ultraviolet light, although "seemingly harmless," worked on one's nervous system like an atom bomb exploding over a long, sustained period of time. Bad design was analogous to the "saturation bombing" of Vietnam, he later suggested (Neutra 1989: 142). But Neutra's worry was less with the consequences of ultraviolet light (something that could conceivably be measured) than with the less measurable consequences of one's built environment. Through an "infinite number of stimuli," he explained, houses, road networks and cities shape and alter the nervous life of the whole community (1954: 83). Even more unsettling was the idea that the survival of the species as a whole was at stake.

Neutra found support for the latter claim in the writings of pre-Darwinian evolutionists. Despite his constant iteration of his belief in the survival of the fittest, at crucial points in the text he turns to decisively non-Darwinian sources for support. Recent discoveries in biology, he contends, show that man's "inheritable substance itself

can be molded." Design elements affected not only the life of those who used them – a relatively innocuous claim – but the very DNA of its users and their progeny. This new discovery, Neutra affirmed, added a "great deal to the prestige and significance of design" (1954: 83).[1] The designer, he reflected, now "has an uncanny leverage on mankind" (54), jokingly describing them as a "guild of messiahs" (1989: 101). Indeed, *Survival Through Design* is an elaborate defense of the designer and, more importantly, of their innate gift: sensitivity beyond the capacity of any machine. And the timing of this defense corresponded precisely with the moment he surrendered his large-scale ambitions to reform society. From his first book *Wie baut Amerika?* (1927) to *Survival Through Design* there is a strong drift away from social models based on universal, but non-biological principles, to a neurasthenic attention to the details of individual body chemistry.

Consider, for instance, a striking passage in chapter 10 of *Survival Through Design* which is devoted to an analysis of the super-subtle effects of technological processes on the nervous system. Surprisingly, Neutra's stress throughout the chapter, and the book more generally, is not at all on the social effects of road networks and urban planning, which are scarcely mentioned, and not even on the construction of domestic architecture. Rather he focuses almost exclusively on the permeation of virtually untraceable technological processes into the microbiology of one's daily existence. There are "numerous threats in those unheeded by-products" of human invention, he observes (1954: 84). The most dangerous threats to humanity's existence lie not in the social fabric at large, but in the "smallest dose" of ill-conceived design, what he describes as the "multitudinous microdosages of stimuli" (1989: 60). "Obscure, seemingly insignificant elements," he repeatedly affirms, "may produce disastrous effects if given sufficient time" (1954: 86). Ordinary soot in chimneys, hydrocarbons from kerosene lamps and microfibers dislodged from wood are just a few of more than "two hundred known carcinogenic substances" that suffuse "the entire urban surroundings of our age" (84). Neutra argues that we are being assaulted by our environment at every turn and that humanity is suffering under an "avalanche of unasserted so-called progress." That this regress is "unasserted" – there is no dictator or overt enemy presence commanding us – only makes its danger all the more pervasive.

Neutra's larger claim is that postwar man's biology has undergone a transformation that blunts the sensation of acute but low-degree forms of suffering. Even "harsh neon signs" as we quickly pass them on the freeway are literally "nerve-wrecking to us, whether we know it or not" (85). Neutra is not concerned with the "flagrant external effect" of these signs on the retina, but insists there are more decisive internal factors involved. Although the overt physiological impact of neon signs is minimal, there are lingering effects of harsh color

combinations that slowly and devastatingly deplete man's physical and mental reserves.

Chapter 21 is devoted to a peculiar analysis of the "not consciously recorded" but nevertheless "inexhaustible" effects of odors and tactile sensations on the nervous system (146). Neutra's concern here is specifically the subconscious physiological effects of "integral exhalations" produced by structural and finishing materials. (He muses on a history of architecture "flavored by smells" and not by sight [147].) For example, Neutra makes an extraordinary leap from the "primary comfort of a floating manifold suspension in the uterus" to the resilience of hardwood flooring (150). In Neutra's hands, material exhalations link design to the most primordial events of biological genesis. Neutra suggests that modern subjects prefer hardwood to cement flooring because the almost imperceptible resilience of wood evokes the sensation of uterine suspension. Neutra nonetheless cautions the reader not to neglect the benefits of cement flooring. A more nuanced and precise account of materials, he suggests, would show that cement flooring is in fact more evocative of primordial suspension than wood or tile because less body heat is lost through its medium. People may be misguided in their view of hardwood as more truly connected with prenatal experience, but they are far from misguided in their belief that that experience orders their taste. "*The prenatal experience of shelter*," Neutra contends, defines the basis of design and construction. Space itself, he explains, is a "multisensorial product which begins to evolve for us while we are still in the uterus" (156). And again (the idea is key): the sensation of "floating in the evenly warm liquid medium of the mother's womb is a primary factor molding our later reactions to an outer world" (156). What this argument suggests is a fundamental transformation in Neutra's defense of prefabrication. In his prewar writings Neutra stressed the need for prefabrication for its economic efficiency, environmental sustainability, and social benefits; in his postwar writings Neutra still makes the case for prefabrication, but now almost entirely on psychoanalytic grounds.[2]

Neutra's psychology is decisively un-Freudian in his emphasis on pre-Oedipal notions of uterine suspension. His model on this account was a widely known text by Freudian maverick Sandor Ferenczi. In 1923 Ferenczi published *Thalassa: A Theory of Genitality*, a "bioanalytic" treatise which articulated an extreme vision of the pre-Oedipal conditions of human development. According to Ferenczi, the "purpose of [man's] whole evolution … can be nothing other than an attempt on the part of the ego … to return to the mother's womb, where there is no painful disharmony between ego and environment, as characterizes existence in the external world" (Ferenczi [1923] 1968: 18). Ferenczi imagined that all forms of human practice – sex above all – aimed at the "genital reestablishment of the intrauterine situation" (26). Birth, in this account, was a "catastrophe" and sex was an effort to reverse the situation, but was doomed only to repeat it.[3]

While the first part of the book describes the ontogenesis of individual life patterns as one of womb lust and overcoming the catastrophe of birth, the second part describes the phylogenic parallel that recurs from primordial times until today. It was Ferenczi's idea that

> *the entire intrauterine existence of the higher mammals were only a replica of the type of existence which characterized that aboriginal piscine period, and birth itself nothing but a recapitulation on the part of the individual of the great catastrophe which at the time of the recession of the ocean forced so many animals … to adapt themselves to a land existence, above all to renounce gill-breathing and provide themselves with organs for the respiration of air.* (1923: 45; original emphasis)

For Ferenczi, birth trauma itself was a repetition of an even more primordial birth catastrophe, the forced adaptation from an oceanic existence to living on dry land. The painful renunciation of one's watery environment for habitation on dry land is replayed within individual psychology in the movement from watery womb to a dry external world. Indeed Neutra saw the desert of Palm Springs and Los Angeles itself as traumatic locations where he could fashion reparative replays or *reversals* of the primordial trauma and thereby provide air for gill-choked masses.

Neutra's fascination with uterine suspension, and more generally with neonatal development, led him to imagine the pregnant mother as the *ur-designer*. The "expectant mother holds many lessons for the expectant architect," he declared in his late study of "Nurturing Individuality" (1989: 39). Mothers are great designers because they bear an "innate gift for … sense-conscious surroundings" (40). He continues:

> In many respects, the expectant mother is the most sensitive and active of organic beings. The mere potentiality of becoming a mother has endowed females with qualities, emotions, and insights that not even the best male obstetricians can fully understand. Particularly during the later stages of pregnancy, mothers instinctively sense the individualized temperament of their offspring. In effect, they "know" their children before they are born, and can even distinguish them from the others she has carried. (39)

Designers are like mothers in their capacity to "know" how their children – their buildings – will turn out. Moreover, designers should strive to replicate the experience of birthing, its trauma and joy, narratively through their structures.

