

Stereotomia colossale

Keywords

Hugh Ferriss, Lithic, Sublime, Stereotomy, Unauthored

Abstract

The text interprets Hugh Ferriss's work as a decisive shift in modern architecture, in which immaterial regulatory forces are rendered as vast, stone-like forms. Ferriss represents zoning envelopes as geological masses – paradoxically stereotomic yet necessarily hollow – producing a condition of “stereotomy by other means”. At the same historical moment, Ferriss's hollow, monolithic forms coincide with the emergence of the framed building, in which structure retreats behind façades and classical language is reduced to skin-deep cladding. What appears massive is in fact thin, assembled, and lightweight rather than loadbearing. By translating abstract regulation into apparent stone at an immense urban scale, these images evoke the aesthetic of the sublime, overwhelming architectural authorship through scale and constraint rather than composition. Architecture thus appears unauthored, shaped by zoning, density, and accumulation rather than by formal intention. This transformation aligns architecture with broader cultural shifts toward the unauthored found in film, Dada, and process-based art, where form is generated rather than designed. Ferriss's stereotomic or lithic figures unexpectedly anticipate later architectural works that deliberately pursue an unauthored aesthetic, adapting similar stone-like abstractions across different building types and scales.

Biography

Preston Scott Cohen is the Gerald McCue Professor at the Harvard University Graduate School of Design, where he served as Chair of the Department of Architecture from 2008 to 2013. He is the principal of Preston Scott Cohen, Inc., an internationally acclaimed architecture and urban design firm. The firm's most renowned projects include the Anhui Province Science Center, Hefei (2024); Congregation Beth Shalom, Kansas (2025); Datong City Library (2021); Taubman Building, University of Michigan (2017); Tel Aviv Museum of Art (2011); the Goldman Sachs Canopy, New York (2008), and numerous houses and theoretical projects. Cohen is the author of *Taiyuan Museum*, *Lightfall*, and *Contested Symmetries*, and of several influential theoretical and historical essays, including “The Isomorphic Imperative,” “Successive Architecture,” “The Hidden Core of Architecture,” “Elegance, Attenuation, Geometry,” and “Dexterous Architecture.” His honors include induction as an Academician at the National Academy of Art, the Award in Architecture from the American Academy of Arts and Letters, and five Progressive Architecture Awards. His work is widely published and exhibited and is held in major museum collections worldwide.

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Colossal Stereotomy

2.1 In his abstract rendering of the first stage of the four-step sequence *Evolution of a City Building Under the Zoning Law* ("New York Times," March 19, 1922), Hugh Ferriss depicts an urban block as a colossal, carved or crystalline form. It reads as stereotomic: lithic, monolithic, and continuous, as if the work of a stonemason at the scale of the city. Yet this form is anything but hand-carved or wrought with instruments disciplined by projective geometry. It is generated by immaterial, pragmatic constraints – the need to mitigate the shadows cast by sheer-walled buildings that arose from rapid urban growth and extreme density. The result is a paradoxical object: stereotomy by other means.

2.2 Ferriss's outsized block – double the size of a typical New York block – is defined by a volume that implies solid mass. Though rendered as geological substance, we know – historically, technically, and empirically – that it must be hollow. It encloses a frame that supports stacked floors, the vertical succession of spaces that defines the tall building. Needless to say, skyscrapers are not solid, and with very few exceptions – most notably the Monadnock Building in Chicago – they are not supported by load-bearing masonry walls. It follows that the first-stage diagram is not stone, despite its stone-like appearance. Ferriss volunteers to render it as such, nonetheless, and in doing so produces one of the most paradoxical and significant images of twentieth-century urbanism – more polemical than he evidently understood or intended.

