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HISTORIES OF THE IMMEDIATE PRESENT

INVENTING ARCHITECTURAL MODERNISM

ANTHONY VIDLER

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3 FUTURIST MODERNISM REYNER BANHAM

Where Banham invented the immediate future, Rowe invented the immediate past. For my generation, those two were the poles of a debate and for some, the horns of a dilemma.

-Robert Maxwell, introduction to Colin Rowe, "Thanks to the RIBA-Part I"

While Colin Rowe, as architect-historian, found the answer to a contemporary practice in the historical and modernist "mannerism" of the neo-Palladian Corbusier, Reyner Banham, the engineer-art critic, was less convinced that modern architectural language had been exhausted by the end of the 1920s. Banham argued in his historical account of the period 1918–1930, Theory and Design in the First Machine Age, that it was precisely the formalist and academic constraints on this language that had led it into an impasse with the modern movement's underlying aspirations to invent an architecture that responded to the new technological and social conditions of the twentieth century. In this thesis, written under the supervision of the historian Nikolaus Pevsner at University College, London, Banham sought both to rebut the challenge of what he regarded as the academic nostalgia of his British contemporaries and to revive the technological aspirations of the first half of the twentieth century. The example of Pevsner was

key to his argument, just as Wittkower's historical substance and theoretical analysis had been for Rowe's initial thesis. In his formulation of the idea of the "Modern Movement" in 1936 and his complex negotiation between German modernism and English empiricism after 1940, Pevsner had established a foundation of quasi-historicist functional and technological authority that allowed Banham fully to embrace the scientific breakthroughs of the 1960s. Pevsner also influenced Banham through his reluctance to discard the aesthetic grounds of architecture and his embrace of the English picturesque as a nonacademic, "functional" aesthetic. Consequently, Banham, anti-academic throughout his career, would himself never quite relinquish his fascination with what he was to term the secret language of the "Black Box" of architecture.¹ The alliance between a renewed "picturesque" version of the architectural image and its new technological and material needs would be, for Banham, at least a contingent solution to the impasse of modernist formalism.

Modern Picturesque

The picturesque was the first, but not necessarily the ultimate, aesthetic discipline which was not based upon the grid, the axis, the module and other academic preconceptions, but rather upon free grouping of parts, free juxtaposition of different materials, upon taking things on their own merits, upon an experimental and tentative approach which is the guiding principle of the modern movement and the planner's life-line in a world of visual chaos. —Architectural Review, editorial note on Pevsner's "C20 Picturesque"

The influence of the *Architectural Review* on contemporary British architecture after Nikolaus Pevsner joined the editorial staff in 1941 can hardly be overemphasized. With Pevsner's help, the journal championed modernism (not yet, if ever, to be ensconced firmly in the British context) and a belief in the vernacular roots of authentic architecture. Through his editorship and continuous contribution to its pages, Pevsner, with considerable aplomb, was able to transfer his faith in the zeitgeist from his native Germany to his adopted England, adroitly managing to combine a historical interest in the unsung Victorian, the vernacular, the "Townscape" affinities of his fellow editors, and a belief in the functionalist tradition of the modern as exemplified by the hero of his *Pioneers of the Modern Movement.*² These concerns were welded together by what he saw as the fundamental genius of the English for the picturesque and, more importantly, the influence of the picturesque on modern architecture itself.³

Pevsner outlined these propositions in a sharp rebuttal of a radio talk by Basil Taylor, who had accused the Architectural Review of sponsoring a "Picturesque revival."⁴ Not only was Taylor wrong in his interpretation of the picturesque as a movement, Pevsner argues, but a significant heritage of the picturesque could be found in the compositional practices of the modern movement. Against Taylor's critique of the picturesque as "accidental" and "disorderly," Pevsner poses what he calls the picturesque's own terms-"varied" and "irregular"-and claims that it was precisely these qualities that lay at the basis of modernism's success. He cites as examples Gropius's Bauhaus building at Dessau and Le Corbusier's Stuttgart houses and Centrosoyuz project for Moscow. The aesthetic characteristics of these buildings included not only "cubic shapes, no moldings, large openings and so on," but more importantly, "the free grouping of the individual building, a mixture of materials, synthetic, natural, rough and smooth, and, beyond that, the free planning of the whole quarter."⁵ These attributes, Pevsner concludes, are what differentiate modernism's "free exercise of the imagination stimulated by function and technique" from the "academic rule of thumb," the "straitjacket" of which had been discarded by the modern movement.⁶ For Pevsner, as for Hitchcock fifteen years earlier, "The modern revolution of the early twentieth century and the Picturesque revolution of a hundred years before had all their fundamentals in common."⁷

Taylor's radio talks had been aimed partially at the ubiquitous movement named "Townscape," sponsored by the Architectural Review and promoted by its art editor Gordon Cullen, a version of the picturesque revival heartily disliked by the modernist wing of British architects. Pevsner's idea of a "picturesque modernism" immediately evoked a gruff reply from the Colin Rowe circle in the form of a letter from Alan Colquhoun. Colquhoun followed Rowe in distinguishing between the eclecticism of historicism, which he called "closely connected" with the picturesque, and the search for "the secret of 'Style' itself," proper to the modern movement.⁸ While it influenced modern practice, Colquhoun argued, the picturesque had to be characterized in its historical context-distinguishing, for example, between the apparent "picturesque" of a Palladio, an Edwin Lutyens, and a Le Corbusier: "All three may be equally successful from the standpoint of the Picturesque, yet, clearly, each has a content which escapes definition in those terms."9 Central to Colquhoun's argument was the idea that any picturesque qualities, such as free grouping and a mixture of materials, were "meaningless" without other traits that offer a contrast, such as visual hierarchy, reflecting functional hierarchy. The distinction, he claimed, was between purely visual qualities, as espoused by Pevsner, and those that derive equally from didactic and mental constructs as maintained by Rowe.

Pevsner's reply to Colquhoun—asserting that he was only speaking of the aesthetic rather than the functional aspects of architecture—was, like his other critical essays for the *Review* in the early 1940s, written under the pseudonym of Peter F. R. Donner.¹⁰ These pieces were, as the colophon stated, "frankly about the aesthetic aspect of architectural design," taking for granted modern architecture's functional basis in efficiency.¹¹ The first of these essays was a direct attack on Frank Lloyd Wright's recent lectures at the RIBA, delivered under the title An Organic Architecture, and especially on Wright's opposed categories of "Organic" and "Classic." Against this distinction, which Pevsner felt was entirely fallacious, Pevsner preferred "Dynamic" and "Static," "a more precise, more arguable and more architectural polarity . . . of real heuristic value in analyzing new as well as old building."¹² His examples were both historical-the symmetrical seventeenth-century Fenton House in Hampstead (static), versus the traditional Cotswold house (dynamic)-and modern-Joseph Frank's house for the 1927 Weissenhof exhibition in Stuttgart (static) versus Maxwell Fry's house at Kingston (dynamic). This choice of words enabled Pevsner to discriminate among varieties of these compositional qualities; but what annoyed him most about Wright's summary disposal of the classic was the inference that symmetry was equivalent to military order, "heels together, eyes front, something on the right, and something on the left."¹³ To the exiled German in August 1941, this connection represented a provocation-the equivalent, as Pevsner put it, of posing the "lounge chair" against the "goose step."14 After all, Fenton House, with its calm symmetry, could never be mistaken for a militaristic composition, for it had been built by his hosts, the English, that "balanced, quiet, self-certain race which has conceived, and chosen to live in, such houses, the only race that looks equally at ease in flannels and in white tie."15 It was Pevsner's hope that such balance might be evolved once more—"Balanced shapes in domestic architecture, shapes to look both homely (sit venia verbo) and formal, neither slovenly in their homeliness, nor Prussian in their formal reserve."16

Such a call for "balance" indicates that Pevsner's aim was directed less at Wright, who merely served as a convenient target, and more at the English modern movement itself, represented in his argument by Maxwell Fry. Pevsner showed his continued reluctance to relinquish his support of the Gropius wing of modernism, which he had clearly demonstrated in *Pioneers* and now displayed in his eulogy of Frank's Stuttgart house. Where Fry demonstrated an "alert tension" and a "complex pattern" in his asymmetries, Frank displayed a repose, a firmness, "and a deeply satisfying finality."¹⁷ His was the *juste milieu* of the "liberal, wise, gentle yet composed spirit" against the "single-minded concentration" of Fry, "not a manifesto . . . not self-asserting."¹⁸ By implication, and in contrast, Fry and the English modernists presented a rather "strained countenance," some "haste in the rhythm" of their fenestration, and left "loose ends" in their compositions. No doubt their adherence to the formal principles of Le Corbusier led them to such anxious forms, for, as Pevsner noted, the rhythm of Le Corbusier was "far more pointed . . . that of the dancer seemingly independent of the weight of matter," while Gropius had the rhythm of "an accomplished machine."¹⁹

This implicit attack on Corbusian influences was transformed into a direct confrontation in a second article, again written under the Donner pseudonym, that October.²⁰ In this article, Pevsner took on Emil Kaufmann, and explicitly his *Von Ledoux bis Le Corbusier*, in order to expose the "absurdity" of pure formalism, of *l'architecture pure*, juxtaposed with the equally specious myth of the *machine à habiter*. Ledoux and Le Corbusier, conveniently brought together by Kaufmann, were to Pevsner the ultimate examples of an impossible and "inconceivable" condition—that of an "Architecture for Art's sake, architecture as a pure abstract art."²¹ As examples of Ledoux's extreme "abstract formalism," Pevsner cited three of his designs taken from Kaufmann's illustrations to *Von Ledoux bis Le Corbusier*: a gate house of "surprisingly modern appearance" (the "Barrière St. Hippolyte" from Kaufmann, page 41), and the pyramidal hut of the "woodman" and spherical house for the "field-guard" (the "Haus eines Holzfällers" and "Kugelhaus für Flurwächter," from Kaufmann, page 31).²² Following Kaufmann, Pevsner describes these "abstract cubic values" as confirming the romantic principle of "the independence and sacredness of the individual," because "each block is severed from the ground, severed from its neighbors, and severed from use." Architecture has here "become an abstract art," with "nothing left of functional soundness." Indeed, Pevsner comments, with withering bourgeois practicality, "It is unnecessary to point out that the shapes of the rooms in the spherical house are sheer lunacy from the practical point of view. No furniture can stand against its walls. Curved windows are prohibitively expensive. A curved door would prove a perplexing problem to joiner and builder."²³

Pevsner next applies the characterization of what Ledoux himself termed "architecture puriste" to Le Corbusier. In creating an abstract art of architecture out of space, as opposed to Ledoux's volumetric projects, Corbusier had reconstrued forms that in Ledoux "strike one as barren" into "fascinating and inspiring" explorations-"even in his most alarming spatial performances."24 Pevsner admits respect for Corbusier's "never-failing power of imagination" and "lucid and quick intellect," and describes the open plan of Le Corbusier's house for the Stuttgart Weissenhofsiedlung exhibition as possessing a "generous unity of atmosphere... combined with the most intriguing, most enchanting, variety of vistas in all directions"-the essence of the picturesque. Against this, however, he raises the same pedestrian critique, one that he no doubt felt would amuse and satisfy his English readers: "Is the Stuttgart house less remote from the realities of life . . . than Ledoux's spherical house? Might it not disturb the happiness of the Brown ménage if Mrs. Brown wants to go to bed at ten behind her low screen, the while Mr. Brown wishes to work on and smoke his pipe until 1.30? Or if Mrs. Brown has her bridge party when Mr. Brown comes home from business and goes straight to have a cold bath behind his screen? Some people like to sing in their baths. He cannot. He cannot even splash freely. And if one of them falls ill, will it not paralyze the whole house?"²⁵ The faintly ridiculous image of a middle-class English couple attempting to adapt their lifestyle to a Corbusian house succeeds with deadpan effect. As he ironically expresses it in conclusion, there remains for Pevsner an inexplicable contradiction between "Le Corbusier the spatial creator and Le Corbusier the writer who invented the widely used and nearly always misused theory of the *machine à habiter*."²⁶

In these early articles Pevsner laid out his strange mixture of picturesque visual criteria and a critique of functional pretense that would energize his student Reyner Banham in his embrace of the Smithsons' Hunstanton School—a work that Banham saw as an exemplar of the new brutalism, precisely formed of these two apparently discordant characteristics.