Neutra's commitment to replicating neonatal experience is at the center of his postwar practice. Neutra illustrates the uterine principle

on the cover of the second edition of *Survival Through Design*, as well as in his autobiography *Life and Shape* ([1962] 2009), both of which are adorned with images (a sepia photograph in *Survival Through Design* and a colored drawing in *Life and Shape*) of the spiral stairwell of the Gemological Institute in Los Angeles (1954–55) (Figure 1).

The stairs (or umbilical cord) twist freely in space, hovering over a pond (or uterine fluid). Between the pond and the stairwell appears

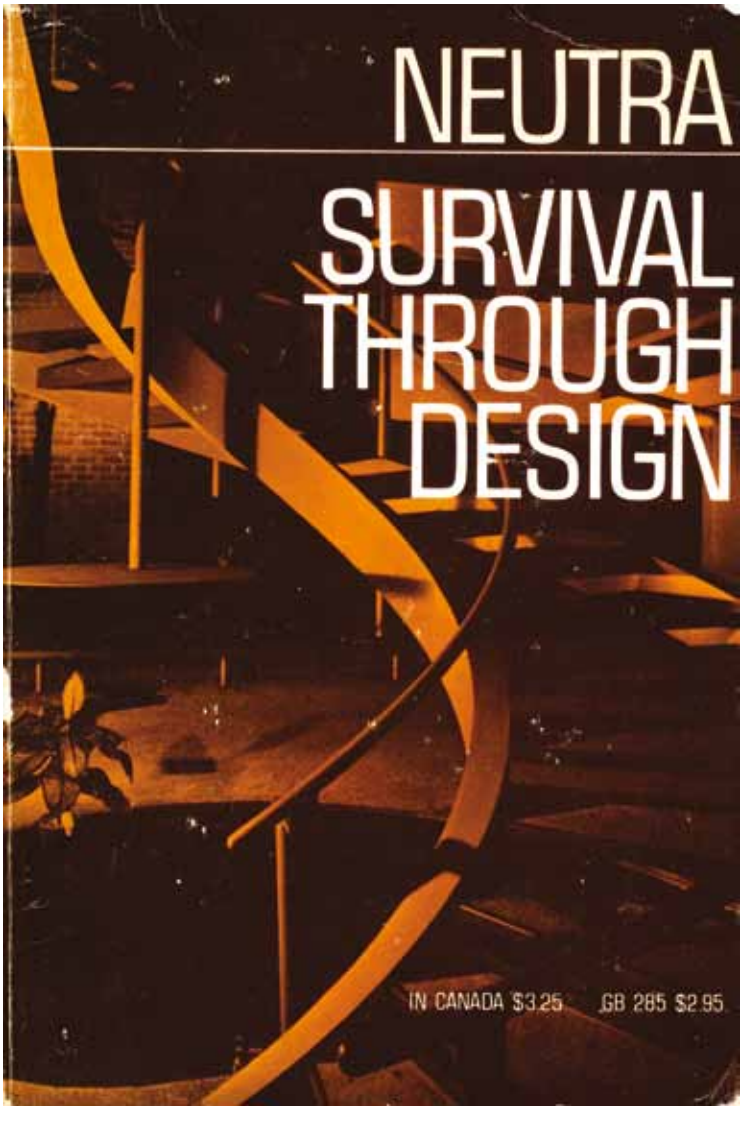

Figure 1
Cover of the second edition of *Survival Through Design*. Courtesy of Oxford University Press.

a circular table eerily suspended from above, casting a long shadow across the outer surface of the winding structure. Neutra describes the umbilical stairway as a "striking example of an architecture that stimulates all the senses" and that is "'lived through'" rather than looked at (1954: iv).[4]

Neutra was explicit about the traumatic and curative effects that design elements transmitted to their infant receivers. In his autobiography he vividly recalls the impact of his early encounters with the four-story stairwell that led to his family home. "The windings and the cold draft are still with me in some dreams," he reflects. When he suggests that the experience is still "with him" he means it literally – the traumatic sensations of the drafty stairwell are lodged deep inside his psyche. He continues: "What happens to one, *in* one, and around one while ascending a stair – and what of it sticks with us as a strangely lasting memory – is to me a master specimen for what architectural experience means. It's way beyond all that photography or motion pictures can convey" (Neutra [1962] 2009: 36). More sensitive than any available recording machine, the human body captures all of the "microfacts" of the environment and stores them in perpetuity in the recesses of the nervous system.[5] Those effects not only linger deep within the self, but grow and proliferate like a traumatic event and come to determine one's later experience of the world.

While photography and film were unable to capture the unseen effects of the environment Neutra described, he nonetheless referred extensively to contemporary scientific and medical research to support his claims throughout *Survival Through Design*. Over and over again he insists that "only precise physiological experiments *can* prove" the effects of industrial materials on the nervous system. Citing the work of zoologist Frederick Crescitelli, Neutra relates an experiment in which animals were brought to "convulsive action by exposure to a certain sound" (1954: 84). What was remarkable about this case, Neutra suggests, was not that the animal was reacting violently to a particular sensory stimulus, but that the effects of the stimulus convulsed the animal long after it had overtly adapted to it. Like the trembling creature, modern dwellers were biologically unable to adapt to their exclusively man-made environment. The human race was ill-equipped to deal with technological dangers because it relied on outmoded senses developed to respond to natural phenomena. What was terrifying about urban existence was that we could not sense what was killing us. In the past humans could rely on "minute pain receptors" to warn them of potential dangers. But these receptors, he explains, only function under the impact of natural stimulation. For reasons he does not elaborate, technologically induced affects do "not cause direct pain" and therefore leave one exposed to dangers without protection from crucial biological cues. Again and again Neutra insists it is only the designer who is truly (hyper-)sensitive enough to understand and manipulate the

wide-ranging effects of design; it is their job to save and protect their clients from a dangerous world (1954: 150).

The back cover of the first edition of *Survival Through Design* (Figure 2) provides a remarkably literal statement of Neutra's design theory. Standing against a white ground, filling up the space from bottom to top, is a diagram of the human nervous system. The sinuous form poignantly overlays the skeleton frame – the term is literalized! – of the Philip Lovell Health House of 1929. The metaphor is clear: architecture provides the skeletal protection for man's exposed nervous life. At top left, untouched by the diagram,

