

Viennese emigré **Richard Neutra** was one of the chief early proselytizers of the European modern movement in America. From the refined athletic utopia of the Health House built for Philip Lovell in Los Angeles in 1929 to the mature and tempered position reflected in his essay "Human Setting in an Industrial Civilization" written thirty years later, Neutra served as mirror and lamp for the ascendancy of the new aesthetic in his adopted land.

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Neutra had sought out Louis Sullivan upon his arrival in America in 1923, and a year later, when Sullivan died, met Frank Lloyd Wright at his funeral. This encounter led to an apprenticeship at Taliesin, where Neutra was lastingly affected by Wright's attitude to site, though interpreting it in a less romantic, more scientific vein. In his early enthusiasm for everything American, embodied in his book *Wie baut Amerika?* (1927), he expressed only slightly skeptical optimism about the Fordist ethos, playfully celebrating it by embellishing the Lovell house with Model-T headlights. But by 1954, in his book *Survival through Design*, he warned that the "overadvertised industrial technology" that had become the instrument of advanced design was "flooding us off our physiological bearings." In his attempt to salvage the human and biological values threatened by mechanization, he emphasized that "man is always in the middle of this ineluctable presence called the environment."

While the prewar Lovell house was to remain his definitive work, Neutra strove in the postwar years to elaborate his psychophysiological philosophy. His practice extended over a large and diverse range of projects, including (in a not entirely unsuccessful partnership with Robert Alexander) communal centers, schools, offices, and government buildings, and (on his own) a suite of single-family houses for clients of moderate and more substantial income in which he was able to implement more fully, and on occasion with much sensitivity, a "clinical" approach to individual environmental needs. In an article that appeared in 1951 in the *AIA Journal*, the architect Ralph Walker had claimed that modernism and its emigré exponents were engaged in "stripping down culture to unattractive minima or in twisting neurosis into nihilism." This accusation, crudely aimed at Gropius along with Neutra, Mies van der Rohe, Serge Chermayeff, Marcel Breuer, and others, unwittingly evokes a book like Theodor Adorno's *Minima Moralia*, published the same year. Adorno, another Viennese expatriate who settled in Los Angeles during this period, had become so disillusioned with Western reason as to express doubts that the world was still habitable. Neutra's diagnosis of a technological civilization's insensitive depletion of nature was only slightly less sobering than the Frankfurt School philosopher's indictment of modern culture; nonetheless he posited a philosophy of "biorealism" aimed at "survival through design." Walker's comments evoke the McCarthyite climate of these years, responsible for the cancellation, in 1951, of Neutra's controversial contract for large-scale public housing on Elysian Park Heights, considered "creeping socialism" by the *Los Angeles Times* and others. Yet despite such disappointments and other crises of a personal nature that undermined Neutra's later career, the architect never deviated from his vivid crusade for a better future.

In the following essay Neutra elaborates his biorealistic creed. An opening image recalls the visionary traffic schema he had advanced in a project of 1926 called "Rush City Reformed," but now in an ironic vein. The architect's postwar critique of a society that has realized its appetite for progress in an avaricious consumer culture is summed up in the apocalypse of one man emerging from the commuting masses, accidentally empowered when his stalled car jams the approach to the Golden Gate Bridge.

From *Zodiac 2* (1958), pp. 69-75. Courtesy of Dion Neutra.

## Human Setting in an Industrial Civilization

Richard J. Neutra

### Social cohesion and technical spread

The species *humana* has long had a wide global range out of which it now begins to burst by rockets into outer space. Its physical setting, once easily tended by local habituation, has turned into a design problem of so formidable a complexity that my humbleness before it deepens, the longer I attempt a contribution.

The United States may well have overextended herself, on the order of a business concern, internally and externally over long distance. Not only its political missions, its embassies, but its cinema films depicting American life, and misunderstandings of it, our commercial manners, our automobiles, have diffused their contemporary flavor and at least on the surface proselytized the world somewhat like the Roman imperium in antiquity and the still farther flung Hispano-Hapsburg empire of the post-Renaissance. We have converted the Pakistanis, not to Christianity, but to the right-hand-drive, and to endless rows of army trucks imported annually as appropriated by Congress. Our Quonset huts dot the jungle clearings of the "Paradise of the Pacific" and the South Seas, way beyond our legitimate trust territory.