Historicism versus Functionalism

A revolt was bound to come against the formal rigidity and the uniformity of the '30s. However it is not odd and strange exterior effects which are the answer; the answer lies in planning, in siting, in landscaping, and so on. The individual building must remain rational. If you keep your buildings square, you are not therefore necessarily a square.

—Nikolaus Pevsner, "Modern Architecture and the Historian or the Return of Historicism"

In January 1961, Pevsner, one of the first historians, as Banham noted, to invent the idea of the "modern movement," sounded

an alarm that has resonated ever since. In a now celebrated talk at the Royal Institute of British Architects, Pevsner registered his unease at the changing role of history and the historian for contemporary practice.²⁷ Whereas in the modern period, history and architecture were finally separated from collusion, now they seemed joined again as architects searched for precedents in what looked like a return of historical styles into architecture. Of course, this time architects were not returning to the Gothic or the classical so much as to modern styles themselves-creating "neo" versions of modernisms in Italy's neoliberty style, in the work of Philip Johnson, in the neo-expressionism of Le Corbusier's Ronchamp. Pevsner added "neo Art Nouveau," "neo de Stijl," "neo School of Amsterdam," and "neo Perret," all of which he saw as undermining the fundamental principles of the modern movement. From modern movement works that embraced the ethical injunction "form follows function," where the exterior is entirely transparent to the interior, Pevsner traced a historical line to the new tendency toward exteriors created not necessarily against function, but in a way that, as he put it, "does not convey a sense of confidence in their well-functioning."28

Pevsner's conclusion was a striking admission of the selfhating historian: "Could you not say that the Return of Historicism is all our fault, and I mean myself, personally: (a) *qua Architectural Review* and (b) *qua* historian?"²⁹ He thus blamed himself for the very effect of "the historian as such, and perhaps I should say, my own pitiable position in particular," through his own book *Pioneers of the Modern Movement* of 1936, and his successive articles in the *Architectural Review*, which had been "certainly misunderstood by many as an encouragement to the new historicism."³⁰ For Pevsner, "historicism" signified "the trend to believe in the power of history to such a degree as to choke original action and replace it by action which is inspired by period precedent."³¹ As Banham later asserts in a spirited defense of his teacher, Pevsner was using the word "historicism" as it is associated with a generalized and relativistic stylistic eclecticism rather than in the various meanings attributed to the word by the German school of historical method in the late nineteenth and early twentieth century, and its resulting sense of historical determinism.³²

A photograph of the main participants in the RIBA event at the subsequent reception shows Pevsner at the center, flanked on his left by the respondent, John Summerson, and on his right by Banham, dressed up in black tie.³³ In retrospect, this quite unconscious staging was prescient enough, as Pevsner would continue to hold the central position in determining the "Englishness" of all architecture, modern or not; Summerson would largely retreat from his support of the modernist program into a study of the eighteenth century conducted from his position as curator of the Sir John Soane Museum; while Banham would discard his formal dress in favor of longer hair and casual clothes, and embark on a pilgrimage to the United States leading from the ecologies of Los Angeles to the grain elevators of Buffalo, thence to Santa Barbara, and finally to the cathartic scenes of the western desert. The image was also prescient in another way, because it would be out of Pevsner's unfinished history of modernism, and armed with his theoretical aesthetics of the picturesque, that Banham would fabricate his own doctoral thesis; and further, it would be Summerson, in his trenchant summary of modernism's underlying functionalism, who would spur Banham to his own espousal of a functionalism beyond that of avant-garde symbolism embracing, partially at least, the latest developments in a second-industrialrevolution technology.

Functionalist Modernism

Reyner Banham once remarked that the history of a period does not always neatly coincide with the calendar. Looking back from the vantage point of 1960, mid-century architecture-that of the Festival of Britain around 1950—seemed less of a break with the past of modernism than that occurring later in the decade after the building of Ronchamp, and closer to 1957.³⁴ As he pointed out, Summerson, in his celebrated article of that year, "The Case for a Theory of Modern Architecture," described what he called a "Thirty-Year Rule" that measured changes in architectural taste, and duly proposed 1957 as "a year of architectural crisis."³⁵ In fact, the divide that both Banham and Summerson detected in the late 1950s, despite their squabbles over its chronology and architectural manifestation, was between the modern movement. universalized through the activities of CIAM and founded on the "mythology of Form and Function," and a new, freer style that Banham characterized not by the often-claimed "end of functionalism," but by the death of the slogan "Functionalism with a capital F, and its accompanying delusion that curved forms were the work of untrammeled fancy."36 Against this "untrammeled fancy" that Pevsner was soon to characterize as a "New Historicism," both Banham and Summerson were to propose alternatives that radically reconsidered functionalism no longer in the largely symbolic guise espoused by the modern movement, but as based on "real" science. In search of what he called "une autre architecture," Banham turned to the authority of military and corporate engineers, biological researchers, and social scientists, while Summerson outlined a new concept of the program as the foundation of a "Theory of Modern Architecture."

Both were following the lead of the earlier historians and architects of the modern movement—Pevsner, Giedion, Hitchcock—who had understood modernism as fundamentally "functionalist" in character. The nature of this functionalism differed from historian to historian, but its rule over modern architecture seemed supreme: it was a way of ignoring the formal and stylistic differences of the various avant-gardes in order to provide a unifying alibi, or defining foundation, for architectural modernity. It was from this functionalist position that we have seen Pevsner criticizing Le Corbusier (formalist) and praising Walter Gropius (functionalist), and later excoriating the return of "styles" characterized as a new historicism; it was from this position too that the first generation of modern masters was criticized by Team X, among others, as not being sufficiently broad or humanist in its functionalism. And of course it was under this sign that Archigram itself was to be denounced by these historians and architects—by Giedion in the 1967 edition of *Space, Time and Architecture*, and by the Smithsons in their *Without Rhetoric* of 1973.

In his article, Summerson rejects the idea of constructing a theory of modern architecture based on the *existence* of modern buildings: to abstract formal characteristics from a select repertory of modern buildings, to provide a grammar of form, and then to illustrate how the forms embody the ideas, would only "add up to something like a Palladio of modern architecture, a pedagogical reference book" that would end up as a "hopelessly gimcrack" "ragbag of aphorisms, platitudes, and fancy jargon." Rather, a "theory" of architecture should be "a statement of related ideas resting on a philosophical conception of the nature of architecture," residing in a group of Mediterranean beliefs about reason and antiquity, continuously reformulated since the fifteenth century: "Perrault said antiquity is the thing and look how rational; Lodoli seems to have said up with primitive antiquity, only source of the rational; Durand said down with Laugier, rationalization means economics; Pugin said down with antiquity, up with the Gothic, and look how rational; Viollet-le-Duc said up with Gothic, prototype of the rational. Eventually a voice is heard saying down with all the styles and if it's rationalism you want, up with grain elevators and look, how beautiful!"37

Against this rational tradition, however, Summerson saw a new version of authority superseding the classical—that of the "biological," as advanced by László Moholy-Nagy. Moholy had stated, "Architecture will be brought to its fullest realization only when the deepest knowledge of human life as a total phenomenon in the biological whole is available."38 For Moholy, notes Summerson, the biological was psychophysical-a demanding theory of design matching a broad idea of function that called for "the most far-reaching implications of cybernetics" to be realized "if the artist's functions were at last to be explicable in mechanistic terms."³⁹ In this way Summerson replaced the idea of classical and rational form with what he considered the modern conception of program-the "organic analogy" of the Renaissance, now fulfilled by science. Architectural theory had moved "from the antique (a world of form) to the program (a local fragment of social pattern)." Hence, Summerson's celebrated conclusion: "The source of unity in modern architecture is in the social sphere, in other words, the architect's program-the one new principle involved in modern architecture."40

Summerson defines a program as "the description of the spatial dimensions, spatial relationships, and other physical conditions required for the convenient performance of specific functions," all involving a "process in time," a rhythmically repetitive pattern that sanctions relationships different from those sanctified by the static, classical tradition.⁴¹ The problem he identifies, similar to that of naive functionalism, is the need for a way to translate such programmatic ideas into appropriate form-a problem to which Summerson offers no direct answer. Dismissing Banham's 1955 appeal to topology in his essay on the new brutalism as "an attractive red herring (I think it's a herring)," Summerson expresses his dismay at the "unfamiliar and complex forms [that] are cropping up" in practice around him through the extension of the engineer's role.⁴² Indeed, his conclusion is ultimately pessimistic. Sensing the incompatibility of a theory that holds two equal and opposite overriding principles,

he remarks that any theory that posits program as the only principle leads to either "intellectual contrivances" or the unknown: "the missing language will remain missing," and our discomfort in the face of this loss would soon be simply a "scar left in the mind by the violent swing which has taken place."⁴³

Banham, writing three years later, was more optimistic. While he sides with Summerson in deploring the style-mongering of the 1950s—"it has been a period when an enterprising manufacturer could have put out a do-it-yourself pundit kit in which the aspiring theorist had only to fill in the blank in the phrase *The New* (. . .)-*ism* and set up in business"—he finds that "most of the blanket theories that have been launched have proven fallible, and partly because most labels have concentrated on the purely formal side of what has been built and projected, and failed to take into account the fact that nearly all the new trends rely heavily on engineers or technicians of genius (or nearly so)." Banham proposes that "a new and equally compelling slogan" is needed, and suggests some of his own: "Anticipatory Design," "Une Architecture Autre," "All-in Package Design Service," and even "A More Crumbly Aesthetic."⁴⁴

Futurism Redux

The Futurist city is back on many drawing boards, begins to be realized here and there.

-Reyner Banham, "Futurism and Modern Architecture"

Though Banham had chronicled the immersion of his contemporaries in the Palladian past, and counted Rowe within his London circle, he was nevertheless from the outset bound to a history different from that promulgated by Pevsner or Summerson, one that he would characterize later as not of the past but of the "immediate future." His affiliation with the Independent Group, his early forays into the world of pop culture and science fiction, and most of all, his work toward a PhD under Pevsner's mentorship persuaded him that the present had little to do with the mannerist or neoclassic past. Rather, in his effort to fill in the historical "gap" since 1914, where Pevsner had ended *Pioneers of the Modern Movement*, Banham became convinced that the modernists' vision of a machine-age future had been betrayed by their adherence to the remains of academic culture. More importantly, he believed a proper history of the period would unearth those architects who had truly been influential due to their lucid, unsentimental understanding of technology and its promise, those left out of the traditional histories of the modern movement. First in line were the futurists, on whom Banham delivered a lecture at the RIBA in January 1957.⁴⁵

Tracing the meager attention paid to his heroes in previous scholarship—a footnote in Pevsner, a half-dozen paragraphs in Giedion's revised Space, Time and Architecture of 1953-he proclaims that as a result of his research, "this tidy and apparently settled situation has blown apart like an art-historical timebomb."46 Flourishing Antonio Sant'Elia's Messaggio and collating it with F. T. Marinetti's Manifesto, Banham reinstates futurism, not simply as one among the many avant-garde movements in the 1900s but as a major force, if not the major influence on the ideology of modernism. His aim was to join Sant'Elia to the futurists and to demonstrate the power of the architectural images of the Città Nuova (1914) as against, for example, the more academic and less far-sighted project for Tony Garnier's Cité Industrielle. For Banham the functionalist modernist. Marinetti's evocation of the mechanical sensibility and its translation into images by Sant'Elia represented the real roots of a vision never realized by the modernists. This vision was not of a merely symbolic order, like that of Le Corbusier, but rather of an order of technological understanding by those who knew the interiors of the racing cars they drove. Out of this vision came not only Le Corbusier's Ville Contemporaine, but the imaginary cities of the Russian constructivists, as well as the projects of Mart Stam, and, more recently, those multilevel, densely packed plans for center city renewal from the Barbican to New York. Banham ends his "time-bomb" with a sly, back-handed homage to Nikolaus Pevsner, in whose *Pioneers* he detected a truly futurist accent: "though it can find only footnote-room for Futurism as such, [Pevsner's book] is nevertheless sparked and spirited throughout by the Futurist inspiration that has bitten deep into the subconscious of Modern Architecture."⁴⁷ In this way was launched the enthusiastic search for another architecture that, in his own tribute to Pevsner, *Theory and Design in the First Machine Age*, would find its postfuturist hero in Buckminster Fuller.