2.3, 2.4 Ferriss's first diagram anticipates the production of the city he would later depict in *The Metropolis of Tomorrow* (1929), where a lone figure stands on a mound, overwhelmed by the immensity of the urban field before him – an image that unmistakably recalls Caspar David Friedrich's paintings, in which human figures are dwarfed by infinite seas, mountains, or voided skies. The zoning envelope rendered in the diagram thus appears not merely as a regulatory abstraction but as the generative cause of a metropolitan scale comparable to the aesthetic category of the sublime. Ferriss emerges, in effect, as a painter of zoning, treating it as a force more determinative than architectural composition and with effects comparable to the magnitude of nature itself.

For Edmund Burke, the sublime arises from vastness, obscurity, and power – conditions that overwhelm the senses and suspend rational comprehension. For Immanuel Kant, the sublime marks the moment at which the imagination fails to grasp magnitude or force, compelling reason to confront what exceeds representation altogether. In this sense, the sublime cannot be authored; it can

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Hugh Ferriss, *Evolution of a City Building Under the Zoning Law*. From "The New Architecture," *New York Times Magazine* (March 19, 1922): 9.

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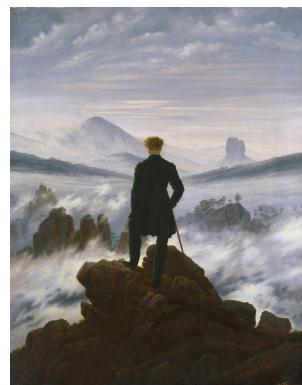
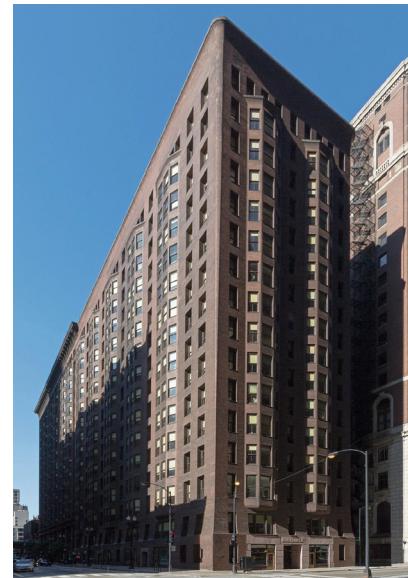
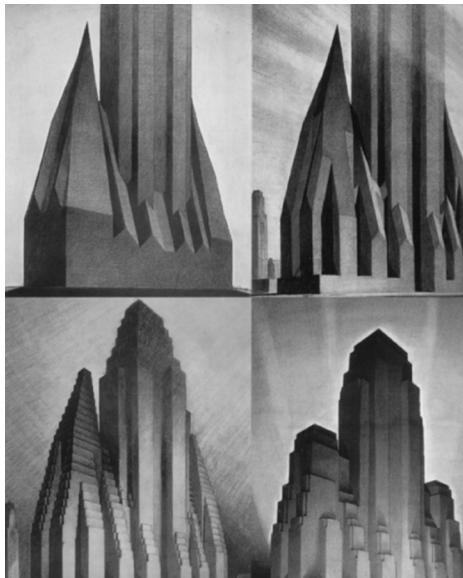
Chicago. Monadnock Building, designed by Burnham & Root, 1891.

2.3

Hugh Ferriss, *The Lure of the City*. From *The Metropolis of Tomorrow* (Washburn, 1929), 57.

2.4

Caspar David Friedrich, *Wanderer Above the Sea of Fog*, ca. 1818. Hamburg, Hamburger Kunsthalle. Public domain.



only be evoked¹. Ferriss's diagrams do not compose the city so much as disclose the scale effects of zoning, projecting an urban condition whose enormity overwhelms architectural authorship.

The zoning law occurs at a decisive moment in the transformation of architecture. It corresponds to the inauguration of an architecture that is skin-deep: façades enclosing skeletal frames, buildings defined not by mass but by accumulation. I have elsewhere described this condition as *Successive Architecture*: an architecture of vertical, repetitive stacking, fundamentally unrelated to variable, stereotomic unity². The multi-story building – the ur-type of modern architecture – produces an intractable conflict between the singularity and hierarchy of its exterior form and the multiplicity and seriality of its interior spaces.