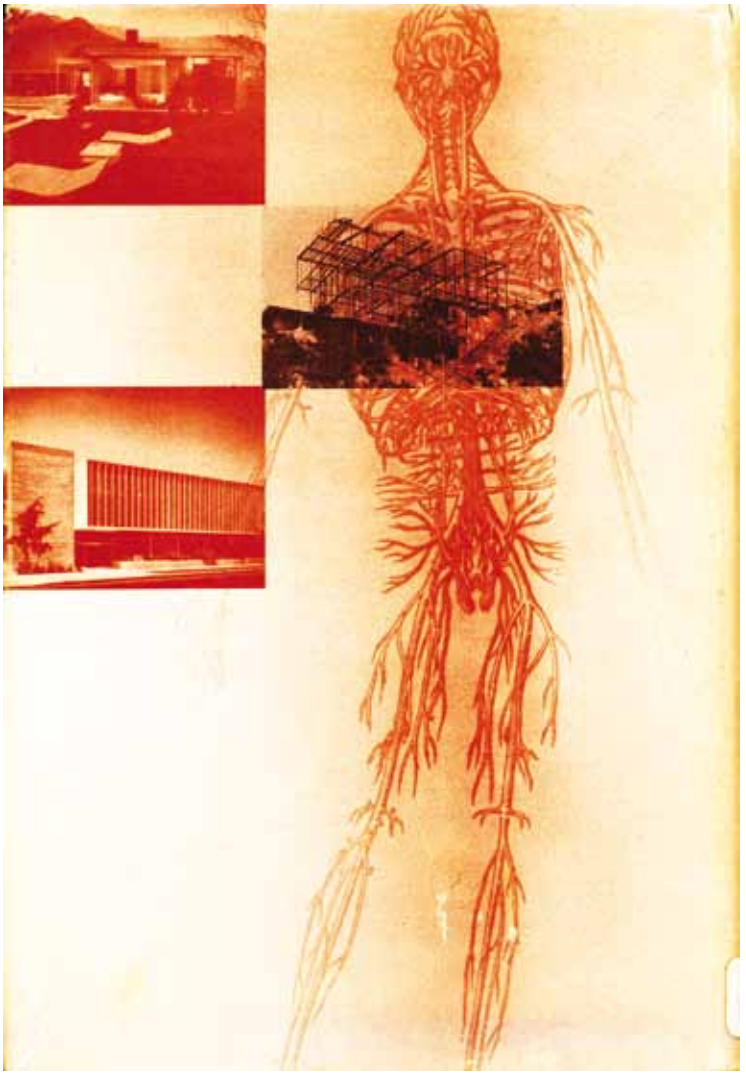

Figure 2
Back cover of the first edition of *Survival Through Design*. Courtesy of Oxford University Press.

appears Julius Shulman's famous twilight image of the exterior of the Kaufmann House in Palm Springs – an image of the ultimate safety (and pleasures) his architecture could provide. The argument this image makes – that design can safely integrate and heal man's sensory life – poignantly inverts Frank Lloyd Wright's famous description of the pernicious effects of ill-understood machinery on modern man's inner life in "The Art and Craft of the Machine" (1901):

> Ten thousand acres of cellular tissue, layer upon layer, the city's flesh, outspreads enmeshed by intricate network of veins and arteries, radiating into the gloom, and there muffled, persistent roars, pulses and circulates as the blood in your veins, the ceaseless beat of the activity to whose necessities it all conforms … This ten thousand acres of flesh-like tissue is again knit and inter-knit with a nervous system marvelously complete, delicate filaments for hearing, knowing, almost feeling the pulse of its organism, acting upon the ligaments and tendons of motive impulse, in all flowing the impelling fluid of man's own life. (Twombly 2009: 65–6)

Of course, Wright intended this image as metaphorical of the relationship between man and machine, but when Neutra inverts the famous image – suggesting that the machine can heal the frail nervous system of a neurasthenic populace – he meant it literally.

"Positive Trauma"

Neutra frames his account of affective design through Freud's notion of trauma. When humans could no longer rely on basic biological cues for their survival they had no protection against subtle forms of traumatic injury from the environment. While in the past evolution was conceived by analogy with organic formations, modern dwellers were alienated from their environment and were subject to a relentless series of shocks. "The picture of a slow and steady shaping as with a growing tree," he reflects on this classical image, "may have to be supplemented" (1954: 228). Neutra focuses on the increasing role "drastic episodes" play in humanity's formation. "The shock of intensive emotion linked to the experience of a single strong stimulation may be a decisive formative agent," he observes (229). For Neutra, trauma is not simply a wounding or destructive experience, but a potentially "formative" encounter. Above all, architectural forms of shock, by replaying the primordial trauma of birth, allow one to master the small-scale traumas of daily life. After the "shock of being born, not into a wonderful natural nest, but into a man-made cradle, an artificial apartment and town, the fantastic receptivity of the impressionable young goes on" ([1962] 2009: 13). The job of the designer was to recreate the birth trauma as well as the protecting womb. Walking through a Neutra structure was like moving from womb to world over and over again.

Like his contemporary Walter Benjamin, Neutra hinged his aesthetic on the liberating potential of shock. In "Experience and Poverty" ([1933] 1999), Benjamin's homage to Le Corbusier and Adolf Loos (Neutra's colleague and mentor in Vienna), he describes the specially evolved nature of the modern traumatized subject. "This much is clear," he writes, "experience has fallen in value, amid a generation which … had to experience some of the most monstrous events in the history of the world" (Benjamin [1933] 1999: 731). The old organic metaphors no longer suffice to describe the current state of the human condition. The new "adjustable, movable glass-covered dwellings of the kind built by Loos and Le Corbusier," he argues, are the only appropriate structures to house the new traumatized subject (733). The new glass and steel architecture were the only homes for the "new barbarians" that have descended on humanity.

For Benjamin, as for Neutra, mankind must first descend into barbarity before a new, non-traumatized subject could emerge. It is a "new, positive concept of barbarism," Benjamin explains, that defines the nature of contemporary existence. The new barbarism "forces man to start from scratch; to make a new start; to make a little go a long way; … [to] begin by clearing a tabula rasa" (732). Similarly, Neutra explains that while "some very negative fixations may thus be produced by what Freud calls trauma," nonetheless "positive vital experiences can come and be fixed by way of shock" (1954: 229). Neutra called these experiences "positive trauma" (Neutra, quoted in Lavin 2004: 87).

Neutra affirmed that great art could no longer exist without determined shock effects. Shock was the only means available to the designer to defeat the small-scale shocks of everyday life: "One intense delight, like one of mortifying anguish, may become an almost unbeatable competitor to many … experiences of the mild habitual kind" (1954: 229). While Benjamin is more extreme in his suggestion that experiences of the habitual kind had come to an end, Neutra is clear that the architecture of "sudden impact" was more necessary today than ever before (229). He literalizes the experience in the abrupt opening of a sliding glass door:

> Here is the value of a wide sliding door opening pleasantly onto a garden. It cannot be measured by counting *how often* and how steadily the door is used, or *how many hours* it stays open. The decisive thing may be a first deep breath of liberation when one is in the almost ritual act of opening it before breakfast or on the first warm and scented spring day. The memories of one's youth and of the landscape in which it was spent, seem composed, to a considerable degree, of this sort of vital recollection. There are in each life certain scattered quanta of experience that may have been small of number or dimension statistically but were so intense as to provide impacts, forever essential (229; original emphasis).

Despite Neutra's aversion to abstract divisions between mind and body, inner and outer, his design theory rests on a broad distinction between ritual and shock. By 1954 he had declared his disinterest in conventional uses of his near-to-nature architecture – the ease of use of new materials, open plan living, user-created divisions – in favor of the rarified experiences of intense bursts of light, air, sound, touch and smell. (He put the difference succinctly in his autobiography, speaking of the high-tech lighting design at the VDL Research House: "Providing light for reading the newspaper was not the primary purpose of this illumination. Rather I saw in it *an emotive stimulant*, changing endocrinal discharges and biochemistry" ([1962] 2009: 268; original emphasis).

For Neutra it was essential to sacrifice ritualized effects for those intense "scattered quanta of experience" that produce irreplaceable "vital recollections." Indeed he broadly redefined everyday life in terms of a psychosomatic account of non-sensuous environmental toxins. Clients could no longer be left to shape spaces in terms of their own needs because they had become too infected by bad design and were thus unable to choose healthy patterns for themselves. With his innate sensitivity and technical capacity to control design elements, the architect could subtly jolt the client out of his or her pathological routine.

Neutra's early champion, architectural critic Esther McCoy, usefully described the shock of her first encounter with Neutra's work. "A door was opened and I entered," she recalled. "The band of windows in his typical module was so acerbic to the eye that I could stand for minutes tasting the new sharpness" (McCoy 1979: 72). McCoy clearly grasped the double nature of Neutra's module structure as both violent and liberating. Instances of this double effect of traumatic healing occur within nearly every postwar work by Neutra. A startling example occurs on entering the balcony through the massive sliding door hanging over the rocky cliffs above the James River in the Rice House, Richmond, Virginia (1962; Figure 3).