Theories and Design

Early on, Banham took it to be his mission as a historian to fill in what he called the "Zone of Silence": the history of the modern movement between 1910 and 1926, between what Sigfried Giedion had taken as the subject of his *Bauen in Frankreich* (1928–29) and his later *Space, Time and Architecture* (1940–41). The common assumption of the time was that the end of the great years of the modern movement should be dated around the time of the First World War; thus, Pevsner had concluded his *Pioneers of the Modern Movement* with the industrial design exhibition of the Deutscher Werkbund in 1914, while Giedion's *Bauen in Frankreich* had stopped even earlier, with the turn of the century.

Banham, in his PhD thesis, published in 1960 as *Theory and Design in the First Machine Age*, argued otherwise.⁴⁸ Here he introduced his innovative view that the futurist movement's emphasis on technology was central to the history of modern architecture, and undertook the first close analytical interpretation in English of Le Corbusier's writings. Banham acknowledged Vers une architecture as "one of the most influential, widely read and least understood of all the architectural writings of the twentieth century."49 Yet, against Rowe's reading and the prevailing climate of Le Corbusier appreciation in London, Banham found Corbusier's book without "argument in any normal sense of the word."⁵⁰ This analysis reveals more than Banham's desire to puncture what he saw as misplaced respect for Le Corbusier. As I will discuss later in this chapter, Banham's analysis of Vers une architecture corresponded to the underlying mission of his entire career, which would be dedicated to freeing the mechanistic from the embrace of the academic, two themes that he found in Le Corbusier. As he emphasized throughout Theory and Design, Banham espoused embracing science and technology in a way that would overcome the limitations of the symbolism of the modern movement. In a reprise of Le Corbusier's comparison of the sports car with the Parthenon, Banham compares Fuller's Dymaxion groundtaxiing unit to Gropius's body for the Adler Cabriolet: "Gropius' Adler, though handsome, is mechanically backward when compared with the streamlined, rear-engined harbingers of the next phase."51

Thus, despite his formal dress on the occasion of Pevsner's 1961 "Historicism" lecture, Banham was far from defeated by the apparent recrudescence of stylistic motifs. While understanding the complaint, and indeed shouldering some responsibility for having reintroduced historical modernism to a new generation, he was loath to give up on his own double-barreled stance—as he called himself in neofuturist tones—as a *combattero*, staunchly defending the role of the critic and historian and perhaps even that of the critic/historian, if not that of the critical historian. He opined that, far from being a regression, the new historicism, insofar as it looked to "strong" examples like Mies and Corb, was a sign of revolt against the mediocre accommodation of the

Scandinavian modern and the British picturesque: "I suppose you can lock the cupboard and say 'You must not have any more history, it is not good for you,' or you can add water until the stuff is indistinguishable from anything they get elsewhere." The responsibility "lies not . . . with the historian but with the practicing architect or designer who is also a teacher: he must provoke stronger leadership than the historian can."⁵²

Banham advanced this argument in a talk that immediately followed Pevsner's own, and served both as the student's response to the master and as a map of Banham's own future interests. Dramatically titled "The History of the Immediate Future," it opened with the ringing statement: "History is our only guide to the future."53 Banham viewed history as a social science, an extrapolative discipline. Just as a science would plot its experimental results in a graph that would, if extended, act as a guide to future behaviors, so "History is to the future as the observed results of an experiment are to the plotted graph."54 The historian then had the task of plotting a curve "beyond the last certain point to see where it will lead." Banham's talk traced the major trends in architectural thought since World War II, operating on the assumption that "trends in architecture follow the strongest available influence that can fill the vacuum of architectural theory. History filled the gap in the early 50s, imitating Corb took over for some after that, others turned to Detroit styling and appliance affluence, others again have gone to science-fiction, or to its historicist shadow, and at all times, of course, engineering has been a potent source of vacuum-fillers."55

Reaching the current moment of the 1960s, Banham contended that the human sciences had emerged as the strongest forces: first the social studies and environmental studies of the 1950s, then the perception studies of the late fifties; and then, logically moving from exterior to interior, the study of "how the human being works inside": "stimulus, involuntary response, neural and cerebral activity... organism and the environment."⁵⁶ In this regard, it was the new biology, in line to overhaul physics and the entire study of man, that was poised to act directly on architecture. He cited, interestingly enough in the light of our own more recent experiences in bioengineering, the work of Peter Medawar and MacFarlane Burnet, who had won the Nobel Prize in 1960 for their work in immunological reaction—the extreme disturbance of organism/environment—and the theory of clonal selection. The pair had studied the irregularities in the fleeces of hundreds of thousands of Australian sheep, working out the theory of cloning that would eventually produce Dolly in our own time, tracing fleece mosaics to somatic mutations caused by cell reproduction damage.

Banham's conclusion: "Either British and world architects will join the intellectual adventure of Human Science and transform architecture, or it will fail to make the imaginative leap, and turn introspective again."⁵⁷ His one codicil, surprising from a critic who had seemed ready to relinquish architecture in favor of science, was aesthetic: "the Human Sciences will not become architecture unless a means can be found to express them as surely as the forms of the International Style expressed the mechanistic inspiration of its Masters in the 1920s."⁵⁸

Program, Science, and History

To deepen understanding of the conflict he saw between form and technology, Banham next introduced a series of inquiries under the title "Architecture after 1960" as a guest editor for the *Architectural Review*.⁵⁹ Printed on bright yellow paper with red accents and bold typography, these articles were launched by his now celebrated article "Stocktaking," with its parallel discussion of "Tradition" and "Design" and its obvious, design-friendly conclusion. This was followed by a group of essays on "The Science Side," by experts on weapons systems, computers, and the

human sciences. The series continued with a symposium of architects chaired by Banham on "The Future of Universal Man," that paradigm of the traditional architectural subject. The inquiry ended with Banham's double bill on "History under Revision": a questionnaire on "Masterpieces of the Modern Movement" and a more personal critique of Pevsner in "History and Psychiatry," in which the master was put on the couch by the pupil. And to demonstrate fairness, Banham allowed the old guard back to reply, still on yellow paper, in a dyspeptic sequence of observations by the editors of the Architectural Review: J. M Richards, Hugh Casson, Hubert de Cronin Hastings, and Pevsner. Needless to say, Banham had the last word, adding marginal notes where he disagreed with the editors, as well as a final conclusion. His message throughout the series was clear: "Functionalism with a capital 'F'" was dead, long live functionalism, with a small "f," finally-as long promised by modernism—with a basis in real science.

Banham, as he made clear at the outset, was also replying to his immediate rival in historical criticism, John Summerson, who had proposed that the only authentic source of unity in modern architecture would be found in the program. It was precisely this issue of the program, and how it could be framed, that interested Banham. Unlike Summerson, who expressed skepticism that any revision of the form-function dichotomy endemic to modernism could be overcome. Banham felt that with the correct inputs-from science, technology, sociology, and the like-the program might be made pivotal once more. Further, again counter to Summerson's belief that there was no possibility of finding an architectural language to express any new programmatic aims, Banham advanced his theory of the image, joined to a hope that aesthetics might be once and for all subjected to science as a way of subsuming all relationships, including "form and function," within a broadly defined view of a new theory of the program. As he wrote of the Smithsons' school at Hunstanton, "This is not

merely a surface aesthetic of untrimmed edges and exposed surfaces, but a radical philosophy reaching back to the first conception of the building."⁶⁰

Using the double-column comparative technique introduced by Rowe in "Palladio-Le Corbusier," Banham begins his own first contribution to the series "Architecture after 1960":

Tradition means, not monumental Queen Anne, but the stock of general knowledge (including general scientific knowledge) which specialists assume as the ground of present practice and future progress. Technology represents its converse, the method of exploring, by means of the instrument of science, a potential which may at any moment make nonsense of all existing general knowledge, and so of the ideas founded on it, even "basic" ideas like house, city, building. Philosophically it could be argued that all ideas, traditional or otherwise, are contemporaneous, since they have to be invented anew for each individual, but the practical issue is not thereby invalidated. For the first time in history, the world of what is is suddenly torn by the discovery of what could be, is no longer dependent on what was.⁶¹

In this ascription, architecture is no longer a question of "form and function," but seriously "torn between tradition and technology," and the architect is forced to respond to the three not entirely balanced cultural influences of science, the profession, and history. Thus, in proposition after counterproposition, Banham attempts to investigate the implications of architecture, understood as "the professional activity of a body of men" and "as a service to human societies." The first might be defined only in terms of the history of the profession and the specific roles of those defined as architects; the second, by contrast, could be defined only as "the provision of fit environments for human activities." The former would inevitably be confined by its definition to the design and construction of single buildings, while the latter would necessarily extend to the design of entire regions.⁶²

Under the heading "Tradition," Banham traces the history of what he calls the failed "revolution" of the early twentieth century: the reaction toward "architectural" values triggered by the perceived overemphasis on sociology and technology, the demand to "get back to architecture," and the subsequent interest in a return to proportional systems, from the "Vitruvian Man" explicated by Wittkower to its newest iteration in Le Corbusier's "Modulor."63 Axiality, Palladianism, and a fascination with Italian neoformalists, led by Luigi Moretti, characterized this enthusiasm for the classical principles held by architects as diverse as Gropius, Johnson, and Mies van der Rohe. Banham points to the influence of Wittkower, Rowe, and Bruno Zevi, and the dynamic teaching of Vincent Scully at Yale, as adding "a richness to the traditions of operational lore that has not been there since the deaths of Soane and Schinkel." Mies, who formerly would be analyzed in technological terms, would now be seen as an heir to the tradition of German neoclassicism.⁶⁴ This return to history was accompanied by a more local historicism known in Scandinavia as the "new empiricism" and in Italy as "neoliberty," both movements that invested value in local materials and specialized in "not putting up buildings that [the average citizen] has not seen before." All these trends toward a revisionist history and away from functionalism Banham tags as "Formalist"; rather than producing his desired "Architecture Autre," these trends simply reduplicated new shapes. Against an earlier image of a "smoothly-developing" modernism, Banham poses the image of a dried up pool of talent, with the old "masters" losing their way or retreating-J. J. P. Oud and Mies in isolated withdrawal, Gropius becoming "Dean of the

Formalists," and Le Corbusier building the enigma (to modernist eyes) of Ronchamp.

Banham's most important contribution in this essay lies in his conclusion, an assessment of the idea of history itself as applied to the modern movement, caught, in his terms, between the selective memory of Giedion and the will to total recall of the new historians. This latter attitude Banham blames for the "new historicism" characterized by Pevsner a year later-the "modern movement revivalism" that drew on all the eclectic sources of the early twentieth century; but he also credits it with having stimulated a new and different direction, demonstrated by the Smithsons' school at Hunstanton. In this building, a "realist" version of steel technology had taken its distance from the more abstract treatment of Mies, or the carefully calculated brick bearing walls of Stirling and Gowan's Ham Common flats; a realism more interested in structural limits than in the primitive images of Le Corbusier at the Maisons Jaoul. Only such a renewed interest in the historical basis for science and technology in architecture, Banham argues, might impel architecture out of formalism and historicism altogether, along the lines of the airform houses of John Johanssen.

Banham's second, parallel column under the heading "Technology" offers his assessment of the potential of the total environment, and its scientific ground, as a foundation for another architecture. Banham posits that architecture itself will be so transformed that it will render the contemporary profession both obsolete and unable to comprehend the radical nature of the technological revolution. Thus, though the profession can see that Buckminster Fuller has contributed to structural form with his domes, his more fundamental research into "the shelterneeds of mankind" is dismissed. Even the formulation "a house as a machine for living in" makes the mistake of presupposing "house" in such a way that, for example, a caravan is seen as a substandard house, rather than the house being seen as a substandard caravan. Instead of the fetishization of technology, as in Le Corbusier's use of the cooling tower motif for the parliament house at Chandigarh, Banham argues for the logic that lies behind the automobile, the experiments in prefabrication by Jean Prouvé and Coulon and Schein, as potential innovations that should work to create a new condition of design.