Early skyscraper architects attempted to master this conflict by applying Gothic and classical façades, but, stretched thin beyond their syntactical limits, these linguistic systems disintegrated³. With the collapse of historical signification and ornament, the modern aesthetic was brought to bear: structural expression became a salient aesthetic imperative, a direct response to the pragmatic, determining systems governing construction. Mies van der Rohe exhibited structural components and refined them to the point of classicization⁴. In Crown Hall, steel extrusions serve alternately as columns and mullions which, in relationship with the dropped ceiling plane, represent a centrifugally extended spatial form. In SOM's Inland Steel Building, the structural system is not a typical classical frame: the vertical members are segments cut from indeterminately extruded piers, while the floor plates appear compressed between parallel rows of structure rather than

¹ For these general remarks on the sublime, I am indebted to Dan Sherer.

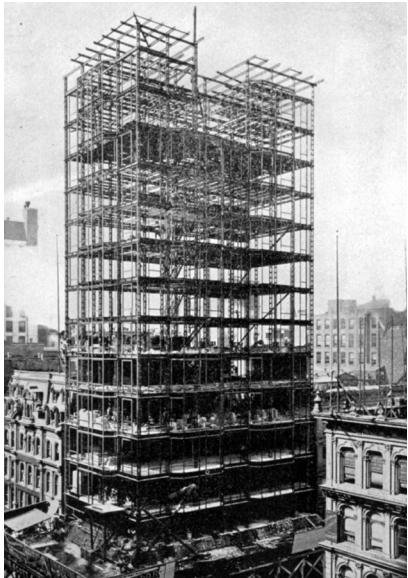
² Preston Scott Cohen, "Successive Architecture," *Log* 32 (2014): 153-63.

³ Manfredo Tafuri, "Disenchanted Mountain: The Skyscraper and the City," in *The American City: From the Civil War to the New Deal* (MIT Press, 1979), 389-528.

⁴ Fritz Neumeyer, "A World in Itself: Architecture and Technology," in *The Presence of Mies*, ed. Detlef Mertins (Princeton Architectural Press, 1994), 64-84.

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2.5

Chicago. Reliance Building, designed by Burnham & Root (John Root & Charles Atwood), 1890-1895.

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Chicago. Inland Steel Building, designed by SOM, 1957.

2.7

Plano, Illinois. Farnsworth House, designed by Ludwig Mies van der Rohe, 1951.

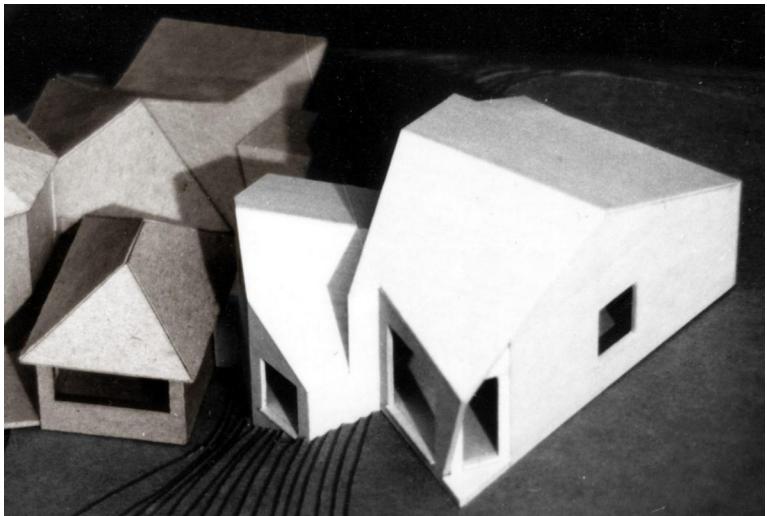


simply supported. Yet, even after modern architects replaced historic conventions with an abstract tectonic language of modern space expressed through structural frames and curtain wall systems, the disparity between exterior form and interior spatial organization remained intractable. The advent of exposed structural componentry as a formal idiom failed to eliminate the inherent contradictions of the modern tall building and its descendants⁵.

