The Modernity of Zaha Hadid

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Abstract
During the heyday of postmodernism in the 1980s, as architects turned to historical styles, urban traditions, and popular culture to rebuild the public support that modernism had lost, Zaha Hadid declared that modernity was an incomplete project that deserved to be continued. This was an inspiring message and its bold vision was matched by projects such as the competition-winning design for The Peak in Hong Kong (1982-1983). Hadid’s luminous paintings depicted the city and the hillside above it as a prismatic field in which buildings and landform were amalgamated into the same geological formation of shifting lines, vibrant planes, and shimmering colors, at once tangible and intangible, infused with the transformative energy that Cubist, Futurist, and Expressionist landscapes had sought to capture.

Disciplines
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Comments
During the heyday of postmodernism in the 1980s, as architects turned to historical styles, urban traditions, and popular culture to rebuild the public support that modernism had lost, Zaha Hadid declared that modernity was an incomplete project that deserved to be continued. This was an inspiring message, and its bold vision was matched by projects such as the competition-winning design for The Peak in Hong Kong (1982–83). Hadid’s luminous paintings depicted the city and the hillside above it as a prismatic field in which buildings and landform were amalgamated into the same geological formation of shifting lines, vibrant planes, and shimmering colors, at once tangible and intangible, infused with the transformative energy that Cubist, Futurist, and Expressionist landscapes had sought to capture (Fig. 01). The figure of her building—a hotel—was barely discernible within this field. It was composed of three long prismatic bars—overlapping, rotating, and sliding above one another, as if detaching themselves from the earth or, alternatively, landing from outer space, anchored by vertical staffs, hovering momentarily on terraces cut into the hillside. These images sent ripples of excitement through the architectural world, evidence that modernism was not a dirty word after all. It was alive, larger than life, and totally seductive.

Hadid’s was a different modernism than we had become accustomed to, no longer utilitarian, blandly corporate, or aggrandizing of technology. Her vision of Hong Kong offered a powerful wish image, at once futuristic and archaic, geometric and geomorphic. Hadid had tapped into the largely forgotten vein of Russian Constructivism and infused its revolutionary heroics with cosmopolitan urbaneity. She rekindled the flame of modernity with this new cocktail of desires.

The word “Constructivism” came into usage in the early 1920s, in art most notably with the Working Group of Constructivists formed in Moscow in 1921, of whom Alexander Rodchenko and Varvara Stepanova became the best known. Yet the term has often been associated with the work of Vladimir Tatlin, whose reliefs, beginning already in 1913, launched a sustained but also diverse field of experimentation into new nonrepresentational modalities of artistic production, for which “Constructivism” has served as an umbrella concept. In the field of architecture, the term was initially associated with the Union of Contemporary Architects, including Moisei Ginzburg and Alexander Vesnin, as well as others such as Konstantin Melnikov. During the late 1920s, a younger generation appeared on the scene, including Ivan Leonidov, whose work on new building and urban types employed the visual language of elemental geometry in a more extreme way than architects had before. At the same time, Yakov Chernikov demonstrated through his teaching that an abstract, graphic (rather than painterly) language of lines, planes, volumes, and color could be employed to generate an extraordinary diversity of things, from machines to engineering works, buildings, and cities.

Though initiated prior to 1917, these lines of research in art and architecture became aligned with the Russian Revolution’s radical politics and served as instruments for the reorganization of life after the overthrow of the tsar. Art was enlisted to create festivals in the street, propaganda on railway cars, and didactic programming in theaters and cinemas. Working at times in parallel with the artists and at times independently, Constructivist architects devised new building types that would be commensurate with the forms of social organization desired in the new Communist state. From apartments to social clubs, theaters, and stadiums, they reconceptualized buildings as social condensers, catalysts for new forms of collective living. During the early 1920s, these various trajectories coalesced into the challenge of defining a new paradigm that would unite art and life and transform the world into a new artistic reality.