Thus the next set of articles that Banham commissioned, under the title "The Science Side: Weapons Systems, Computers, Human Science," were the first step in setting out a new theory of modern architecture based on knowledge rather than architectural precedent, whether modernist or traditional.⁶⁵ Toward this end, A. C. Brothers of General Electric outlined the approach to weapons systems developed by English Electric; M. E. Drummond of IBM sketched the emerging fields of operations research, systems simulations, linear programming, and queuing theory; and the future head of the Bartlett School of Architecture, Richard Llewelyn-Davies, wrote of the potential to mathematicize social activities.

Banham's comments in response to the three articles are critical throughout. Drummond begins by outlining the contributions that computing might make to aspects of architectural planning in four areas: operations research, systems simulation, linear programming, and queuing theory. But, he cautions, computers could add little to the aesthetic appearance of a building: "They deal in cold hard facts. They have no aesthetic sense whatsoever. Furthermore, they have no imagination. So, although I feel they may be used as aids to architecture, it is still for the human being to create that which is beautiful."⁶⁶ Banham, however, disputed this traditional separation between "mathematics" and "art" as simply replicating the old form/function divide, "not only that mathematics is part of the traditional equipment of the architect, but that aesthetics and other aspects of human psychology are no longer mysteries necessarily to be set up against 'cold hard facts.'" $^{\rm ^{67}}$

While Banham was clearly in favor of borrowing from technology in widespread fields-rocketry as described by Brothers, for example, offered a lesson in "total planning and teamwork"-he was as suspicious of the contemporary architectural fetishism of technology as he was of the modern movement's mystique: "Throughout the present century, architects have made fetishes of technological and scientific concepts out of context and been disappointed by them when they developed according to the processes of technological development, not according to the hopes of architects."68 He concludes, with self-conscious irony, against his own enthusiasms: "A generation ago, it was 'The Machine' that let architects down-tomorrow or the day after it will be 'The Computer,' or Cybernetics or Topology."69 Likewise, Banham responds to Drummond, electronic computing "can stand as an example of a topic on which the profession as a whole has been eager to gulp down visionary general articles of a philosophical nature, without scrutinizing either this useful tool, or their own mathematical needs to see just how far computers and architecture have anything to say to one another."⁷⁰ Giving the example of Charles Eames, who had spoken at the RIBA in 1959 on the "mental techniques associated with computers" important for architecture, Banham calls for a more analytical approach, examining how computers might be used, and "how far."

Banham is more generous toward his future professor at the Bartlett, claiming that the article by Llewelyn-Davies of the Nuffield Foundation had opened the way to the analysis of supposedly "soft" social and psychological facts: "*Psychological matters* can be assigned *numerical values*—and statistical techniques make it increasingly feasible to quantify them—they become susceptible to mathematical manipulation. . . . An increasing proportion of the most jealously-guarded 'professional secrets' of architecture are already quantifiable."⁷¹ Banham interprets this as signifying that finally the gap between the unquantifiable and the quantifiable had narrowed so that all aspects of the architectural program might be assigned mathematical values. He supports this theory in his side-by-side comparison of architectural tradition and technological "progress" (tradition lost the race), and by taking on the problematic question of the historical languages of modernism in his article "History and Psychiatry."

In response to Pevsner's irritation that, throughout the series, "No architect really stood up to say that he is concerned with visual values (i.e. aesthetics) and that, if a building fails visually, we are not interested in it,"72 Banham tartly answers: "No architect stood up to say that he was concerned with visual values because visual values are only one of six (ten? fifty?) equally important values of design." And to Pevsner's fear of Banham's scientific program that "you can have 'non-architecture' that way before you know where you are," Banham rehearses his notion of a "scientific aesthetic." Admitting that "Certainly a fully scientific aesthetic is impossible now-but it is a thousand-percent more possible than it was thirty years ago," he explains, "By a scientific aesthetic, I meant one that uses, as the basis and guide to design, observations (made according to the normal laws of scientific evidence) of the actual effect of certain colours, forms, symbols, spaces, lighting levels, acoustic qualities, textures, perspective effects (in isolation or in total 'gestalts') on human viewers."73 In sum, this 1960 series seemed to support Banham's conclusion to Theory and Design, published in the same year: "It may well be that what we have hitherto understood as architecture, and what we are beginning to understand of technology are incompatible disciplines."74

This emergence of a new sensibility to the architectural program considered in its broadest terms recalls Banham and John Summerson's optimism in the late 1950s that a closer attention to science—whether of perception, information, or technology would in the end lead to a fundamental reconception of modern movement functionalism, not in order to free architecture from observance of function, but rather to cast functionalism in a vastly expanded field—one that included, from Banham's point of view, topology, perception, biology, genetics, information theory, and technology of all kinds.

"Une Architecture Autre"

Banham had mentioned "clip-on components" for the prefabricated service rooms of a house in his 1960 "Stocktaking," but it was not until five years later that he developed a complete theory of "clip-on architecture" in an article for Design Quarterly, reprinted in the same year to introduce a special issue of Architectural Design largely devoted to the Archigram group.⁷⁵ Here he traces the genealogy of "clip-on," from the idea of "endlessness" with regard to standardization and, according to Llewelyn-Davies, from Mies to the notion of a "cell with services" introduced by the Smithsons in their plastic House of the Future of 1955, as well as by Ionel Schein in France and Monsanto in the United States. The concept of the house as a mass-produced product, mass-marketed like a $Detroit \, car \, but \, put together \, on \, site \, with \, prefabricated \, components,$ had already inspired Banham to sketch an article on "Clip-on Philosophy" in 1961. And Cedric Price's Fun Palace, conceived for Joan Littlewood and interpreted by Price as a "giant neofuturist machine," ran very close to the programmatic revolution for which Banham was calling in 1960: a giant "Anti-building" seen as a "zone of total probability, in which the possibility of participating in practically everything could be caused to exist."76 Admittedly, Archigram had reversed the idea of clip-on by adopting that of "plug-in," but Banham was ready to fold this concept into his theory: "too much should not be made of this distinction between extreme forms of the two concepts: technically they are

often intimately confused in the same project, and the aesthetic tradition overruns niceties of mechanical discrimination."77 In thus returning to an "aesthetic tradition," Banham reveals his real agenda with regard to "une architecture autre": it is a call for an architecture that technologically overcomes all previous architectures, to possess an expressive form.⁷⁸ Against the way in which the "architecture of the establishment" had adopted prefabrication-"the picturesque prefabrication techniques of the tile-hung schools of the CLASP system" (a prefabricated system for building schools adopted by a consortium of local authorities in the 1960s)-he was equally opposed to the theories of "cyberneticists and O and R men" who predicted that "a computerized city might look like anything or nothing." For this reason Banham was enthusiastic about Archigram's Plug-in City, explaining "most of us want [a computerized city] to look like something, we don't want form to follow function into oblivion."79

For Banham, Archigram's projects—he characterized them as "Zoom City," "Computer City," "Off-the-Peg City," "Completely Expendable City," and "Plug-in City"—were important as much for the technology on which they were predicated as for their aesthetic qualities: "*Archigram* can't tell you for certain whether Plug-in City can be made to work, but it can tell you what it might look like." Whether their proposals are acceptable to technicians or dismissed as pop frivolity, they offer important *formal* lessons. Banham thus traces a movement from propositions about the contribution of technology to 1950s aesthetics to Archigram, in whose projects "aesthetics [offer] to give technology its marching orders."⁸⁰ As he added later: "Archigram is short on theory, long on draughtsmanship and craftsmanship. They're in the image business and they have been blessed with the power to create some of the most compelling images of our time."⁸¹

In this apparently dismissive characterization of Archigram as an "image business," Banham was returning to a theory developed around the mid-1950s: the notion of the "image" first posed by Ernst Gombrich in the 1950s and adopted by Banham in his characterization of brutalism. In his 1955 article "The New Brutalism," Banham had used the term "image" to escape from classical aesthetics and to refer to something that, while not conforming to traditional canons of judgment, was nevertheless "visually valuable," requiring "that the building should be an immediately apprehensible visual entity, and that the form grasped by the eye should be confirmed by experience of the building in use." For Banham, this "imageability" meant that the building in some way was "conceptual," more an idea of the relation of form to function than a reality, and without any requirement that the building be either classically formal or more abstractly topological. Whether "image" referred to a Jackson Pollock or a Cadillac, it was "something which is visually valuable, but not necessarily by the standards of classical aesthetics"; paraphrasing Thomas Aquinas, Banham further defines an "image" as "that which seen, affects the emotions."82

This implies that a building does not need to be "formal" in traditional terms; it could also be *aformal* and still be conceptual.⁸³ Thus attacking what he calls "routine Palladians" as well as routine functionalists, Banham cites the Smithsons' Golden Lane project as an example that "created a coherent visual image by non-formal means" with its visible circulation, identifiable units of habitation, and the presence of human beings as part of the total image, which was represented in perspectives with people collaged so that "the human presence almost overwhelmed the architecture."⁸⁴ In Golden Lane, as at Sheffield University, "aformalism becomes as positive a force in its composition as it does in a painting by Burri or Pollock."⁸⁵ This effect was a result of the Smithsons' general attitude toward composition, which they approached not in traditional formal terms, but with apparently casual informality: this was a compositional approach based on "an

intuitive sense of topology" rather than on elementary rule-andcompass geometry. Banham concludes that the presence of topology over geometry is what marked the inception of "une autre architecture," another architecture, which displayed its qualities through the characteristics of penetration, circulation, the relations between inside and outside, and above all, the surface of apperception, which finally gave the image its force and substance: thus, beauty and geometry were supplanted by image and topology.⁸⁶ Image, for Banham, evidently related to what he was to claim in 1960 as the only aesthetic "teachable" along scientific lines: "No theory of aesthetics (except possibly Picturesque) that could be taught in schools, takes any cognizance of the memoryfactor in seeing."⁸⁷

No more than a year after the publication of "The New Brutalism," Banham, evidently straining to find an appropriate object for his image-theory in the Hunstanton School, found even the Smithsons wanting in their response to his aesthetic conditions. Reviewing the group displays in the "This Is Tomorrow" exhibition at the Whitechapel Art Gallery, Banham judged the "Patio and Pavilion" designed by the Smithsons, Nigel Henderson, and Eduardo Paolozzi-a collection of objects in a shed within a courtyard that, in the Smithsons' words, represented "the fundamental necessities of the human habitat in a series of symbols"-to be "the New Brutalists at their most submissive to traditional values . . . in an exalted sense, a confirmation of accepted values and symbols."88 The installation by John Voelcker, Richard Hamilton, and John McHale, on the other hand, seemed more "Brutalist" in character than the brutalists, as the artists "employed optical illusions, scale reversions, oblique structures and fragmented images to disrupt stock responses, and put the viewer back on a tabula rasa of individual responsibility for his own atomized sensory awareness of images of only local and

contemporary significance."⁸⁹ Ultimately, the authenticity of the movement lay in brutalism's refusal of abstract concepts and its use of "concrete images—images that can carry the mass of tradition and association, or the energy of novelty and technology, but resist classification by the geometrical disciplines by which most other exhibits were dominated."⁹⁰ Banham's image, then, was not only a passive symbol of everyday life or technological desire, but an active participant in the viewer's sensory perception—using all the techniques of modernist disruption, of shock and displacement, to embed its effects in experience.

Such a theory of the image, then, begins to deepen our own interpretation of what Archigram itself wanted, beyond the overtly brilliant subterfuges of advertising techniques, pop and op art, collage and montage, super graphics, and the like that rendered the actual images of Archigram so seductive and arresting. For to see an underlying commitment to topology and to the image as a confirmation of synthetic experience was to begin the process of building, out of Archigram, a "program" for architecture that went beyond its surface effects. It was in this sense, at least for Banham in 1965, and before his retreat into more conventional architectural paradigms of the "well-tempered environment," that Archigram was to provide Summerson's "missing language."