Against this backdrop, Ferriss's first stage diagram – the most abstract of the four, yet rendered as if materially real – invokes precisely the opposite: monoliths of masonry projected at a scale so large that they can exist only as hollow fictions. The diagram does not function merely as a preliminary abstraction awaiting elaboration; it already reads as architecture. Ferriss's three subsequent diagrams – introducing light, floor plates, and Beaux-Arts or Deco façades – establish operativity and plausibility by verifying the reasonableness and marketability of the massive form of stage one.

Scale operates here as analogy. Geological carving stands in for zoning logic; rock-like mass stands in for setback envelopes. Architecture is driven beyond its disciplinary limits, asked to inhabit a rhetorically articulated solidity at a scale it cannot linguistically sustain. Architecture is forced

⁵ Preston Scott Cohen, "The Isomorphic Imperative," *Log* 64 (2025): 24-32.



2.8

Preston Scott Cohen, Model for Wydra House (Montague, NJ), 1987.

2.9

Genuine clear quartz crystal cluster point from Brazil (372.7 grams).

2.10

Stuttgart. 134 Wood House, designed by Jacques Herzog and Pierre de Meuron, 1995.

2.11

Carl Andre, *Tau and Right Threshold (Element Series)*, 1960.

to resolve what begins as abstraction; it runs backward relative to modern abstraction. Instead of moving from the concrete toward the abstract as the modernists did, Ferriss begins with abstraction and shows how architecture must accommodate it.

For the modernists, analogy operated at another level. The new idiom of structural expression – purportedly an honest reflection of the spirit of the age⁶ – was compelled to function as an international architectural language, not only for tall buildings but for architecture as a whole. In order to demonstrate this imperative, houses and small buildings therefore adopted several of the salient formal and organizational logics of the skyscraper. Mies's Farnsworth House, which translates the structural morphology of the Inland Steel Building into only two horizontal slabs, can be read as a single story extracted from a high-rise. Likewise, Le Corbusier's Villa Savoye condenses the logic of his *Five Points of Architecture*: its principal level functions as one layer within a vertically repeatable system – lobby at the base, followed by successive functional layers, capped by a roof garden. The villa thus operates as an analog of a three-story skyscraper. Effectively, the idiomatically articulated principle of successive architecture became a generative origin across building scales.

The exponential jump in metropolitan scale and the disappearance of solidity in architecture coincided with a broader transformation across the arts: the emergence of the unauthored. Film

⁶ Colin Rowe, "Neo-'Classicism' and Modern Architecture II," in *The Mathematics of the Ideal Villa and Other Essays* (MIT Press, 1976), 125.



2.12

Zeller See. Austrian House, designed by Rem Koolhaas, 2018-23.

2.13

Clastic sedimentary rock, Switzerland.

arose from technological and commercial imperatives and only retroactively became an artistic medium⁷. Dada displaced authorship with the industrially produced readymade. Process-based practices – from Jackson Pollock to Richard Serra – replaced compositional control with material behavior as causation. In these works, form was no longer composed but generated. Under conditions of extreme urban density, architecture underwent a parallel paradigmatic redefinition. As Colin Rowe – and later Rem Koolhaas – observed, its most original and consequential effects, like those of film, were inaugurated not by aesthetic intention but by technical invention and social and cultural demands⁸. Capitalism thus propelled architecture away from representation and disciplinary synthesis, despite the ethical and social ambitions asserted by modernism.