But now all this is no longer just "Americanism," whatever the initial stages of the fantastic industrialized civilization of superhuman scale may originally owe to one or the other national focus. The steel sections from which Japanese elevated railway structures are built to carry thundering electric trains, and to corrode over neatly preserved and tended rural rice paddies, or in the midst of the sprawl of a Tokyo of eight million population—are rolled in Kiushu, not in Pittsburgh. The swarms of double-deck buses piling up at the Kowloon Star Ferry are of Hong Kong assembly and fabrication, like the Coca Cola locally bottled; the twelve new, miraculously mechanized beet sugar factories in the fields of ancient Anatolia are imports of French manufacturing talent to Turkey, even if their ingenuity of agrarian economy may be supported by U.S. "Economic Cooperation" dollars. From Manila to Caracas the Douglas and Lockheed airliners, laden with commercial "agents provocateurs" and tourists, the upholstery of the big cars from Detroit and the Hilton International hotels have brightly colored the mental and the physical scene, both conditioning minds and producing antagonism. These contemporary inserts abroad often are erratic islands strangely and offensively elevated in the midst of a wide sea of soft currency and direly low purchasing power.

Power, mammoth magnitude, mass transaction in material, energy, and megalopolitan turmoil are our American pride as well as our patient suffering.

An episode again and again tends to come to my mind. One of my clients lives in Orinda, east of the beautiful San Francisco Bay and, like a quarter million others, drives every morning to town over the world's proudly longest bridge.

Recently, he told me, he had a wonderful inspiring experience—a revelation of power. On the bridge approach his car broke down. For twenty minutes he was holding up behind him thirty-five thousand two-tone cars in shiny Duco. It was a magnificent picture. He could see their chromium-plated bumpers glittering in the morning sun, sparkling like the lovely waters of the Golden Gate beneath, as he looked in the other back mirror of his windshield. He could hear from far and near harmoniously whooping horns, as every driver longed to reach his parking place and busy office desk over there in downtown San Francisco. He said it was a moment to feel one's power, the thrilling power of the unprecedented progress of our wondrous age.

Not every enthusiast of progress and power has so lyrical a view when looking backward, in our early morning that now perhaps begins to approach a hot noonday.

Love for the New World of "liberty or death" was instilled in me about 1910 by indeed unequal bards of America, Adolf Loos, Louis Sullivan, and Frank Lloyd Wright. Yet I found myself also pitifully lonesome under the spell of fanciful superscale statistics and gigantism in a hemisphere more and more reverberating of it from Vancouver to Buenos Aires.

In English the word "figure" stands for both number and shape—what Plato would have called *eidos* or what perhaps a school of German psychology terms *Gestalt*. American Jamesian Pragmatism has in its popularization veered toward utilitarian numerology, a cult of big numbers and of winning statistics, no matter how splendid writers and thinkers since Henry David Thoreau have in this country tried to uphold the humanities. They have bravely postulated a culture of cities, and found its continuity through all the only supposedly unmitigated dark ages, even that of Victorianism.

When much later, about 1930, returning from Zen Buddhist Japan and lecturing before students and colleagues in Asia, I was given the privilege to address also many countrymen in the then brand new "School of Social Research," lower Manhattan, or the gilded Blackstone Hotel on the central waterfront of Chicago, where an institute of industrial arts was to be born, I spoke of the ritual of perfectionism, intimately bound to human nature, of the Bauhaus where I had just been invited as a guest, the International Congresses for Modern Architecture, of history as Giedion sees it, the problems of mathematical rationalism long intertwined with timeless abstract classicism—and of my own ideas to make architecture a warm-tempered, nonabstract, most intimately enveloping environmental art, intensely close to nature—human nature as well as nature outside our skin.

In those days I urged to follow an old American tradition and bring vital Europeans, Gropius and Mies to the New World, while the old seemed to crumble; and they came and taught, so that I felt less lonesome.

But first, and long after, I had no clients at all. In the early twenties my solitude remained arctic in the midst of this scene of humming wheels. Anyone can see why, who glances through the trade journals of that period. I made drawings of tall office buildings somewhat like Lever Brothers, but instead the Woolworth Building went up with a fanfare.

But the Woolworth had such a ridiculous position in the city plan, such a misrelation to New York City Hall, the adjacent traffic arteries and East River bridge, that in my mind and on patient paper I began to "Reform Rush City" in dozens of studies all related to each other, like Balzac's stories in the *Comédie Humaine*. An *urbs* of wholesomeness with healthy pedestrian neighborhoods in the orbit, with rail-and-air transfers at the ends of a precalculated ribbon city along a spine of central industries and distributing facilities of goods, was one of the more comprehensive schemes which I analyzed and described in all detail. I was indeed deeply happy when Lewis Mumford, decades later, saw something exemplary in these lonely forgotten studies, included entire school and recreation systems, gravity centers of community life, and kept on laboring hard against the sprawling blight that befools and outdistances nature around our cities.