Indeed, of all those interrogating "une architecture autre" in the 1960s, the Archigram group, under the cover of what seemed to be irreverent and harmless play, had launched the most fundamental critique of the traditional architectural program. The tone was set by the first issue of the magazine *Archigram*, in May 1961, consisting of a single page with a foldout, in which David Greene polemically substituted for the "poetry of bricks" a poetry of "countdown, orbital helmets, discord of mechanical body transportation and leg walking." Eight issues followed, from 1963 to 1970, developing themes that embraced issues of expendability and consumerism at the broadest scale. In the "Living City" exhibit of 1963 at the Institute of Contemporary Arts and in its projects for Plug-in City (Peter Cook, 1964), Computer City (Dennis Crompton 1964), Underwater City, and Moving Cities (Ron Herron, 1964), Archigram explored all of the potentials for technology and social engineering to reshape the environment. Inflatables, infrastructures, pods, blobs, blebs, globs, and gloops were proposed as the engines of a culture dedicated to nomadism, social emancipation, endless exchange, interactive response systems, and, following the lead of Cedric Price, pleasure, fun, and comfort on the material and psychological level, all designed with witty technological poetics to place the total synthetic environment—human, psychological, ecological, and technological—firmly on the agenda.

The destabilizing power of these images and their evident relationship to a tradition, identified by Manfredo Tafuri as that of "Duchamp," was clear; but so was their equal commitment to technology, new and as yet uninvented, and its potential for supporting a new society, also yet to be invented. In their ironic stance toward traditional modernism and their fundamental critique of its social, psychological, and technological failings, these utopian images seemed to be dedicated to extending modernist principles to their extreme (and thereby ideal) limits. At this point, the image of science-fiction utopia joined the program of total design imagined by those who, like Tomás Maldonado at Ulm, believed that an entirely new version of the traditional Gesamtkunstwerk was demanded by the mass global society's complex environmental, social, and technological conditions. Here, the "psychedelic" aspirations of the utopian left met, almost seamlessly, the systematic cybernetics of the rational center.⁹¹

The momentary alliance between Archigram and Banham seems, however, to offer more than a historical antecedent to contemporary experiments in virtual architecture and global visions. As Mark Wigley has pointed out, Archigram was more than a "sci-fi" and pop blip on the screen of architectural history; it was embedded in the very processes of architectural practice, imaginary and real.92 Banham himself realized this in his systematic exploration of the conditions demanded by an "autre" architecture, The Architecture of the Well-Tempered Environment, published in 1969. In his consideration of the newly constructed Queen Elizabeth Hall at the South Bank Centre in London (1967), he noted the conjunction of two of the major forces on design in the early sixties: Corbusian exposed concrete and the "plug-in" aesthetic of Archigram. While most commentators focused on the brutalist features of the building. Banham notes the contributions of Ron Herron, Warren Chalk, and Dennis Crompton to the design team: "In truth one could say that the Corbusian and Plug-in elements are manifest in one and the same thing, the silhouette the buildings derive from the external disposition of the main service ducts."93 In the "romantic" silhouette of the exterior, and the concrete-enclosed air ducts that circulate on the outside of the building's volumes, Banham saw the coming together of the two main themes he had introduced in "The New Brutalism": the neopicturesque "image" that relied as much on the presence of a moving observer as it did on composition, and the technological innovations of an "autre" architecture. In this way, Banham's insistence on the role of aesthetics-of the viewer and in experience-in the promulgation of a new architecture invoked the possibility of reconceiving the notion of program in a way that might occlude the fatal modernist gap between form and function, and incorporate environmental concerns, technology, and formal invention as integral to a single discourse.

The Architecture of the Well-Tempered Environment represented a seminal stage in Banham's search for an "autre" history for an "autre" architecture. In an opening apologia, which he recognized would be entirely unwarranted "in a world more humanely disposed, and more conscious of where the prime human responsibilities of architects lie," he castigates a vision of architectural history that had divided its object of study between structures and mechanical services, privileging the former over the latter. Such a division, he argues, makes "no sense in terms of the way buildings are used and paid for by the human race."94 At the end of his ground-breaking survey of the evolution of mechanical services and their use (or misuse) in some of the iconic buildings of the nineteenth and twentieth centuries. Banham observes that, of contemporary designers, only Buckminster Fuller and the members of Archigram had exhibited a "willingness to abandon the reassurances and psychological supports of monumental structure," citing the "threat" launched in Archigram 7 "that 'there may be no buildings at all in Archigram 8.""95

Beyond Architecture: Banham in LA

Historical monograph? Can such an old-world, academic, and precedent-laden concept claim to embrace so unprecedented a human phenomenon as this city of Our Lady Queen of the Angels of Porciuncula?—otherwise known as Internal Combustion City, Surfurbia, Smogville, Aerospace City, Systems Land, the Dream-factory of the Western world.

-Reyner Banham, *Los Angeles: The Architecture of Four Ecologies*

If "The New Brutalism" and his study of the "well-tempered environment" had begun Banham's search for a history of modernism that would serve the development of another architecture for the late twentieth century, it was his experience of Los Angeles between 1965 and 1971 that encouraged Banham to expand the narrow notion of "environment" as a single building into the wider frame of ecology. Los Angeles, made up of "instant architecture in an instant landscape,"⁹⁶ was a city that knew very little about "history"-especially the history of its architecture-and seemed to exist quite well without it. The unique and "extraordinary mixture of geography, climate, economics, demography, mechanics and culture" that composed Los Angeles prompted Banham to forge an entirely new kind of architectural history, one that would take architecture as equal to, if not a secondary response to, the ecological conditions of urban settlement. Further, this new history would understand "architecture" as implying the widest possible field of inquiry-from the popular restaurant and the dingbat apartment to the work of individual name architects. all set in a context that itself was taken to be "architectural" in its broadest definition. This was to be a history that went beyond the "local" histories of Pevsner in his "Buildings of England" series, or even that urban-architectural history developed by Summerson in his Georgian London. For Banham, the promise of scientific functionalism led inevitably to a wider program that did not simply embrace the demands of a client or translate the zeitgeist of the moment into form, but took into account the broadest set of urban geographical conditions.

Constructed from a series of radio talks for the BBC Third Programme in the summer of 1968, the book *Los Angeles: The Architecture of Four Ecologies* sketched a potential for architectural history to join with historical geography in order to explore the full implications of "ecology," a word then considered radical in art historical circles. Reviewers, ranging from those who found the very subject of Los Angeles beneath the historian's interest to those who found Banham's enthusiasm overplayed in the wake of the social turmoil of the 1960s, failed to note the more general implications of the work's scope. The book was commissioned as part of a series entitled "The Architect and Society" and edited by the British historians John Fleming and Hugh Honor (a series that included James Ackerman's elegant monographic essay on Palladio among others). Nevertheless, Banham's book certainly seemed an anomaly in the field of architectural history. Rather than a survey of the great buildings of the city-already accomplished, as Banham noted, by David Gebhard and Robert Winter⁹⁷—the book was first and foremost intended to take a new approach by examining the whole fabric and structure of an urban region. In this attempt, Banham developed an entirely radical view of urban architecture, one that has had a major impact on the discipline of architectural history. Joining architecture to the idea of its ecology, the title immediately announces Banham's intention to pose the interrelated questions: What has architecture to do with ecology? What might be an ecology of architecture? And, even more important, what would be the nature of an architecture considered in relation to its ecology?

Taken together, Banham's answers to these three questions provided a road map for the study of urban architecture not just in its geographical, social, and historical context—this was already a common practice among the social historians of architecture in the late 1960s—but as an active and ever-changing palimpsest of the new global metropolis. Not incidentally, they also entirely redefined the architecture that scholars were used to studying, for Banham embraced all forms of human structure, from the freeway to the hotdog stand, and a plurality of forms of expression not simply confined to the aesthetic codes of high architecture. Here, of course, lay one of the problems for his early reviewers: as a critic, Banham had established himself as an apologist for pop art and pop culture, a reputation that, together with his evident fascination with technological innovation and change, made it all too easy for the book to be seen as a pop history of Los Angeles. One reviewer even bestowed the title "Schlockology" on the book.⁹⁸

The very inclusion of traditionally "nonarchitectural" structures-including even surfboards-inevitably obscured the real seriousness of Banham's intent to destabilize the entire field of architectural history by treating a subject, Los Angeles, that hardly any serious critic took seriously. But on this he was explicit from the outset. Answering his own question as to whether the city was a fit object for a "historical monograph," he wrote: "The city has a comprehensible, even consistent, quality to its built form, unified enough to rank as a fit subject for a historical monograph."99 Hence his programmatic intent to insert the polymorphous architectures of designer houses, hamburger stands, freeway structures, and civil engineering into a "comprehensible unity" that would find its place within a total context—the whole fabric and geographic structure of the region. In this attempt to take on a whole urban region, Banham was forced by the special conditions of Los Angeles to develop an entirely radical view of urban architecture, and one that has had a major impact on the discipline of architectural history over the last thirty years.

Indeed, Los Angeles turned out to be exactly the vehicle needed to blow up what Banham had earlier called "trad" history, precisely because it defied the "trad" city as a city, and the "trad" place of architecture on the streets and squares of the "trad" city; precisely because Los Angeles was a city where the structure of the regional space was more important than individual grids or fabric; precisely because of its semi-self-conscious "pop" culture; precisely, finally, because it represented to "trad" historians everything a city should *not* be, it was possible to write the kind of history of it that was everything a history of architecture should *not* be.¹⁰⁰ Here it is important to approach the development of Banham's thought as a *historian* rather than as the "journalist" assumed by his reviewers, as he encountered Los Angeles, that

apparently most unhistorical of cities, and to explore the effects of his complex response on the history of architecture and of cities.

It was in the summer of 1968—following radio programs dealing with the French student revolt, the "revolution" at Hornsey College of Art, the Velvet Underground's album *White Light*, *White Heat*, the showing of Jean-Luc Godard's *Weekend*, the assassination of Robert Kennedy, the ongoing war in Vietnam, and the Warsaw Pact invasion of Prague—that listeners to the British Broadcasting Corporation's Third Programme, the channel for intellectual discussion and cultural commentary, were treated to the decidedly better news of Reyner Banham's visit to Los Angeles in four witty talks. As published in the BBC's house organ, *The Listener*, between August 22 and September 12, they were titled respectively "Encounter with Sunset Boulevard," "Roadscape with Rusting Rails," "Beverly Hills, Too, Is a Ghetto," and "The Art of Doing Your Thing."¹⁰¹

Banham began by recounting his perplexity at the layout of the city by telling the story of his journey to Los Angeles by bus, and his mistake in assuming the downtown bus terminal would be "closer" to Sunset Boulevard and his hotel in Westwood than the station at Santa Monica. Sunset, he found, was one of those arteries that traverse the side of the Los Angeles River valley from downtown to the sea. The point of the story, it seemed, was to demonstrate to himself as much as to his audience the wonder of the rooted, Norfolk-reared, London-based, nondriving Banham feeling "at home in Los Angeles." And even more curiously, he argued that, indeed, London and Los Angeles had a lot in common, each a conglomeration of small villages, spread out in endless tracts of single-family houses, despite their vast apparent differences in terms of car travel, freeways, climate, and scale. For Banham, the structural and topographical similarities were striking.

The second talk, "Roadscape with Rusting Rails," picked up on this theme to explore the infrastructural formation of Los Angeles, and its basis not so much in freeways, as the commonplace went, but in the vast and expansive light-rail system built up between the 1860s and 1910, Pacific Electric's interurban network, which gradually, between 1924 and (extraordinarily enough) 1961, formed the backbones of Los Angeles's working and living systems. Yet this fact was merely a preface to what was to enrage critics a couple of years later, Banham's eulogy of the freeway system. This nondriver turned driver out of instant love with a city was exultant at the "automotive experience," waxing eloquent over the drive down Wilshire toward the sea at sunset, and downplaying the city's notorious smogs in comparison to those in London; his proof: "a shirt that looks grubby in London by 3 p.m. can be worn in Los Angeles for two days."¹⁰²

Banham's third talk covered Beverly Hills, an exclusive community self-incorporated specifically to prevent the schools from being invaded by children of other classes and ethnicities, the "most defensive residential suburb in the world," an enclave of unrelieved middle-class single-family dwellings, created to send children to school without the risk of "unsuitable friends." The Listener article was illustrated by a Ralph Crane photo of a typical upper-middle-class family relaxing around the pool. Banham noted the "apparently total indifference to the needs of all communities except one's own that is one of the most continuously unnerving aspects of public life in Los Angeles," "the ugly backside of that free-swinging libertarian ethic that makes so much of Angeleno life irresistibly attractive."103 This would be Banham's didactic method-that of contrast, "for" and "against" balancing each other, more often than not with the "for" on the winning side.