Stepping onto the balcony one is instantly aware of one's precipitous suspension over the cliff without the least protective railing.[6] What Neutra intends by "survival through design" is to locate the inhabitant in a situation of anxious uncertainty and thereby trigger long buried biological mechanisms suggestive of two primordial events: uterine suspension and birth trauma. Once those mechanisms have emerged into awareness and one's security was ensured, the body will be trained – homeopathically – to deal with the onslaught of daily, low-dosage, trauma.

In a late essay on Freud entitled "Taking off the Blinders of Tradition," Neutra described his efforts alternately as a depth psychologist and ophthalmologist of the environment. So while Freud could see the "unseen" forces that impinge on the soul, he was nonetheless oblivious to "our daily sensorial intake" (1989: 13). Freud's notion of *Nachträglichkeit* was unnecessarily restricted to intersubjective

Figure 3
Richard Neutra, Walter Rice House, Locke Island, Richmond VA, October 1964. Photograph courtesy of Valentine Richmond History Center.

traumas and therefore "Freud … did not recognize the sensory assaults to which our systems and psyches are subjected [and which] have a surreptitious, often delayed effect" (15). It is the job of the designer, like a Freudian analyst, but now looking *at* the couch on which the patient lies, to "anticipate and avert the many microfacts of environmental damage" (ibid.). Borrowing a phrase from his friend the microbiologist René Dubos, Neutra declares his project a form of "biological Freudianism" (23). If one knew everything about the "various surroundings" of one's "earliest years" of development one could predict and perhaps avert forms of "self-destructive, sociopathic, or violent behavior" (ibid.). Turning Freud's theory on its head, Neutra declares in his closing phrase that it is neither our families nor society that shapes our development, but rather "Our environment is our fate" (24). Neutra's discourse of environmental fatalism went so far as to equate crime with the delayed effects of living in an unhealthy environment. If man continues to "settle for punishing surroundings that … debase our emotions, and sap our energies, the pathologies will continue to mount, gradually incarcerating society as a whole" (ibid.). Neutra made his case about the "sociological ramifications" of the environment absolutely literal in his design of the Orange County Courthouse (1968) (66). In his essay on the Courthouse, Neutra worried about the "personal metabolism" of the jury and the visitors as each one "exudes a different degree of butyric acid, deodorants not-withstanding" (70–1). And while this acid is not particularly "toxic," it can nonetheless be

"very soporific." So Neutra explains "if more than a couple jurors get drowsy, or fall asleep, an intermission must be called, causing a most cumbersome prolongation of the case, which in turn increases the cost to taxpayers"! As he suggests, this "involvement of public finances with our personal body chemistry may strike you as bizarre, but it is measurably vital" (71). The wider suggestion is clear: if you ignore such "microfacts" as body chemistry in a courtroom, you inevitably ignore the causes that caused the crime in the first place.

From Therapeutics to Functionalism

In her groundbreaking analysis of Neutra's late work, Sylvia Lavin considers some of the key issues raised by his theory of trauma. Lavin focuses on the implicit and explicit ties between Neutra and the "age of psychoanalysis." It is under that capacious (and largely productive) label that Lavin considers Neutra's attempt to create an empathetically oriented architecture. Although Lavin provides remarkable accounts of Neutra's late work, the broad brush she uses to describe the psychoanalytic turn in his practice elides the various phases of his practice and further elides problems within the contested theory of empathy.[7] This is apparent in her general description of the difference between the first phase of psychological architecture and its postwar revision. While her concern is with the latter, her characterization of the former lacks specification. According to Lavin, the first phase focused on "symbolically and programmatically curative building types" (such as asylums and hospitals), while the latter phase opened a "new therapeutics that opened the house to a wide array of projections that psychologized an emerging domestic environment" (Lavin 2004: 47). This definition leaves little room for an account of the main line of non-affectively oriented abstraction within modernism. More generally, Lavin's guiding claim that Neutra's approach has "nothing to do with the discourses on function and structure normally associated with modernism" is overplayed (50). Lavin's characterization of Neutra's postwar practice is persuasive – although I will evaluate it in exactly opposite terms – but places too little emphasis on his early work. While Lavin is right to suggest that Neutra's early critics "deflect focus away from his interest in form and its effects," she neglects to consider the early works in any detail (13). The consequences of Lavin's dismissal of the functionalist reading of Neutra's work is that she ends up further codifying the distinction between early and late.

At the time of *Survival Through Design*, critics had begun to notice a change in Neutra's attitude towards architectural design. Douglas Haskell observed how the book signaled a fundamental shift from a "functionalist approach, from early naïve mechanistic functionalism to psychological, from concern with how architecture goes together to a concern with what it is for, how it affects the user" (Haskell 1954: 15–16).[8]

Neutra's apprentice Harwell Harris offers a different vision of Neutra's project than the affectively oriented one defined by *Survival Through Design*. "For Neutra," Harris writes, "*Sweet's Catalogue* was the Holy Bible and Henry Ford the holy virgin." All of his projects, he observes, "had prefabrication in their blood stream" and forecasted an "anonymous architecture and anonymous architects" (McCoy 1979: 8–9). And in an important 1931 letter to Richard Muetterli, Neutra explained the difference as he saw it between two modes of artistic practice, one based on memory and empathy and the other on a dispassionate analysis like the one described by Harris. "As soon as I observe someone in distress, I try to understand," he writes, "but my interest in a *general conception of misery* is of a different kind, like my interest in aerodynamics or the construction of a new kind of airplane." It is hard to see why Neutra would stress misery as subject of a general rather than particular interest. "In the field of social-planning," he continues, "emotional involvement should be carefully avoided" (Neutra 1986: 221; original emphasis). Neutra offers a clear trajectory for his own work, one that moves from detached, functionalist concern for social planning to a psychoanalytic commitment to the production of spaces of "positive trauma." And yet, how different, ultimately, are these two accounts? In what follows I will argue that Neutra's underlying commitment was to the *user* of his designs rather than the autonomy of the structures themselves. It is this sustained commitment to the user, either as an interactive participant or as someone to be psychoanalytically treated, that risks instrumentalizing his practice. Neutra's fixation on the user also suggests the ultimate line of cleavage between his modernism and an autonomously oriented one.

Design Plasticity and the New Man

> Everything had to double for something else to yield increase and elasticity of use.
>
> Richard Neutra, *Life and Shape* ([1962] 2009: 267)

Neutra's early work was dominated by large-scale public projects such as *Rush City Reformed*, Lehigh Portland Cement Airport, the Ring Plan School and an elaborate competition design for the League of Nations (all of these developed with his partner at the time, R.M. Schindler). And far from producing spaces of emotional cathexis, Neutra's groundbreaking work in domestic architecture, the Lovell House of 1927–29, was described by its (initially) unsatisfied clients as "a public museum" (McCoy 1979: 69). Indeed Neutra lamented the "directly physiological" ideal of architecture, suggesting that too much attention to it would "ruin [his] outlook forever" (Neutra, quoted in Hines 1982: 93). Instead he aimed to produce an open-planned, flexible architecture that would be used by its inhabitants in ways they saw fit.[9] Neutra consistently spoke of necessity for "elasticity of

use" down to the smallest detail ([1962] 2009: 267).[10] "In our house rooms have no names such as living room, dining room, bedroom," he enthusiastically records. "Rooms are portions of our great living space and pragmatically elastic." In his article "The Changing House" for the *Los Angeles Times*, Neutra (1947) stresses the necessity for the "ready-for-anything" plan which is "adaptable to almost any living requirements" and "flexible enough to permit all kinds of modifications."[11] Neutra shared this attitude with his friend and colleague R.M. Schindler. "The modern dwelling," Schindler wrote in his 1912 "Manifesto" "will not freeze temporary whims of owner or designer into permanent features. It will be quiet, flexible background for a harmonious life" (Schindler [1912] 1997: 148).[12]