### **Physis and physics**

Apart from any sentimental attachment, I saw nature phylogenetically and ontogenetically

as our matrix, ever since I had as an adolescent boy started to study experimental physiological psychology in the ponderous tomes of the great Wilhelm Wundt. His observational curiosity readily fused with all that stirred in me as a future planner of communities and a designer of living spaces. Modern architecture, explained by the progress of engineering and technique, was the creed of us avant-gardists, and I passionately experimented with a wide array of constructional novelties, such as bolted and welded steel, sheet metal shaped and engineered into stress-taking stiffness, shot and vibrated concrete. Prefabrication and radiant heating I explored, and such efforts of mine were graciously reported as of interest and merit in scientific and trade journals, which in a technological civilization have a predominant readership. The romantic rhetoric of an age of glorious engineering possessed also me—so much so that all my Beaux-Arts colleagues of yesterday's vogue disparaged me as "just an engineer," a bad word, indeed intended as a mortifying insult at that time.

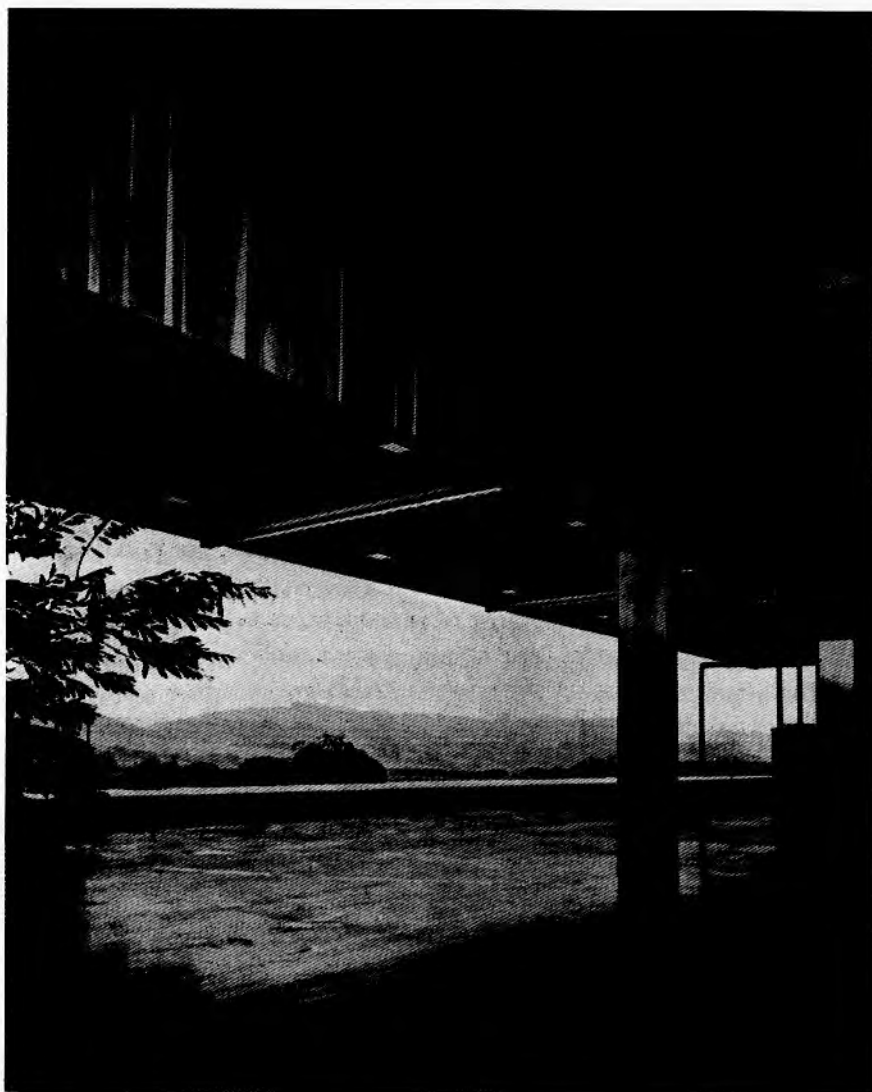
But this blame was not justly fixed on me, as in 1926 and 1927 I began the plans of the "Health House." It could have easily been called the first light residential steel structure—largely composed of most slender suspension members in tension, or it could well have been named the "glass" or the "gunite house." Although it was bristling with exciting technology from stem to stern and from frame to finish it was called Health House, and built it was with the patient, even passionate connivance of a physician preoccupied with the health-sustaining and therapeutic stimuli an architect has the chance to arrange for a lifetime around man, woman, and child—especially the child, in its so plastic and impressionable infancy.

When I used to my client the word "psychosomatic," it was then startlingly new, and I believe I never had heard it myself. But having had six years of Greek in school, it seemed to have a fused meaning most significant to me, most telling and serviceable.