In Banham's account, Beverly Hills was a "self-contained, specialized area," and a "socio" and "functional" "monoculture."

For him it was proof that if you "insist on trying to use LA as if it were a compact European pedestrian city," you become campusbound. Banham admits that he too nearly succumbed to this mentality: "At the University of California in Los Angeles (UCLA) you never stir out of the Rancho San José de Buenos Ayres. You live in digs in Westwood, stroll over to classes, eat in the Faculty Club or Westwood Village restaurants, go to Village bookshops and cinemas. In short you do exactly what we accuse Angelenos of doing, living restricted and parochial lives that never engage the totality of Los Angeles." But Banham was, he claims, saved by the realization that "the amount of distorted and perverted information circulating about Los Angeles in quasi-learned journals about architecture, the arts, planning, social problems and so forth," came not so much "from hasty judgments formed by lightning visitors," but rather "from visitors who may have spent a semester, a year, or even longer, in the city, but have never stirred beyond the groves of academe-eucalypts, jacarandas, bananas-planted in the 1920s on the old Wolfskill ranch that too can be a ghetto."104

In his last radio talk, Banham delivered his judgment on the pop culture of Los Angeles: its "doing your own thing" tradition of artistry, from the motorcycle pictures of Billy Al Bengston in the early 1960s to Von Dutch's painted crash helmets, from the ubiquitous surfboard decoration down in Venice to that monument to do-it-yourself culture, Simon Rodia's Watts Towers. These were "not, as some European critics seem to maintain in any way naive or folksy. Their structure is immensely strong, the decoration of their surfaces resourceful and imaginative."¹⁰⁵ The same was true of contemporary pop artists, like Ed Ruscha: his *26 Gasoline Stations, 34 Parking Lots,* and *Every Building on the Sunset Strip* were all, to Banham's eyes, deadpan statements that were content to "do their own thing," neither judging nor criticizing.

With hindsight, these apparently random radio musings on his recent travels emerge as entirely systematic, for we realize that Banham was carefully building up three of his four final ecologies—the beach, the foothills, and the freeways—as well as beginning to treat the city's alternative architecture, that of "fantasy." Subsequent articles in *Architectural Design* (such as "LA: The Structure behind the Scene")¹⁰⁶ elaborated his take on the transportation network and its process of continual adjustment. By the spring of 1971, the overall plan of *Los Angeles: The Architecture of Four Ecologies* had been set, and its complicated outline developed.

And the structure of the book was indeed complicated—a number of reviewers disparaged its apparent lack of unity, and even suggested reordering the chapters. But Banham's arrangement was in fact a part of his conscious attempt to reshape not only how one looked at a city like Los Angeles—an order forced by the unique form of the city itself—but also how one wrote architectural history in a moment of widening horizons and boundaries, when the very definition of architecture was being challenged and extended to every domain of technological and popular culture, and inserted into a broad urban, social, and of course ecological context. Thus he self-consciously intersected chapters on the "ecologies" of architecture with chapters on the architecture itself, and these again with notes on the history and bibliography of the city.

The book opens with a brief history of the geographical and infrastructural formation of the city, tellingly titled "In the Rear View Mirror," as if one could, as indeed Banham did, glimpse fragments of that not-so-long history while driving the freeways and glancing back(wards) into the rear view of the city. This is followed by four chapters on each of the four "ecologies" of the title: "Surfurbia" (the beach and coastline); "Foothills" (the Santa Monica Mountains); "The Plains of Id" (the great flat central valley); and most important of all, "Autopia" (the freeway system and its correlates). These ecological studies do not form a continuous narrative but are broken in sequence by four parallel chapters on the specific "architectures" of Los Angeles: "the exotic pioneers"; "fantastic" architecture; the work of the distinguished foreign "exiles"; and a homage to the new Los Angeles modernism of the 1950s embodied in the Case Study House movement, in Banham's eyes "The Style that Nearly" but not quite became a true regional genre. These are interrupted by four thematic chapters that step out of the systematic study of ecology and architecture to add notes on the development of the transportation network, the culture of "enclaves" unique to Los Angeles, and a brief consideration of downtown. This last chapter is the most heretical with respect to traditional city guides. Whereas the latter would start with the old center and demonstrate a nostalgic sense of its "loss," in Banham's view a "note" is all that downtown deserves in the context of a city that had become an entire region, and where "downtown" seemed just a blip on a wide screen. Finally, Banham's programmatic conclusion is entitled "An Ecology for Architecture."

Such a complicated, multilayered structure was obviously Banham's attempt to irrevocably break up the normal homogeneity of architectural narratives and urban studies, insistently inserting the one into the other in a kind of montage that works against the narrative flow to instigate pauses for reflection and re-viewing, as if the historian/critic were circling around his objects of study, viewing them through different frames at different scales and from different vantage points.

On one level, this structure was entirely new, one engendered by the special conditions of Los Angeles itself; it was a freeway model of history, looking at the city through movement and as itself in movement. On another level, however, Banham the self-conscious historian of modernism, who had ten years earlier published the first full-length study of architectural theory and design between the wars, was drawing inspiration from many precedents. These included proclamations of modernism that called for the rejection of "high" architecture in favor of structures generated by functional and technological demands; alternative modernist "utopias," from the technotopias of Buckminster Fuller to the contemporary work of the Archigram group in London; appreciations of the consumer society and its modes of representation, exemplified in the discussions and exhibitions of the Independent Group in London, and notably in their "This Is Tomorrow" exhibition of 1956;¹⁰⁷ and scientific prognostications of the future, especially the potential effects of new biological, genetic, and chromosome research. All these paradigms and many more were formative for Banham's radical rewriting of history and theory. But, for the purpose of exemplifying the special character of Los Angeles, two models are particularly significant; one that had a major impact on the narrative form of the book, the other on its "ecological" content. Both, in a way that indicates Banham's polemical intention to criticize and continue the positive tendencies he detected in the first modernisms, were themselves exemplary statements of high modernist positions.

The first model was Le Corbusier's Vers une architecture, a precedent which might at first seem surprising, given Banham's often repeated rejection of what he called academic formalism and his critique of inadequate, modernist functionalism. Banham had already vaunted Le Corbusier's manifesto in *Theory and Design*, calling it "one of the most influential, widely read and least understood of all the architectural writings of the twentieth century."¹⁰⁸ Yet in analyzing the form of *Vers une architecture*, which was assembled out of individual essays from the journal *L'Esprit Nouveau*, he describes it as without "argument in any normal sense of the word": it was made up of "a series of rhetorical or rhapsodical essays on a limited number of themes, assembled side by side in such a way as to give an impression that these themes have some necessary connection." 109

Banham identifies two main themes in his reading of Le Corbusier. The first is what he calls the "academic" approach to architecture—architecture conceived as a formal art derived from Greek and Roman models as taught in the Beaux-Arts schools of the late nineteenth century; the second are what he identifies as "mechanistic" topics—the engineer's aesthetic, ocean liners, aircraft, cars, and the like. These themes, Banham points out, alternated, chapter by chapter, through the book, with the "mechanistic" essays "firmly sandwiched" within the others. Banham further notes the rhetoric of the illustrations, the celebrated facing-page photos that point out comparisons, historical and aesthetic. This analysis, still one of the very best readings of Le Corbusier we have, is revealing in a number of ways.

First, it reveals the underlying mission of Banham's entire career, dedicated to freeing the "mechanistic" from the embrace of the academic. As he writes in the conclusion to Theory and Design, Banham called for "the rediscovery of science as a dynamic force, rather than the humble servant of architecture. The original idea of the early years of the century, of science as an unavoidable directive to progress and development, has been reversed by those who cheer for history, and has been watered down to a limited partnership by the mainstream. Those who have re-explored the twenties and read the Futurists for themselves feel once more the compulsion of science, the need to take a firm grip on it, and to stay with it whatever the consequences."110 We might well imagine that in Los Angeles Banham found the solution to the modernist dream of the ubiquitous automobile, sketched with primitivist formalism by Le Corbusier in his comparison of the sports car with the Parthenon.

Secondly, Banham's description of the narrative structure of *Vers une architecture* can be applied directly to that of his own book Los Angeles, with its interspersed series of essays on two main themes, the ecological and the architectural. Supporting this hypothesis is the layout of the illustrations with its insistent pairing of comparative photographs on facing pages-the beach houses of Malibu from the beach side and from the road side, the Santa Monica Canyon in 1870 and in 1970, the Wayfarer's Chapel by Frank Lloyd Wright of 1949 juxtaposed against the oil rigs off Long Beach. In each case, "before" is contrasted with "after"; the architecturally designed is posed against technological form; undeveloped landscape against developed; pop against high culture, and so on, in visual comparisons that remind us immediately of Le Corbusier's temples, cars, engineering structures, and grain elevators. In this sense we might conclude that Los Angeles was Banham's response to, and triumph over, what he regarded as the central manifesto of 1920s modernism, and we would be reinforced in this conclusion by his sly acknowledgment to Corbusier in the last chapter, entitled not "Towards a New Architecture" but "Towards a Drive-In Bibliography"-which we might decipher as "(Driving) Towards a New Architecture."

The second major influence on *Los Angeles*, this time on its content, was perhaps more substantial and arose from Banham's discovery of a work by Anton Wagner, a German urban geographer who had chosen Los Angeles as a thesis topic between 1928 and 1933. Wagner completed his research in Santa Monica, and in 1935 published his monumental "geographical" study with the title *Los Angeles: Werden, Leben und Gestalt der Zweimillionstadt in Südkalifornien* (Los Angeles: The development, life, and form of the city of two million in southern California).¹¹¹ The subtitle of Wagner's book was calculated to evoke comparisons with that other paradigmatic modern metropolis, Berlin. Noting that Los Angeles is a "city which far exceeds Berlin in expansiveness,"¹¹² Wagner superimposes the plans of the two metropolises over each other to prove the point.

Wagner's research was exhaustive. He conducted numerous interviews of all types of inhabitants, and his understanding of the city was accomplished by a rigorous survey carried out, despite the distances involved, mostly on foot (unlike Banham's), as he explored and mapped its "lived space and access paths" (*Lebensraum*). At the same time (like Banham), he took his own photos: "I captured the appearance of the cities and quarters in numerous photographs which still bring to mind the details of the cityscape, despite increasing spatial and temporal distance."¹¹³

Interested in the play of "forces of nature" and "activities of man"-the need to study all the geographical factors and the biosphere of the region-and the urban landscape ("die städtische Landschaft"), Wagner starts the book with a detailed study of the city's geological history and structure-its "geological dynamism," as he calls it. Indeed, "dynamism" is the watchword of Los Angeles for this European observer: "A quickly evolving landscape, and a city whose formation proceeded faster than most normal urban development, thereby encompassing much larger spatial units, requires an emphasis of dramatic occurrences, movement and forces. Especially for the current form of Los Angeles, becoming is more characteristic than being. This determines the method of representation."114 He concludes: "For Los Angeles . . . tradition means movement."¹¹⁵ Present during the major Long Beach earthquake of March 10, 1933, Wagner was well aware of the kinds of movement to which Los Angeles is susceptible, and characterized the building of the city as a struggle between nature and man: "the life of so artificial an urban organism . . . depends on how much it is secured against catastrophes."116

Beyond this totalizing and systematic yet dynamic and processual geological "history" of the city, Wagner traces the successive development booms of Los Angeles and the growth of its communities in meticulous detail, from the establishment of the first pueblos and ranchos, which he maps, to the development of the rail transportation system, again mapped, to the aspect of every quarter in the 1930s. These maps, it should be noted, were the basis for many of those elegantly transcribed by Mary Banham for her husband's later book, as well as forming the basis of Banham's own perceptive history of transportation networks and land-ownership patterns.