Behind Neutra and Schindler's ideals of plastic architecture lie the assertive claims of Frank Lloyd Wright, above all in his essay on "The Sovereignty of the Individual," which formed the preface to the famous 1910 Berlin Wasmuth edition of his work:

> In America each man has a peculiar, inalienable right to live in his own house in his own way. He is a pioneer in every right sense of the word. His home environment may face forward, may portray his character, tastes, and ideas, if he has any, and every man here has some somewhere about him. … It is fair to explain the point, also, which seems to be missed in studies of the work, that in the conception of these structures they are regarded as severe conventions whose chief office is a background or frame for the life within them and about them. (Twombly 2009: 119, 128)

The mismatch between Wright's ideals and his practice was apparent from the start. Wright had little interest in creating a neutral background for the display of his clients' "tastes," nor did he have much faith in the emergence of the sovereign individual from out of the masses. Vincent Scully succinctly captured Wright's intentions: "The prose of architecture – the background buildings which attempt only a little and are content to serve as neutral settings for any kind of human thought and action – did not interest him." It was his "life-long intention to form human life," Scully concludes (Scully 1960: 11). Neutra literalized Wright's view that the individual had to be *made*, *formed*, but could not be found.

Neutra's prewar work was dedicated to a Wrightian ideal of sovereignty on the side of the user (Wright characteristically intended it for the architect). The house designed for Grace Lewis Miller in 1937 was aptly described by its owner (in a letter to the Museum of Modern Art) as a "smart house," one that "lends itself easily for any kind of life, either close, private life, or the gay social life … whether there is one or more to dinner; or one or two or a crowd for tea or cocktails; or a bunch of young things, careless of their cigarette butts, for dancing" (Miller, quoted in Hines 1982: 121). Spaces were

Figure 4
Richard Neutra, *Miller House*, Palm Springs, CA. Studio-living room-dining room-bedroom. Photograph by Julius Shulman, courtesy of J. Paul Getty Research Library.

designed in a system of complex layering for expansive multifunctionality. The main room supported functions of living, sleeping, eating, entertaining, and performing "Functional Exercise" for her clients (Figure 4).

For Neutra aesthetic principles of "weightlessness" and "dematerialization" originated in democratic social and political ideals of liberation and freedom. As he saw it, his structures would promote the origination and elaboration of new forms of life. Like Le Corbusier's ideal of the house as a "machine for living," Neutra conceived of it as an open "stage for living." Neutra's open-plan ideals reached their peak in the early 1940s, with designs for large-scale housing projects for low-income workers. The Channel Heights housing for shipyard workers near the Los Angeles harbor at San Pedro, funded by the Federal Works Agency – comprising 222 residential structures for 600 families – marked the apogee of Neutra's publicly minded Depression-era program. Supported by a shrewdly managed media campaign, Neutra trumpeted far and wide the utopian possibilities of prefabrication. The "prefabricated era is just beginning after many false starts," he told the *Los Angeles Times* in 1941 (Neutra, quoted in Hines 1982: 178). He trusted that the war economy would forcibly end traditional forms of design and usher in the era of prefabrication. Multifunctionality, made possible by prefabrication, ruled at Channel Heights. Houses were situated diagonally, with views of the park on one side and the ocean on the other. Underpasses functioned as

surface drains and as "pedestrian communication," as he called it, moving between residential areas and community buildings. The community buildings were masterfully designed with multiple functions in mind: community center functioned as nursery, supermarket contained a daycare, gardening building became a classroom, stationery store contained a post office, and drugstore doubled as doctor's office (novel ideas at the time).

From Plastic Spaces to Plastic Users

An important and unexamined precedent for Neutra's early commitment to an aesthetic of flexibility, plasticity and multifunctionality was the work of the Constructivists in Russia. Although he had limited access to the actual production of the Constructivists, he was acutely aware of their operations through a range of European journals like *De Stijl*, *Vesch/Gegenstand/Objet*, *Merz* and *G*. These journals featured up-to-date results of the Russian experiment in the arts (although stripped of its political bearing) and were presented to Western audiences as the new standard for advanced design. The artist who most forcefully defined the new aesthetic of multifunctionality and flexible planning was Alexander Rodchenko. As the deputy head of the Metfak or Metalwork Faculty at the Soviet design school VKhUTEMAS (Higher Art and Technical Studios), Rodchenko poured his energies into the development of objects with "multiple functions which required a creative intelligence to manipulate" (Margolin 1997: 89). These new objects, including beds, chairs and storage cases, embodied Rodchenko's ideal of flexible form. As Victor Margolin observes of these works, "Users would realize [the] potential [for action] by interacting meaningfully with the objects rather than relating passively to them" (ibid.). The passive consumer related instrumentally to their environment, making decisions without weighing their various options. Before one of Rodchenko's structures, one had a clear sense as to how it was put together (often through a deductive structure) and how it could be put to multiple, even contradictory uses.

Rodchenko's design for a collapsible rostrum for the USSR Workers Club exhibited at the *Exposition Internationale des Arts Décoratifs et Industriels Modernes* in Paris in 1925 (Figure 5) "allowed for maximum interactivity with a strong active user who could alter its form according to different needs" (Margolin 1997: 91). As a "virtual volume," Rodchenko's linear frame of struts and planes could unfold to produce a rostrum or movie screen or bench, and collapse again into a relatively compact mass. Without putting the matter too cynically, how liberating were these ideas?[13] While Margolin stresses the rhetorical power of Constructivist objects as providing an image of freedom for new revolutionary subjects, we are nonetheless left wondering what image of freedom these works suggest.

To put the question in Neutra's terms, how do we reconcile his early commitment to user interactivity (open planning and multifunctionality) and his later commitment to a psychoanalytically

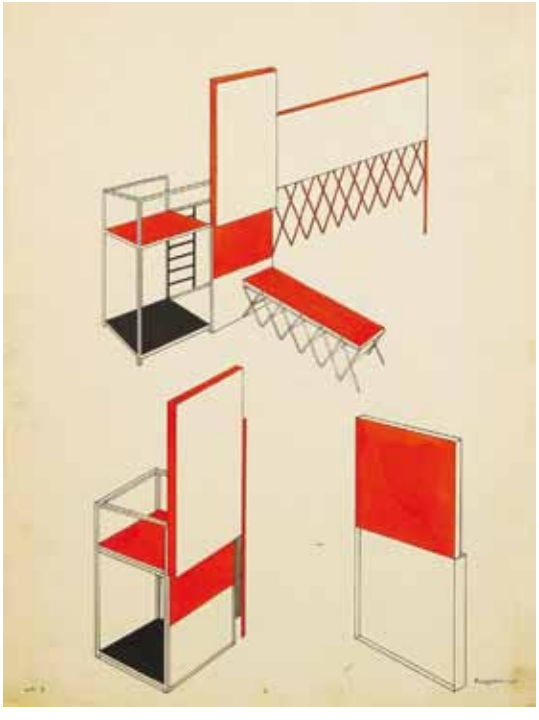

Figure 5
Alexander Rodchenko, Design for a collapsible rostrum for the USSR Workers' Club at the *Exposition Internationale des Arts Décoratifs et Industriels Modernes*, Paris, 1925. Courtesy of the Estate of Alexander Rodchenko/RAO, Moscow/VAGA, New York, NY.

inflected design? We are left to wonder what unites Neutra's seemingly polarized accounts of architectural pliability on the one hand and psychological control on the other. It seems that Neutra's identification of architectural openness with user participation conflicts with his later concern to create "organic" structures whose materials contain an affective life independent of any spectator (indeed materials are lauded and feared for their inherent capacity to shape the inhabitant's deepest psychological recesses). If Neutra's early work and writings stress the technological capacities for new forms of liberated experience, technologies that allow for seemingly high degrees of "participation" in the shaping of one's surroundings, then how do those same technologies liberate the *architect's* capacity to manage and shape psychological functions?