Psychosomatically and in every other way an architect is not in the "quick turnover" but in the "long-range investment" business, if one can call his sacrificial profession any business at all. "Conservative," to use now a time-honored Latin word, meant to me preserving function and value, and I decided at this early age that frills and fashions were splendid for the ladies' apparel branch but bewildering to the person scraping together his savings, straining all his credit to build and to expose his life to a building for decades to come. An architect with fast-changing formal predilections, as a matter of course, scares him by equally fast obsolescence and decay of value. Entire neighborhoods get dated painfully and damagingly without a chance of improvement before physical depreciation and downright dilapidation relieves the surface of the earth of this dead weight, one time after another superseded by new stylishness. No cohesive community, placidly and slowly aging in unison and with a harmonious patina as of yore, is thinkable under such circumstances, and while architecture once used to be related to eternity, now it is subject to the latest copy of the fashion journal.

As Giulio Carlo Argan has expressed, it is an ominous step "from the sphere of the transcendent to that of the contingent" which architecture, the housing of man's activities, has taken. Some 40,000 architects and students of architecture around the globe can be a great help or harm to mankind. I was in recent years impressed to meet very many of them while on journeys of professional consultation, and found them with the same questions in mind and fairly uniformly bewildered because what they learn or have mastered today will, even in major aspects, not be good a few years hence. Yet man and his natural endowment is unchanged, and still poorly served.





*Eagle Rock Park Playhouse, 1955. City recreation building opening wide into public hillside park. Suspension members of steel construction help omit obstructions of play area. Roll-up fronts on both sides permit expansion of interior play-space. [Photograph by Julius Shulman.]*

It was not profound if modern architecture had been explained to the reluctant Philistine as timely "because this is a new day in engineering, in installations, in plate glass, plastics, and stainless steel . . ." A new day passes every twenty-four hours and the earth keeps spinning on to make us dizzy. Our gadgety property of yesterday becomes listlessly obsolete, overtaken by the Joneses who bought theirs this morning. We are restless, unsteady, impatient. The home is a place where one part of the family waits until the other brings back the car.

Yet mooring, anchorage, rooting are organic necessities, not even the freest bird can miss. He is even identified with the territory of his nesting and the "biochore," as zoologists call his specific habitat. I have on occasions thought of statistics from the mental health clinic of the Menninger Research group Topeka. Annually, somewhere between nine and twelve million know-how Americans cool their too hot heels in psychiatric waiting rooms, and one wonders where they could all park their cars.

Some seventy percent of the goods which reach the Brooklyn docks F.O.B. factory do so with only an eighteen miles speed per day. That this is what all our power and commotion have bought for us moderns makes one think of the sixteen miles a day mail coaches traveled over an almost roadless continent a hundred years ago. It is not merely a techno-economic disappointment. That eighty percent of overall costs of many goods, including manufacture, carrying charges, and plant overhead, go into the expense of distributing this merchandise over densely truck-clogged Manhattan, where thousands of taxis idle in a perpetual jam, brings to mind the biting of fingernails, the anxieties and neuroses which brain dynamicists have laboratory-produced by arrhythmic stop-go-stop innervations.

Modernity must not clash with the tradition of the so long fairly available calm nerves, natural protectors against stomach ulcers and hardened coronaries. True modernity will have to recognize readily the beneficial balance of cultural engrams and it will strive to "conserve" values and the steadiness derived from peaceful spatial-temporal integration. It will attentively salvage the most precious material that daily is under the urban designers' and the architects' hands: the human individual, although it is the one material least nationally advertised, and, in fact, not for sale.

Wear and tear on organic systems, physiological maintenance costs are overlooked by the "practical man." His supposedly pragmatic politics may have muddled through in ages of lesser velocities and mass transactions. I began to feel doubt that this experience of the past applies in our period of supercolossal stakes in the energy game. Our fireworks have become too bright, too noisy, and too rapid to adjust to. Automation may triumphantly turn ubiquitous, but it does not work at all for an automatic survival in the midst of wild artificialities, to which adaptation cannot be found even in eons while hourly progress goes on. No, not "progress"! We have—an awful plural of it—millions of progresses which take off each other's fenders, clash, crash into each other and never have been conceived in any sort of coordination. They have been conceived in terms of the technologically feasible and the commercially exploitable, hardly in terms of the biologically bearable.

I decided to look at architecture under the angle of Biological Realism, which if not *sub specie aeternitatis*, reckons at least with the long past of organic establishment that realistically deserves all respect from the designer of the human setting. The hardest facts, even economics, enter man's affairs via resilient neurocerebral tissue; no human fact is harder than that. The architect must keep it in mind and feel responsible for the subtle but vital preservation and satisfaction of human nerves and of life itself.