With their project Exodus, or The Voluntary Prisoners of Architecture (1972, Fig. 02), Rem Koolhaas and Elia Zenghelis with Madelon Vriesendorp and Zoe Zenghelis had already revisited Russian Constructivism at the Architectural Association in London, where Hadid would soon emerge as Koolhaas and Zenghelis’s most talented student. This project looked to Leonidov’s proposal for a linear infrastructural city of 1930 in attempting to develop an alternative to the behavioral sink of a city like London. Seeking to operate at the scale of metropolitan reconstruction, the group turned to Constructivism to strike a path between the legacy of CIAM (Congrès Internationaux d’Architecture Moderne), on the one hand, and the more recent artistic urban visions of Superstudio’s Continuous Monument (1969), Archizoom’s Non-Stop City (1969–72), Archigram’s Plug-In City (1962–64), Yona Friedman’s Spatial City (1958–59), and Constant’s New Babylon (1956–60). For Koolhaas, the work of Leonidov became a strategic ingredient in an explosive, ironic mixture that also included the raw vitality of the enclave-city of West Berlin, fantasies of decadence in early twentieth-century Manhattan, Surrealist juxtapositions of incongruous fragments, and the typological delirium of O. M. Ungers.

It was in this context that Hadid rediscovered the Suprematist and Constructivist precursors to the Utopian artist-architects of the 1960s, turning specifically to Kazimir Malevich to find her own way of dreaming the future by deliberately tapping into experiments left incomplete. Where Tatlin and the later Constructivists abandoned the medium of painting in favor of materially based reliefs, assemblages, spatial constructions, stage sets, and even architecture—all of which already occupied the same world as the observer—Malevich launched a “new painterly realism” in 1915, called it Suprematism, and declared it the key to transforming the world. His display of over twenty canvases—with Black Square hung in a corner—at The Last Futurist Exhibition of Paintings: “0.10” in Petrograd (1915, Fig. 03) served to demonstrate both the deductive rigor and generative potential of what he considered a new system of pure painting. Its systemic character lay in the permutation of elemental shapes in black, white, and red—beginning with the square, then the circle, cross, rectangle, trapezium, triangle, ellipse, and combinations of all these. Through the show, Malevich attracted...
students who joined him in developing Suprematism over the following years, and the style soon incorporated greater diversity, movement, and expression (Figs. 04, 05).

Architect Peter Cook once observed that "Malevich's Architekton [Fig. 06] is constantly being erected as the baseline for Zaha's own work." 7 Certainly, presentations of Hadid's oeuvre often, and with biographical inevitability, begin with her graduation project from the Architecture Association — Malevich's Tektonik of 1976—77 — for which she transformed Malevich's assemblage of elemental blocks into a hotel on the Hungerford Bridge over the Thames in London. But what kind of origin was this and what kind of repetition did it involve?

Where Malevich considered his Black Square of 1915 as the founding origin of Suprematism, the irreducible "degree zero" of painting and seed germ of an entire artistic system, Hadid took up the trajectory of Suprematism already well into its evolution. After five years of developing Suprematism in painting, Malevich and his followers moved from two into three dimensions, from painting into architecture, decorative arts, and even urbanism. 8 More precisely, this constituted a return since it was in his stage sets for the Futurist play Victory over the Sun (1913) that he had first discovered the black square. He cast his Architekton series in white plaster, each one different, first horizontal and later vertical, and displayed them together in a black room, as if they were creations ex nihilo, floating in the nothingness of space. He even called them satellites and planets. In contrast, Hadid began with an act of appropriation more reminiscent of Marcel Duchamp's Bicycle Wheel of 1913 than Malevich's elementarism. She brought Malevich's Alpha Architekton (1920) down to earth, anchored it to the Hungerford Bridge, and opened it for business as a hotel. Somewhat too short to span the entire width of the river, somewhat too wide to be contained by the existing bridge, it remained alien and contingent in its new context.