It is tempting to historicize Neutra's concerns, to see early and late Neutra as driven by competing and largely contradictory impulses which respond to the changing social and economic climate of the interwar years in the United States. According to Isenstadt, for instance, from prewar to postwar Neutra's "focus had changed from the technology of construction to the technology of perception, a consumer aesthetics" (Isenstadt 2001: 98). Nonetheless, with

Neutra's two aesthetic modalities in view one can discern a basic structure to his commitments. From beginning to end Neutra was devoted to shaping the life of those who inhabited his structures – the consumer, rather than the site or structure itself, was his only model. As Barbara Lamprecht puts it, "All Neutra houses were to be therapeutic" (Lamprecht 2004: 43). Or, as Stephen Leet observes: "What was unchanging was his belief that the primary responsibility of the architect is to improve and enrich the well-being of architecture's inhabitants … [T]he architect had a professional responsibility to eliminate, or at least ameliorate, the detrimental consequences of poor design and planning" (Leet 2004: 172). Lamprecht's and Leet's optimistic assessment of Neutra's effort to "improve and enrich" the well-being of his inhabitants perhaps elides a more basic commitment to shape the life of those who encountered his structures. What changed between 1927, with the design of the Lovell Health House, and 1946, with the Kaufmann House, was simply Neutra's approach to the problem of dwelling. The question always was: How can design produce desired forms of subjectivity?

Consider one further source for Neutra's design theory, the Bauhaus writings of Walter Gropius. Gropius first visited Neutra in Los Angeles in 1927, which was followed two years later by Neutra's visit to the Bauhaus. Above all, Gropius and Neutra shared an extreme concern for monitoring and controlling the affective qualities of the most minute design details. "Color and texture of surfaces have an effective existence of their own, sending out physical and psychological energies which can be measured as such," Gropius wrote (Gropius 1968: 148). Studying and controlling these "energies," Gropius explained (and Neutra concurred), was the basis of the Bauhaus education. At the Bauhaus we "knew and taught that space relations, proportions, and colors control psychological functions," Gropius declared (80).[14]

Gropius's account of "Modern Theater Construction," first published in English in February of 1928, just weeks after his visit with Neutra, bears directly on Neutra's design theory. In this brief essay Gropius describes the fate of his unrealized "Total Theater" for Erwin Piscator in Berlin.[15] Gropius's emphasis lies on the extreme pliability and plasticity of the structure and how that allows for new forms of audience participation in the play. Piscator's "Utopian demands aimed at the creation of a technically highly-developed, pliable theater-instrument which should to a great degree allow the audience to participate actively in the scene" (Gropius 1928: 136). A few years later, in his Rome lecture on the "Total Theater," he affirmed that the building was so "adaptable in character" that it could "respond to any imaginable vision of a stage director – a flexible building, capable of transforming and refreshing the mind" (Gropius 1968: 155). The new theater was "an instrument so flexible" that it could support a seemingly infinite "diversity of purposes" (161). What is crucial to recognize is the strict economy of Gropius's formula: flexibility, audience

participation and audience control as a unified result. Above all, Gropius was concerned with "drawing spectators into closer relation with stage happenings" (Gropius 1928: 136). Participation, that is, happens within the architect's environment. Every aspect of the new architecture's technologically inspired flexibility was aimed at fixing and controlling the spectator's experience. The building is "so pliant and variable" strictly as a "means toward the accomplishment of the end that the spectator shall be brought into the midst of stage events" (ibid.). Architectural pliancy was the means by which the architect/director could powerfully "assault and force the public to participate in the play" (Gropius 1968: 159). If the "precision instrument" is made as "flexible as possible" then the spectator "cannot escape" from the architect's tightening grip. (Indeed Gropius went so far as to describe the seats as encircling, "pincer-like," the circular stage [161].) "The goal of this Total Theater," Gropius concluded, "is to overwhelm the spectator. All technical devices serve this goal" (162). Architectural flexibility was a means of enforced participation. With this in mind we can begin to make sense of Neutra's important and seemingly ambiguous statement before a Women's University Club in 1940. There he spoke of the "plastic purposelessness, passively receptive mind of the infant" (Neutra, quoted in Lavin 2004: 56) as the ideal sensation of inhabiting his structures. Plasticity was not ultimately a relation between inhabitant and environment, but rather a passive relation between designer (father) and user (infant).

In *Architecture and Utopia: Design and Capitalist Development*, Manfredo Tafuri starkly characterizes the participatory turn in design theory that emerged with the Bauhaus and Constructivism as masking deeper forms of coercion. With the rise of "'open' space" architecture, wherein the user is "summoned to complete … the process," Tafuri suggests that the subjective capacity to choose is reduced to a play of limited and preformed decisions (Tafuri 1976: 101).[16] What is worse, the new "open" forms offer a perfunctory image of freedom drained of any alternative beyond the narrowly delimited ones granted the user to move a wall or shift furniture between two or three functions. "Architecture," Tafuri wrote, "summoned the public to participate in its [completed] work of design" (101). According to Tafuri, design under the Bauhaus functioned as a means to control user response *through participation*. On this account, the participatory rhetoric of design plasticity is the formal equivalent for forms of subjectivity unable to conceive the difference between predigested choice and self-determined decisions. Put in less pessimistic terms, one might nonetheless see the limitations of Neutra's definition of participatory architecture as "allow[ing] leeway for personal expression and expansion" (1989: 151).

Neutra's Materialism

Neutra's ultimate claim was not just to shape the psychological function of his inhabitants – an ideal he shared with other modernists,

including Wright, Le Corbusier and Mies – but that he could control those functions *without recourse to his intentions*. For Neutra, control was a result of his careful arrangement of prefabricated materials that contained their own "measureable energies" and not a matter of his intentional shaping of those materials. Throughout his writings Neutra's aesthetic intentions are minimized, while his materials are granted the form of agency he denied himself. Agency was generated internally by his materials, thus his desire to incorporate as much of the "neurologically salubrious agents of nature" as possible (1954: 195). It was Neutra's assertion of the inherent agency of his materials, their capacity to generate measureable sensory effects outside his shaping will that captures his basic aesthetic commitment and differentiates his practice from other modernists in his generation and before.[17]

Neutra's effort to deny his agency through a "scientific" conception of materials ultimately secured him against the possibility of artistic failure. Or rather failure and success were reconceived along scientific lines – a good building was one that could potentially be measured for the positive effects it produced for its inhabitants. Likewise a failed structure could (potentially) be measured according to its unhealthy effects. While Neutra discovered (or invented) a secure means to produce architecture, he nonetheless denied himself the possibility of having his work evaluated in terms of their meaning. Meaning, for Neutra, is subsumed into measureable quantities of energy exchange.

Although Neutra would continue to produce and prophesize the coming of a new architecture and its new man, his social vision was starkly chastened with the end of the war. His two major works of the later 1940s – the Kaufmann House, Palm Springs and Tremaine House, Montecito – lack any ambition for mass-produced functionality.[18] Men or women could no longer be trusted to shape their own lives (however narrowly conceived); now the subtle "creative guidance" of the designer was necessary to help the newly termed "patient-client" become reasonable. Through a series of carefully organized shock effects Neutra would slowly train his clients into more affectively attuned beings, literally saving them from a life of deadening routine full of imperceptible but putatively debilitating shocks.