Following the precedent set by modern architects, who applied the formal logic of the tall building type to all of architecture, the lithic, stereometric idiom would also later be appropriated for all scales and types of buildings, but this time under fundamentally altered historical conditions. It should be noted that any apparent connection to Ferriss is likely coincidental. Ferriss was not a canonical figure whose aesthetic can be argued to have guided subsequent architectural practice, and it is improbable that architects who later pursued inorganic, stone-like expressions were consciously drawing on his work. Instead, the turn toward stereometric form in the late twentieth and early twenty-first centuries – particularly among neo-avant-garde architects – reflected a deliberate rejection of postmodernism's stylistic excesses and of its erosion of linguistic and material sources through crude modes of abstraction. The seemingly irreducible, non-referential or unesthetic abstractions of the lithic kind provided architects a means to conjure unauthored forms. Yet when applied at smaller building scales, where typology reasserts itself, the crystalline or carved forms lose their aura of necessity and become elective. The lithic thus shifts from describing a precondition to serving as an expressive idiom – primarily sculptural rather than documentary. Instead of beginning with abstraction, the smaller and medium scaled projects start with real, unauthored forms and proceed to abstract them until they are seemingly stereometric. Vernacular gabled roofs are trimmed of their eaves; volumes are chamfered, faceted, or seemingly chiseled. Retroactive abstraction restores authorship where Ferriss's first-stage diagram had suspended or postponed it. The author's Wydra House appears to be two conjoined vernacular roofed structures that surreptitiously resemble a crystalline formation; Herzog & de Meuron's 134 Wood House reads like solid linear blocks of wood – reminiscent of a Carl Andre sculpture – packed together and cut into the shape of a single hip-roofed house or agricultural shed; and Koolhaas's Austrian

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⁷ Erwin Panofsky, *Three Essays on Style* (MIT Press, 1995), 153-78, esp. 153-5, reprinted from his essay "Style and Medium in the Motion Pictures" (1934).

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⁸ Colin Rowe, "The Chicago Frame – Chicago's Place in the Modern Movement," *The Architectural Review*, 170, 718 (1956): 285-89; Rem Koolhaas, "Life in the Metropolis" or 'The Culture of Congestion,' *Architectural Design* 47, 5 (August 1977), in *Architecture Theory Since 1968*, ed. K. Michael Hays (MIT Press, 2000), 320-31.

2.14

Chicago. John Hancock Center (875 North Michigan Avenue), designed by SOM, 1970.

2.15

Beijing. China Central Television Headquarters, designed by OMA, 2008.



House – riffing on an unusually narrow sawtooth-roofed loft building – evokes a sedimentary rock exhumed from the ground. A transformative effect of all of these is that spatial isomorphism becomes increasingly immanent: what appears as crisply cutaway mass is already empty. Mass and hollowness coincide.

In the most renowned tall buildings of the lithic idiom, the forms seem non-compositional, as if historically inherited and ready-made or in some other way generated independently of architectural authorship. SOM's Hancock Tower in Chicago resembles a flat-topped obelisk, a form originating in the signification of permanence, monumentality, and timeless authority. OMA's CCTV Headquarters, by contrast, approaches the logic of a Carl Andre or Tony Smith sculpture, but enlarged to an urban scale – an object that evokes industrial processes of material production rather than compositional intent. Yet its unaesthetic character remains formal, not material. Foster's Park Avenue tower occupies a more ambiguous position. It recalls Ferriss through its reference to immaterial determinants – set back regulation, optimization – by means of its overall shape. Foster alone approaches Ferriss's transformation of constraint into apparent geology. The reversal of abstraction plays out in all three of these canonical examples.