Like Banham's some thirty years later, Wagner's physical survey of the "cityscape" omits nothing, however squalid; and no "architecture," however tumble-down or populist, escapes his gaze and camera. He revels in the studio lots or "stage-set cities" (Kulissenstädte); he speaks of the "cultural landscape" of the oil fields with their "drilling tower forests"; he examines the stylistic and plan typologies of every kind of housing, from the modest bungalow to the apartment house and Beverly Hills mansion; above all, he remarks on the eternal billboards—"a major aspect that dominates parts of the frontal view, or elevation [Aufriss]: the business advertisement . . . the billboard that emphasizes the incomplete [das Unfertige] in the landscape"—and takes two pages to describe the physiognomy of the billboard as it competes for view amid the "inelegant posts and wiring of the telephone and electric lines."117 Wagner's final judgment of his epic study is that "It is not only architects, statisticians and economists who should draw lessons from this work of urban geography, but everyone who is a member of an urban community."118

It is easy to see what Banham, who called this unique work "the only comprehensive review of Los Angeles as a built environment,"¹¹⁹ drew from it: the idea of a city whose history is firmly rooted in its geology and geography—a rooting that is itself as mobile as the ecological circumstances of its site; the idea of a city that is important as much for change as for permanence; the idea of the architecture of the city as less important than the totality of its constructions; the notion, finally, of taking the city as it is as opposed to any utopian, idealistic, or nostalgic vision of what it might be. As he recapitulates in the article "LA: The Structure behind the Scene," "Los Angeles represents processes of continuous adjustment, processes of apportionment of land and resources. . . . As far as Los Angeles is concerned, the land and the uses of the land are . . . the things that need to be talked about first."¹²⁰ Banham's history of the city's development, of its transportation network, of the transformation of the city from ranchos and pueblos into a single sprawling metropolis takes its cue at every moment from Wagner. Finally, Wagner's understanding that it is "movement" of every kind that characterizes Los Angeles is echoed in Banham's own sense that if there is a "local language" to be identified in Los Angeles, it is a language of "movement."¹²¹

In the light of such precedents, what appeared to critics as Banham's apparently light-hearted "drive-by" approach to Los Angeles emerges as a tightly constructed text, part manifesto, part new urban geography, that, joined together, form an entirely unique kind of "history." Answering Banham's own call for a posttechnological, postacademic, even postarchitectural discourse, the book resolutely sets out to engage the city as it is, refusing to lower its gaze in the face of sprawl, aesthetic chaos, or consumerist display. Rather than calling for a "new architecture," as Le Corbusier had done, Banham's manifesto asks for a new and uncompromising vision, one that might not immediately see what it wants to see, but nevertheless may be rewarded by glimpses of other, equally interesting and satisfying subjects. And, unlike Anton Wagner's call for a totalizing geo-urbanism, Banham's self-fabricated "ecology" provides him with an open framework for heterogeneity in subject matter and observation.

The city of Los Angeles, then, was both vehicle and subject for Banham, and its strange attraction allowed him to forge a new sensibility in his own work, to be fully explored, just over ten years later, in the equally misunderstood work *Scenes in America* Deserta. Like Los Angeles, this book was greeted by reviewers as a "guide," an object in "a desert freak's checklist," but also like Los Angeles, its purpose was more serious and radical.¹²² Treated as a set of personal "visions" of different deserts, it stands as a poetic evocation of landscape to be set beside all its British and American romantic precedents; yet treated, as Banham no doubt intended, as a new kind of environmental history, it is clearly the logical conclusion, the second volume, of a work, that has as its major purpose the complex examination of environmental experience as a whole. And while the "eye of the beholder" that looks in the rear-view mirror or across the Mojave is first and foremost Banham's eye, by extrapolation it stands for a sense of the meaning of objects in space that goes far beyond the architectural, the urban, the regional, to engage the phenomenology of landscape experience itself. The suppressed Pevsnerian "picturesque" that had been transformed into a theory of "image" in the 1950s is in America Deserta combined with the special notion of "ecology" explored in Los Angeles to produce a complex understanding of vision and space, observer and object, that takes the initial standpoint of "The New Brutalism"—"Introduce an observer into any field of forces, influences or communications and that field becomes distorted"123-and transforms it into a principle of ecological history.



Manfredo Tafuri, Teorie e storia dell'architettura (1970), cover

NOTES

INTRODUCTION

- Fredric Jameson, A Singular Modernity: Essay on the Ontology of the Present (London: Verso, 2002), 169. Jameson characterizes Greenberg as "that theoretician who more than any other can be credited as having invented the ideology of modernism full-blown and out of whole cloth" (ibid.).
- Reyner Banham, "The New Brutalism," Architectural Review 118, no. 708 (December 1955): 355.
- 3. Adolf Behne, Der moderne Zweckbau (Munich: Drei Masken Verlag, 1926); Gustav Adolf Platz, Die Baukunst der neuesten Zeit (Berlin: Propyläen Verlag, 1927); Sigfried Giedion, Bauen in Frankreich, Bauen in Eisen, Bauen in Eisenbeton (Leipzig: Klinkhardt & Biermann, 1928); Bruno Taut, Modern Architecture (London: The Studio, 1929); Walter Curt Behrendt, Modern Building: Its Nature, Problems, and Forms (London: Martin Hopkinson, 1937); Henry-Russell Hitchcock, Modern Architecture: Romanticism and Reintegration (New York: Payson and Clarke, 1929); Nikolaus Pevsner, Pioneers of the Modern Movement from William Morris to Walter Gropius (London: Faber and Faber, 1936); Sigfried Giedion, Space, Time and Architecture: The Growth of a New Tradition (Cambridge: Harvard University Press, 1941).
- 4. See the excellent analysis by Panayotis Tournikiotis, *The Historiography of Modern Architecture* (Cambridge: MIT Press, 1999), which must form the basis of any serious study of the works of Pevsner, Zevi, Benevolo, Hitchcock, Collins, and Tafuri. Influenced by the semiotic structuralism of his thesis advisor Françoise Choay, Tournikiotis restricts his analysis to the structural comparison of key texts, deliberately removing any discussion of context or authors, in the belief that "the context . . . and the personalities . . . have nothing to tell us about the nature of the *written discourse per se*" (5–6). The present work, however, studies these relations specifically, understanding the writing of history, whether or not under the guise of objectivity, to form a practice immersed in the theory

1927 and 1953," Architectural Review 118, no. 705 (September 1955): 145–151, and "Ronchamp: Le Corbusier's Chapel and the Crisis of Rationalism," Architectural Review 119, no. 711 (March 1956): 155–161.

- 91. Stirling, "Garches to Jaoul," 145.
- 92. Ibid., 151.
- Colin Rowe, "Chicago Frame," Architectural Review 120, no. 718 (November 1956): 285–289.
- 94. Stirling, "Ronchamp," 155.
- **95.** Ibid., 161. It is interesting in the light of Rowe's influence that Stirling sees Ronchamp as an example of "the initial ideology of the modern movement . . . being mannerized" (ibid.).
- 96. James Stirling, "Thesis for the Liverpool School of Architecture" (1950), 1.
- Colin Rowe, "James Stirling: A Highly Personal and Highly Disjointed Memoir," in Peter Arnell and Ted Bickford, eds., *James Stirling: Buildings and Projects* (New York: Rizzoli, 1984), 15.
- 98. This comparison was also belatedly admitted by Rowe in his reprinting of "The Mathematics of the Ideal Villa" in 1974.
- 99. Rowe, "Addendum 1973."
- 100. Rowe, "James Stirling," 23.

3 FUTURIST MODERNISM: REYNER BANHAM

Preliminary versions of sections of chapter 3 were published as "Toward a Theory of the Architectural Program," *October* 106 (Fall 2003): 59–74; "Still Wired after All These Years?" *Log*, no. 1 (Fall 2003): 59–63; and as part of the introduction to the reprint of Reyner Banham, *Los Angeles: The Architecture of Four Ecologies* (Berkeley and Los Angeles: University of California Press, 2000), xvii–xxxiii.

 Reyner Banham, "A Black Box: The Secret Profession of Architecture," New Statesman and Society (12 October 1990): 22-25. In this article, published two years after his death, Banham came to the conclusion, always implicit in his criticism, that there was indeed a distinction to be drawn between what Le Corbusier had described as the "Engineer's Aesthetic" and "Architecture." The distinction was "between fundamental modes of designing," between Wren and Hawksmoor, for example; and he issued a deeply felt plea to architects to recognize the limits and nature of "architecture" in the Western tradition, in order then to open it to the demands of a more extensive practice toward "a more habitable environment." This last essay by Banham deserves serious scrutiny, as both an admission of defeat in changing "architecture" at all during his polemical career, and an expression of respect for such a tenacious tradition.

- Nikolaus Pevsner, Pioneers of the Modern Movement from William Morris to Walter Gropius (London: Faber and Faber, 1936); 2nd ed. titled Pioneers of Modern Design from William Morris to Walter Gropius (New York: Museum of Modern Art, 1949).
- 3. In tracing Pevsner's relationship with the Architectural Review, I have been helped by the doctoral dissertation of Erdem Erten, "Shaping 'The Second Half Century': The Architectural Review 1947–1971" (PhD diss., History and Theory of Architecture, MIT, 2004). The first part of the thesis is devoted to the Townscape program developed by the editors under Hubert de Cronin Hastings, J. M. Richards, and Nikolaus Pevsner; the second half charts the positions of the Architectural Review with respect to the "humanization" of modern architecture.
- 4. Nikolaus Pevsner, "C20 Picturesque," Architectural Review 115, no. 688 (April 1954): 227–229. Pevsner was replying to the third of three BBC Third Programme talks on "English Art and the Picturesque," broadcast by the art critic Basil Taylor, that indicted the influence of what Taylor called "this imperfect vision" on the last twenty years of English architecture.
- 5. Ibid., 228.
- 6. Ibid., 229.
- 7. Ibid.
- 8. A. I. T. Colquhoun, letter to the editors, Architectural Review 116, no. 691 (July 1954): 2.
- 9. Ibid.
- 10. The pseudonym was used several times by Pevsner in the 1940s, no doubt to disguise the "auteur" nature of the journal in these years; between July and December 1941 alone, five articles, one review, and a letter were signed "Donner," which, of course, means "thunder" in German. One of the more interesting, given later accusations against Pevsner of pro-Nazi sympathies, is a trenchant and unambiguous critique of Hitler's architectural aesthetics for its inhuman uniformity and scale of the buildings, whether modernist, medievalizing, or neoclassical: "With the Nazis, architects as well as painters, it is all a surreptitious gratification of vulgar instincts concealing themselves to secure outward dignity under

a Neo-Classical disguise. Hence these diluted Greek motifs, this over-obvious symbolism, these hackneyed compositions—all dodges to achieve an easy appeal with the masses (and the Führer) and hide the Beast in View." Peter F. R. Donner [pseudonym for Nikolaus Pevsner], "Criticism," *Architectural Review* 90, no. 539 (November 1941): 178.

- 11. The editors' note stated: "These monthly articles are frankly about the aesthetic aspect of architectural design. They are written in the belief that we cannot take the practical basis of modern architecture for granted. They claim . . . there is now room, in criticism, as in actual design, for study of the aesthetic basis that the art of architecture postulates." Editors' note, *Architectural Review* 90, no. 536 (August 1941): 68.
- Peter F. R. Donner [Nikolaus Pevsner], "Criticism," Architectural Review 90, no. 536 (August 1941): 69.
- 13. Ibid., 68.
- 14. Ibid., 69
- 15. Ibid., 70.
- 16. Ibid.
- 17. Ibid.
- 18. Ibid.
- 19. Ibid., 69.
- Peter F. R. Donner [Nikolaus Pevsner], "Criticism," Architectural Review 90, no. 538 (October 1941): 124–126.
- 21. Ibid., 124.
- 22. Ibid., citing Kaufmann's Von Ledoux bis Le Corbusier.
- 23. Ibid., 125.
- 24. Ibid.
- 25. Ibid.
- 26. Ibid.
- 27. Published as Nikolaus Pevsner, "Modern Architecture and the Historian or the Return of Historicism," *Journal of the Royal Institute of British Architects* 68, no. 6 (April 1961): 230–260. The talk had been given at the RIBA on 10 January 1961, and was later adapted for a BBC radio program, broadcast on 11 February 1961, "The Return of Historicism," BBC Third Programme, and printed in Nikolaus

Pevsner, *Pevsner on Art and Architecture: The Radio Talks*, ed. Stephen Games (London: Methuen, 2002), 271–278.