Near the end of his life Neutra reflected on his brief experience at the Bauhaus in 1930 and on the shared optimism of the time that "modern technology could give us humans all we need" (1989: 189).[19] He mused about Gropius's Bauhaus ideal as it appeared in his famous faculty housing: "standardized and identical abodes, accommodating the most diversified people who were certainly not compatible as artists!" "They were very, very personal and individual in their outlook on art and life," Neutra reflected. It was only those with a strong sense of self, Wright's "Sovereign Individual," who "could indeed live in identical dwellings" (Neutra, quoted in Hines

1982: 95).[20] By 1970, when he offered this account, his idealism had ebbed away. The Bauhaus, he now suggested, was really the result of the "wizardry" of Gropius and impossible to repeat. Perhaps the most dramatic shift is marked by his resigned admission that one cannot "frame normed [*sic*] habitations, or prefab them for quite ordinary families of coal miners or steel workers in Pittsburgh or East Germany!" (1989: 190). It is a familiar lament. Wright, Mies and Le Corbusier made similar confessions about their failed ideals. The world was not ready for the freedoms granted to them by the architect; rather than make spaces for a new subject, one could only shelter those who were already free. Neutra took another option: by focusing his efforts on the microfacts of his environments he made the ideal of a mass-produced modernism simultaneously impossible and failed from the start.

Notes

1. Neutra explained that through design we largely unknowingly "tamper daily with the precious inheritable substance itself" (1954: 83).
2. Sandy Isenstadt recently noted the "shift in [Neutra's] justification for characteristic modern forms" from functionalism to one "legitimized on psychological grounds" (Isenstadt 2001: 98). Isenstadt's generally cogent analysis suffers from the effort to further legitimate Neutra's perceptual psychology. Isenstadt, for instance, supports Neutra's notion that "at however minute a level, 'continuous, *smooth and even* distribution of stimuli' [such as produced by linoleum, smooth walls, flush cabinetry, glass, and views onto natural panoramas] across a surface lead to relaxation" (92, 106). Isenstadt goes on to cite J.J. Gibson's notion of "abstract constituents of vision" – how Neutra's spaces manage a healthy relay between interior and exterior view – in support of the architect's psychological theories. While Isenstadt is perhaps correct in seeing Gibson as a contemporary ally for Neutra, I would suggest both accounts – based in biology – conceive architectural form in reductive terms.
3. Otto Rank, inspired by Ferenczi's example, had a profound impact on Neutra's aesthetics. According to Sylvia Lavin, Rank shifted "away from the primacy of the oedipal complex" in Freud and towards "the role of the mother in infantile psychological development" (Lavin 2004: 54). Nonetheless, both Freud and Rank founded their practices on the individuated subject. As René Girard argues, Freud and Rank share a common philosophical foundation based exclusively on individual rather than social psychology. Rank and Freud, Girard writes, "never start out from the relation, but always from the isolated individual" (Girard 1973: 542). Mikkel Borch-Jacobsen, following Girard, offers a deconstructive account of Rank's *The Trauma of Birth*. As Borch-Jacobsen crucially observes, there is no primal event of birth

because birth is "not an event at all, since it is the advent of the subject, *before* any event" (Borch-Jacobsen 1988: 277).

4. Neutra adds that while the "*somesthetic*" experience of the uterus was multisensorial, it decisively lacks "visual responsiveness" (1954: 256). As he later put it, "Never are we 'all eye,' as the Impressionists averred" (1989: 97). Neutra's design theory – despite his occasional emphasis on panoramic vision – squares with the broader animus against visuality traced by Martin Jay (1993).
5. Despite Neutra's skepticism of the photograph, he nonetheless came to see it as an essential device for recording the micro-facts or "memory images" of the environment. "The still optics of the camera oppose physiological time optics even in our retinal chemistry. There, sensitivities are in flux, they do not remain static as on a fabricated film. Everything in our reactive life-body changes every second, but everything is rigid on that 8 x 10 print" (Neutra 1962: vii).
6. According to Barbara Lamprecht, writing of the Rice House, "Neutra managed to dispense with any kind of railing beyond the L-shaped, two-inch-deep reflecting pool lined in dark anodized aluminum that embraces the upper terrace" (Neutra 2000: 436). The same year that Neutra designed the Rice House, Walter Gropius similarly considered the psychosomatic effects of open railings. "Standing high up on a balcony with an open railing, many of us experience a sensation of dizziness. Such dizziness stops immediately, however, when cardboard or paper is hung on that open railing which, giving the eye support, reestablishes our equilibrium through the *illusion* of safety, though of course nothing has been added for greater physical safety" (Gropius 1968: 149). As I will suggest, Gropius's design theory is closely analogous to Neutra's.
7. While Lavin makes an entirely convincing case for the centrality of empathy as a model for understanding Neutra's work, she is less interested in the range of recent interpretations of empathy that reveal the tenuous and highly fraught nature of the concept within psychoanalysis. René Girard, Philippe Lacoue-Labarthe, Jean-Luc Nancy and Mikkel Borch-Jacobsen, for instance, have reflected at length on the dual nature of the concept. Following a trajectory that reaches back to Plato, they have shown how empathy or mimesis has been suppressed, largely under the terms of a modified specular version of the concept. For a close study of this problem in the work of Freud, see Borch-Jacobsen (1988).
8. Stephen Leet helpfully describes Neutra's turn from a "tempered optimism of the 1930s" to postwar resignation before the "insurmountable obstacles to industrialized building in the United States," which resulted in Neutra's "increasingly critical [view] of the deleterious effects of industrialization generally" (Leet 2004: 172).

9. Mies van der Rohe's 1927 statement regarding the Weissenhofsiedlung is a clear point of reference for Neutra's elastic ideal: "the increased complexity of our [present] requirements demands flexibility … For this purpose skeleton construction is the most suitable system. It makes possible Rationalized building methods and allows the interior to be freely divided. If we regard kitchens and bathrooms, because of their plumbing, as a fixed core, then all other space may be partitioned by means of movable walls" (quoted in Banham, 1996: 274). Following Mies, Philip Johnson and Henry-Russell Hitchcock affirmed the new "elastic principles of architecture" and "planning [that] has become absolutely pliant to the needs of function" (Johnson and Hitchcock 1995: 63, 96). The discourse of elasticity, pliancy, adaptability, flexibility, malleability and plasticity in architectural theory and practice has yet to be studied in detail. This essay is one part of a larger study of that phenomenon. For a powerful account of the concept in philosophical terms, to which I am indebted here, see Lacoue-Labarthe (1998). Within the field of architectural theory, Peter Blake was perhaps the most ardent advocate for a plastic theory of architecture (see, for instance, Blake 1960).
10. According to Catherine Malabou, there is a significant difference between plastic and elastic ideals. Malabou suggests that "an elastic material is able to return to its initial form after undergoing a deformation. Elasticity is thus opposed to plasticity to the extent that plastic material retains the imprint and thereby resists endless polymorphism" (Malabou 2007: 82). She adds that plasticity includes a transformative or explosive dimension alongside a developmental one. In his interchangeable use of plastic, elastic and flexible, Neutra is perhaps more perspicuous than Malabou as he shows the specular identity underlying these ideals.
11. The caption for the article reads "FLEXIBLE."
12. Despite Schindler's early advocacy of elastic space construction, he later turned to a loosely physiological notion of design. See, for instance, Schindler's six-part article on ventilation, plumbing, heating, lighting, furniture and the house as playground included in Phillip Lovell's column of the *Los Angeles Times Sunday Magazine* (1926). Nonetheless, Schindler's primary concerns remained with the integrity of the structure in relation to the *site*, rather than its relation to the inhabitant.
13. Less sanguine than Margolin, Leah Dickerman sees Rodchenko's club as charting "a path between two rationalized poles – between the space of rational efficiency and hyperfunctionality. Much of the club's design in fact aimed at bodily control." Nonetheless, Dickerman imagines the exacerbated space of "media saturation" as producing an "active engagement with information … and the games and activities within

the club were to promote consciousness, putting ideology into practice" (Dickerman 1998: 75–6). My concern, of course, is not specifically with the ambition to enforce certain effects on the beholder (although it bears its own problems), but to suggest the mistake involved when one imagines effects not as a matter of intentional agency but as transmitted by non-intentional material agencies.