A paradox lies in architecture's structural inability to manifest the material rawness and homogeneity invoked by these stone-like forms. Minimalist sculpture can rely on industrially conditioned materials that resist manipulation, making their physical indifference a salient component – combined with an uninflected shape – in the creation of the anti-aesthetic object, a central aim of the movement. Architecture cannot. For it, rock forms are not an aspect of a material process but an ideological camouflage: a means of representing the unaesthetic and unauthored. Among modern strategies for displacing authorship – ready-made symbol, abstract shape made of expressly raw material, process art – Ferriss' exemplifies process, elevating immaterial forces to the status of surrogate architectural material.

In this sense, Ferriss's work can be read as both a parallel to and a transformation of the problem Michael Fried articulates in *Art and Objecthood*⁹. Fried identifies the framing of objects – typically by a gallery, or what he calls a «room» – along with scale and bodily encounter to be analogous to the experience of theater, conditions under which the conventions that normally govern an object's composition and referentiality dissolve into situation. The viewer is drawn into a physical and psychic experience of interpreting an implicitly interminable work. Ferriss's forms operate within a comparable field of tension, that of the city. They cannot be apprehended in their entirety, from exterior to interior or interior to exterior; rather, they are encountered over time as overwhelming presences that resist closure.

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⁹ Michael Fried, "Art and Objecthood," *Artforum* 5, 10 (Summer 1967): 12-23. Robert Levit has interpreted this essay very convincingly relative to the projects of OMA and the essay by Robert E. Somol, "12 Reasons to Get Back into Shape," *Content*, ed. Rem Koolhaas and AMO (Taschen, 2004), 86-87.



Their a priori indifference to collective understandings of symbolic form aligns architecture with the very condition – theatricality – that Fried sought to critique¹⁰; yet in this case, it is not theatricality but immersion in extremity that ultimately prevails. Architecture escapes objecthood only by surrendering control: by becoming too large, too slow, and too externally determined to be recognized or experienced either as a composition or as an object at all. At this threshold, architecture abandons the illusion of autonomy.

Ferriss's contribution does not lie in the invention of a new language, but in exposing the limits of architecture itself. His work demonstrates how architecture can only appear unauthored by submitting to forces it cannot master, allowing regulation, urbanization, and scale to analogize material rawness as the final determinants of form.

Ferriss' stage one diagram in which the surface stands for everything, unwittingly, prepared the ground for an architecture in which mass is absorbed, suppressed, or dissolved into composite skins. Walls become sandwiches into which structure retreats. Structure reemerges as a discernibly discrete system only under exceptional conditions – cantilevers, mega-forms, or exoskeletally supported giants. Stereotomy is either implied by shapes or analogized not by resemblance to carving but as a structurally reformulated consequence of scale.

Only in large-scale buildings does authorship recede and form become indistinguishable from the processes that generate it. Occasionally, large spans and deep volumes necessitate oblique structural members and mega-trusses. These systems inscribe a form of structural stereotomy independent of the shaping effects of carving. Structure is not applied as expression but asserted through necessity. Its truth lies not in visibility but in causation. The Hancock, CCTV, and 270 Park Avenue are each conceived as vast volumes filled with stacked layers of space and supported by cross-bracing systems that lend visual tension to their envelopes. Whether evoking an obelisk, a voided pyramidal mass, or a stepped and tapered variation on Ferriss, it's the naked presence of the exoskeletal structure that comes closest to the literalist effect of minimalist sculpture that arises from both material and scale, not the visual form or compositional logic¹¹.

Scale, then, is not merely a question of size. It is a system of proportion and analogy through which architecture loses mass while continuing to invoke it. Urban stereotomy today is no longer carved; it is simulated, hollowed, and intermittently reasserted through structure. The city becomes a montage of surfaces that remember stone.

2.17

2.16 New York. JPMorgan Chase Tower (270 Park Avenue), designed by Foster and Partners, 2025.

2.17

Chicago. Structural insulated panel (SIP) construction: oriented strand board (OSB) and expanded polystyrene foam (EPS), 2025.

¹⁰ Fried, "Art and Objecthood," 15-16.

¹¹ Fried, "Art and Objecthood," 15-16.