- 28. Pevsner, "Modern Architecture and the Historian," 230.
- 29. Ibid., 234.
- 30. Ibid.
- 31. Ibid., 230.
- 32. Reyner Banham, "Pevsner's Progress," *Times Literary Supplement* (17 February 1978): 191–192. Banham was reviewing David Watkin's *Morality and Architecture*, which had aroused his ire by the gratuitous comparisons of Pevsner to Goebbels, and the inferences Watkin drew from Pevsner's use of the word "totalitarian" in the conclusion of *Pioneers of Modern Design*. Banham is equally blunt in his refutation of Watkin's attempt to apply a rigid definition derived from Karl Popper to the word "historicism": "It has always been perfectly clear what Pevsner means by the word, and it is difficult to find a more convenient label to describe what he is discussing when he uses it, and it nowhere impinges on its other meanings, including those used in describing historiographical techniques" (191).
- 33. Pevsner, "Modern Architecture and the Historian," 238.
- Reyner Banham, "Architecture after 1960," Architectural Review 127, no. 755 (January 1960): 9.
- John Summerson, "The Case for a Theory of Modern Architecture," Journal of the Royal Institute of British Architects 64, no. 8 (June 1957): 307–310.
- 36. Banham, "Architecture after 1960," 9.
- 37. Summerson, "The Case for a Theory," 308.
- **38**. Quoted in ibid., 309.
- 39. Ibid.
- 40. Ibid.
- 41. Ibid.
- 42. Ibid., 310.
- 43. Ibid.
- 44. Banham, "Architecture after 1960," 9.
- Reyner Banham, "Futurism and Modern Architecture," Journal of the Royal Institute of British Architects 64, no. 4 (February 1957): 133.
- 46. Ibid., 129.
- 47. Ibid., 135.

- Reyner Banham, *Theory and Design in the First Machine Age* (London: Architectural Press, 1960).
- 49. Ibid., 220.
- 50. Ibid., 222.
- 51. Ibid., 304.
- 52. Banham, response to Pevsner, "Modern Architecture and the Historian," 238.
- 53. Reyner Banham, "The History of the Immediate Future," Journal of the Royal Institute of British Architects 68, no. 7 (May 1961): 252. The talk was delivered at the RIBA on 7 February 1961, less than a month after Pevsner's talk.
- 54. Banham, "The History of the Immediate Future," 252.
- 55. Ibid., 255.
- 56. Ibid., 256.
- 57. Ibid., 257.
- 58. Ibid.
- 59. The Architectural Review series "Architecture after 1960" included Reyner Banham, "Architecture after 1960," Architectural Review 127, no. 755 (January 1960): 9–10; Reyner Banham, "Stocktaking." 127, no. 756 (February 1960); A. C. Brothers, M. E. Drummond, and R. Llewelyn-Davies, "The Science Side: Weapons Systems, Computers, Human Sciences," 127, no. 757 (March 1960): 188–190; "The Future of Universal Man Symposium with Anthony Cox, Gordon Graham, Lawrence Alloway," 127, no. 758 (April 1960): 253–260; Reyner Banham, ed., "History under Revision," with "Questionnaire, Masterpieces of the Modern Movement," and Reyner Banham, "History and Psychiatry," 127, no. 759 (May 1960): 325–332; "Propositions," with J. M. Richards, Nikolaus Pevsner, Hugh Casson, and H. de C. Hastings, sidebar notes by Banham, 127, no. 760 (June 1960): 381–388.
- Reyner Banham, "School at Hunstanton," Architectural Review 116, no. 693 (August 1954): 153.
- 61. Banham, "Stocktaking," 93. Emphasis his.
- 62. Ibid.
- 63. Ibid., 94.
- 64. Ibid., 95–96.
- 65. Brothers, Drummond, and Llewelyn-Davies, "The Science Side."
- 66. Ibid., 188.

- 67. Banham, editorial comments in ibid., 188.
- 68. Banham, in ibid., 184.
- 69. Banham, in ibid.
- 70. Banham, in ibid., 185–186.
- 71. Banham, in ibid., 188. Banham concluded: "A very large part of the psychophysiological relationship between man and environment is likely to fall to the mathematician, not—as heretofore—the mystic."
- 72. Pevsner, "Propositions," 383.
- 73. Ibid., 386-387.
- 74. Banham, Theory and Design, 329.
- Reyner Banham, "A Clip-on Architecture," Architectural Design 35, no. 11 (November 1965): 534-535.
- 76. Ibid., 535.
- 77. Ibid.
- 78. Banham first used the term "une architecture autre" in his essay "The New Brutalism," Architectural Review 118, no. 708 (December 1955): 361. For a review of the possible sources of the term, see Nigel Whiteley, Reyner Banham: Historian of the Immediate Future (Cambridge: MIT Press, 2002), 118–122.
- 79. Banham, "Clip-on," 535.
- 80. Ibid.
- Reyner Banham, "A Comment from Peter Reyner Banham," in Peter Cook, ed., Archigram (Basel: Birkhäuser, 1972), 5.
- 82. Banham, "The New Brutalism," 358. The best analysis of Banham's image theory in relation to his technological futurism is Jonathan Farnham, "Vero pop per gente d'oggi: Reyner Banham, storia e fantascienza / Pure Pop for Now People: Reyner Banham, Science Fiction and History," *Lotus* 104 (1977): 111–131. Farnham studies Banham's idea of a "history of the immediate future" with respect to the science-fiction novels and comics of the 1950s.
- 83. Banham, "The New Brutalism," 358.
- 84. Ibid., 361.
- 85. Ibid.
- 86. Ibid.

- Reyner Banham, A Critic Writes: Essays by Reyner Banham, selected by Mary Banham, Paul Barker, Sutherland Lyall, and Cedric Price (Berkeley: University of California Press, 1996), 382–383.
- Reyner Banham, "This Is Tomorrow Exhibit," Architectural Review 120, no. 716 (September 1956): 188.
- 89. Ibid.
- 90. Ibid.
- 91. As Manfredo Tafuri noted, these two were in fact soon to come together literally in public presentation: "Their designs conquered a market that had remained closed to the products of Neoliberty; their desecrations, justified by appeals to Duchamp, finally gained international recognition at an exhibition organized by Emilio Ambasz at the Museum of Modern Art in 1972: 'Italy. The New Domestic Landscape.'" Manfredo Tafuri, *History of Italian Architecture*, 1944–1985, trans. Jessica Levine (Cambridge: MIT Press, 1989), 99.
- 92. Mark Wigley in conversation with the author.
- Reyner Banham, The Architecture of the Well-Tempered Environment (London: Architectural Press, 1969), 257.
- 94. Ibid., 11.
- 95. Ibid., 265.
- Reyner Banham, Los Angeles: The Architecture of Four Ecologies (London: Penguin Books, 1971), 21.
- 97. David Gebhard and Robert Winter, A Guide to Architecture in Southern California (Los Angeles: Los Angeles County Museum of Art, 1965). Banham called this work a "model version of the classical type of architectural gazetteer—erudite, accurate, clear, well-mapped, pocket-sized" (Los Angeles, 21).
- Francis Carney, "Schlockology," review of Los Angeles: The Architecture of Four Ecologies, by Reyner Banham, New York Review of Books, 1 June 1972.
- 99. Banham, Los Angeles, 21.
- 100. The consideration of architecture as "trad" or "non-trad" was drawn by Banham in his critique of Sir Basil Spence's rebuilt Coventry Cathedral, in "Coventry Cathedral—Strictly 'Trad, Dad,'" New Statesman 63 (25 May 1962): 768–769. The argument over tradition was taken up by Stanford Anderson in a lecture of 1963 at the Architectural Association, London. See Stanford Anderson, "Architecture

and Tradition that Isn't 'Trad, Dad,'" in Marcus Whiffen, ed., *The History, Theory* and Criticism of Architecture (Cambridge: MIT Press, 1964).

- 101. The four pieces in *The Listener* were Reyner Banham, "Encounter with Sunset Boulevard," *The Listener* 80 (22 August 1968): 235–236; "Roadscape with Rusting Rails" (29 August 1968): 267–268; "Beverly Hills, Too, Is a Chetto" (5 September 1968): 296–298; "The Art of Doing Your Thing" (12 September 1968): 330–331.
- 102. Banham, "Roadscape with Rusting Rails," 268.
- 103. Banham, "Beverly Hills, Too, Is a Ghetto," 296.
- 104. Ibid., 298.
- 105. Banham, "The Art of Doing Your Thing," 331.
- 106. Reyner Banham, "LA: The Structure behind the Scene," Architectural Design 41 (April 1971): 227–230.
- 107. For an account of this exhibition and the pop movement in general, see Lawrence Alloway et al., *Modern Dreams: The Rise and Fall of Pop* (London: Institute of Contemporary Art, 1988).
- 108. Banham, Theory and Design, 220.
- 109. Ibid., 222–223.
- 110. Ibid., 13.
- 111. Anton Wagner, Los Angeles: Werden, Leben und Gestalt de Zweimillionstadt in Südkalifornien (Leipzig: Bibliographisches Institut, 1935). A manuscript translation of this work by Gavriel O. Rosenfeld, entitled Los Angeles: The Development, Life, and Form of the Southern Californian Metropolis, was commissioned by the Getty Research Institute in the History of Art and the Humanities, Los Angeles, 1997. Quotations are from this translation. Wagner, whose uncle had settled in Santa Monica in 1878, had been guided in his search for a topic by his advisor at the University of Leipzig, the urban geographer O. Schneider, who had himself published a work on "Traces of Spanish Colonization in the American Landscape" (Spuren spanischer Kolonisieren in US-amerikanischen Landschaften [Berlin, 1928]).
- Wagner, Los Angeles: The Development, Life, and Form of the Southern California Metropolis, 1.
- 113. Ibid., 7.
- 114. Ibid., 6.
- 115. Ibid., 207.
- 116. Ibid., 166.

- 117. Ibid., 168, 169, 172.
- 118. Ibid., 207.
- 119. Banham, Los Angeles, 247.
- 120. Banham, "LA: The Structure behind the Scene," 227.
- 121. Banham, Los Angeles, 23.
- Reyner Banham, Scenes in America Deserta (Salt Lake City: Gibbs M. Smith, 1982).
- 123. Banham, "The New Brutalism," 355.

4 RENAISSANCE MODERNISM: MANFREDO TAFURI

A first version of part of chapter 4 was published as "Disenchanted Histories: The Legacies of Manfredo Tafuri," *ANY* 25/26 (2000): 29–36.

- Manfredo Tafuri, Teorie e storia dell'architettura, 2d ed. (1968; Bari: Edizioni Laterza, 1970), 165. Translation slightly emended from Manfredo Tafuri, Theories and History of Architecture, ed. Dennis Sharp, trans. Giorgio Verrecchia (London: Granada, 1980), 141.
- 2. Tafuri, Theories and History, 149.
- Manfredo Tafuri and Massimo Teodori, letter in "Un dibattito sull'architettura e l'urbanistica italiane: Lettere di studenti," Casabella 214 (July 1960), 56.
- 4. Ibid.
- Manfredo Tafuri, "La prima strada di Roma moderna: Via Nazionale," Urbanistica 27 (June 1959): 95–109.
- Giorgio Piccinato and Manfredo Tafuri, "Helsinki," Urbanistica 33 (April 1961): 88–104.
- Manfredo Tafuri, with Salvatore Dierna, Lidia Soprani, Giorgio Testa, and Alessandro Urbani, "L'ampliamento barocco del commune di S. Gregorio da Sassola," Quaderni dell'Istituto di Storia dell'Architettura (Facoltà di Architettura, Università di Roma) 31 (1961): 360–380.
- 8. Giorgio Ciucci, "The Formative Years," in "The Historical Project of Manfredo Tafuri," special issue, *Casabella* 619/620 (January–February 1995): 13–25 This article, the best of all those making up this special double issue of *Casabella* on Tafuri, traces his intellectual career and influences in detail from the 1950s to 1968. Tafuri's articles on the planning of Rome—"Il problema dei parchi pubblici in Roma e l'azione di 'Italia Nostra,'" *Urbanistica* 34 (Summer 1961): 105–111;