14. For an important discussion of Bauhaus architectural theory, one to which I am indebted here, see Michaud (1978).
15. An important source for Gropius's political theories was Erwin Piscator's writings on theater. See Piscator (1929).
16. Tafuri is referring specifically to the work of Mies and Gropius. Despite Tafuri's critical remarks on open planning, he goes on to offer a positive evaluation of Le Corbusier's ideal of "total involvement" by the public in the Obus plan for Algiers. Which is to say "maximum flexibility, interchangeableness, and accommodation to rapid consumption" take on a completely different cast in Le Corbusier's hands than they do within the Bauhaus (Tafuri 1976: 131). Unfortunately, a closer analysis of the difference between these two models of agency is beyond the confines of this discussion.
17. Neutra's one-time colleague R.M. Schindler, for instance, never conceives of materials bearing internal powers to generate effects on their beholders.
18. According to Kenneth Frampton, the "year 1945 appears as the watershed between the socially committed ethos of the New Deal and an incipient impulse towards monumentality" (Frampton 1985: 240). These issues are usefully considered by Anthony Denzer (2008).
19. Neutra reflected on his Bauhaus experience in 1989: 176–80.
20. Gropius offered his own description of the Kühnauer Allee project: "The organism of a house derives from the course of the activities which take place within it … The shape of a building is not there for its own sake" (quoted in Whitford 1984: 159).

References

Banham, Reyner. 1996. *Theory and Design in the First Machine Age*. Cambridge, MA: MIT Press.

Benjamin, Walter. [1933] 1999. "Experience and Poverty." In *Selected Writings, Volume 2: 1927–1934.* Edited by Michael W. Jennings, Howard Eiland and Gary Smith; translated by Rodney Livingston. Cambridge, MA and London: Harvard University Press.

Blake, Peter. 1960. *The Master Builders: Le Corbusier, Mies van der Rohe, Frank Lloyd Wright*. New York: W.W. Norton.

Borch-Jacobsen, Mikkel. 1988. *The Freudian Subject*. Translated by Catherine Porter. Stanford, CA: Stanford University Press.

Denzer, Anthony. 2008. *Gregory Ain: The Modern Home as Social Commentary*. New York: Rizzoli.

Dickerman, Leah. 1998. "The Propagandizing of Things." In Magdalena Dabrowski, Leah Dickerman, Peter Galassi, A.N. Lavrent'ev (eds), *Alexsandr Rodchenko*. New York: Abrams.

Ferenczi, Sandor. [1923] 1968. *Thalassa: A Theory of Genitality*. Translated by Henry Alden Bunker. New York: W.W. Norton.

Frampton, Kenneth. 1985. *Modern Architecture: A Critical History*. New York: Thames and Hudson.

Girard, René. 1973. "Discussion avec René Girard." *L'Esprit* (November): 528–63.

Gropius, Walter. 1928. "Modern Theatre Construction: Regarding the Rebuilding of the Piscator Theater in Berlin." *The Drama Magazine*, 18 (February): 136.

Gropius, Walter. 1968. *Apollo in the Democracy: The Cultural Obligation of the Architect*. New York: McGraw Hill.

Haskell, Douglas. 1954. "Planning Our Plans." *Saturday Review*, 37 (February 20): 15–16.

Hines, Thomas S. 1982. *Richard Neutra and the Search for Modern Architecture: A Biography and History*. Berkeley and Los Angeles: University of California Press.

Isenstadt, Sandy. 2001. "Richard Neutra and the Psychology of Architectural Consumption." In Sarah Williams Goldhagen and Réjean Legault (eds), *Anxious Modernisms: Experimentation in Postwar Architectural Culture*. Cambridge, MA and London: MIT Press.

Jay, Martin. 1993. *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought*. Berkeley and Los Angeles: University of California Press.

Johnson, Philip and Hitchcock, Henry-Russell. 1995. *The International Style*. New York and London: W.W. Norton.

Lacoue-Labarthe, Philippe. 1998. *Typography: Mimesis, Philosophy, Politics*. Edited by Christopher Fynsk. Stanford, CA: Stanford University Press.

Lamprecht, Barbara. 2004. *Richard Neutra: Survival through Design*. Köln and London: Taschen.

Lavin, Sylvia. 2004. *Form Follows Libido: Architecture and Richard Neutra in a Psychoanalytic Culture*. Cambridge, MA: MIT Press.

Leet, Stephen. 2004. *Richard Neutra's Miller House*. New York: Princeton Architectural Press.

Lovell, Phillip. 1926. "Care of the Body." *Los Angeles Times Sunday Magazine* (March 14–April 21).

Malabou, Catherine. 2007. "Plasticity and Elasticity in Freud's Beyond the Pleasure Principle." *Diacritics*, 37(4): 78–86.

Margolin, Victor. 1997. *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917–1946*. Chicago and London: University of Chicago Press.

McCoy, Esther. 1979. *Vienna to Los Angeles: Two Journeys*. Santa Monica, CA: Arts & Architecture Press.

Michaud, Eric. 1978. *Théâtre au Bauhaus (1919–1929)*. Lausanne: Éditions L'Age d'homme-La Cité.
Neutra, Dione (ed.). 1986. *Richard Neutra: Promise and Fulfillment, 1919–1932: Selections from the Letters and Diaries of Richard and Dione Neutra*. Carbondale and Edwardsville: Southern Illinois University Press.
Neutra, Richard. 1947. "The Changing House." *Los Angeles Times* (June 22), E6.
Neutra, Richard. 1954. *Survival Through Design*. Oxford and New York: Oxford University Press.
Neutra, Richard. 1962. "The Photographer and Architect." Introduction to *Julius Shulman: Photographing Architecture*. New York: Whitney Library of Design.
Neutra, Richard. [1962] 2009. *Life and Shape*. Los Angeles: Atara Press.
Neutra, Richard. 1989. *Nature Near: Late Essays of Richard Neutra*. Edited by William Marlin. Santa Barbara, CA: Capra Press.
Neutra, Richard. 2000. *Richard Neutra: Complete Works*. Edited by Peter Gössel. New York: Taschen America.
Piscator, Erwin. 1929. *The Political Theater*. Translated by Hugh Rorrison. New York: Avon.
Schindler, R.M. [1912] 1997. "A Manifesto." Reprinted in David Gebhard. *Schindler*. San Francisco: William Stout.
Scully, Vincent. 1960. *Frank Lloyd Wright*. New York: George Braziller.
Tafuri, Manfredo. 1976. *Architecture and Utopia: Design and Capitalist Development*. Translated by Barbara Luigia La Penta. Cambridge, MA and London: MIT Press.
Twombly, Robert C. (ed.). 2009. *Frank Lloyd Wright: Essential Texts*. Princeton, NJ: Princeton University Press.
Whitford, Frank. 1984. *Bauhaus*. London: Thames and Hudson.