In presenting her project as a painting (rather than as a maquette), Hadid folded Malevich's Suprematist architecture back onto its origins in painting and in the process scrambled the definitions of both mediums. Where Malevich eschewed representation, Hadid's paintings must be considered representational, though not in a naturalistic sense, since what they depict are potential architectures, not physical realities. They represent her vision of an abstract architecture, or in Malevich's terms, a nonobjective reality. Moreover, she sets her projects into specific urban contexts that she portrays abstractly as Suprematist landscapes and cities. Since Suprematism itself did not produce such interpretative abstractions, it is necessary to turn to the paintings of landscapes and cities in Cubism, Futurism, and Expressionism (including Malevich's own, such as Fig. 01) to discern the implications of Hadid's operation. Drawing on Cubist decompositions of landscapes into prismatic fields, Futurist expressions of dynamic energies, and Expressionist renderings of psychic experience, Hadid transformed Suprematism from an art of building complex structures out of elemental geometric shapes into one that seeks to make visible the elemental nature inherent in the world. Where Malevich declared in 1920 that the forms of Suprematism "have nothing in common with the technology of the earth's surface," 9 Hadid's paintings bring mathematical and geological geometries into greater alignment.

Hadid created Suprematist paintings of Suprematist buildings in Suprematist landscapes and cities, using architectural drawings — plans, sections, and isometrics — in place of pure geometric figures. The plan of the Architekton-hotel appears several times in different places on the canvas, in solid red and black and in compositions of mixed colors, so that it is transformed into a series of abstract shapes floating in space. In the bottom left corner, the building is decomposed into its constituent planes of color, bringing the painting even closer to Malevich. Rather than reinforcing the volumetric integrity of the various blocks that make up the Architekton, Hadid's application of color decomposes its masses into planes, much as Theo van Doesburg had done for his Maison Particulière project of 1923. Where modernists such as Malevich sought an origin, or ground, for their work in the autonomous properties of different mediums, Hadid's painting of Suprematist buildings envisions the building of Suprematist paintings.

With such a beginning — a beginning that denies, but then compounds, folds, and twists the modernist idea of origins — we could say that Hadid took seriously Malevich's statement that Suprematism was itself merely the beginning of a new art and that he was merely its initial theoretician. 10 Or we could also say that she gave Malevich a "monstrous child," to borrow the image that Gilles Deleuze gave in describing the relationship of his books to those of philosophers with whom he was in dialogue, such as Bergson, Leibniz, and Spinoza. 11 In "Mediators," an essay from 1985, Deleuze took issue with the return at that time of the modernist problem of origins and insisted instead that creativity was mediated: "Mediators are fundamental. Creation is all about mediators. Without them, nothing happens. They can be people ... but things as well, even plants or animals. ... Whether they're real or imaginary, animate or inanimate, one must form one's mediators. It's a series: if you don't belong to a series, even a completely imaginary one, you're lost." 12 Deleuze suggested that, in fact, a change of paradigm was underway, exemplified by the shift in cultural preference from sports of energetic movement, such as running and throwing a javelin, which presume starting points, leverage, effort, and resistance, to sports such as surfing, windsurfing, and hang gliding, which "take the form of entry into an existing wave." 13

In employing Malevich as mediator, Hadid entered into an existing wave, one that had already gone beyond Malevich and his pursuit of origins, although Malevich remained a presence in it, as did ideas of new beginnings, first principles, and universal elements. Through interlocutors, such as Vasily Kandinsky (Fig. 07), revisionist students such as El Lisitsky, and more distant admirers such as László Moholy-Nagy (Fig. 08), Suprematism had already become a broader, more diverse movement, which...
explored the potential of new mediums and technologies for creating an abstract landscape of dynamic forms and fluid spaces. When Hadid joined the wave of painting, she inflected it further to include conceptual explorations of language, generative process, totality, and openness. Treating each project as an experiment in the laboratory of new beginnings, she replayed the modernist return to origins but without its fundamentalism or teleology.

In translating figures and patterns from two to three dimensions, Hadid qualified the quest for a universal architectonic language by exploiting the diverse formal experiments already undertaken in Suprematist and other abstract painting. Where Malevich had restricted his architecture to the primary language of prismatic blocks, Hadid used each new project to explore the potential of another formal variant developed in painting. Consider, for example, the differences between The World (89 Degrees) (1983), A New Barcelona (1989), London 2066 (1991), Vision for Madrid (1992), the Victoria & Albert Museum, Boilerhouse Extension (London,1996), the New Campus Center, Illinois Institute of Technology (Chicago, 1997–98), and Boulevard der Stars (Berlin, 2004). Today, Hadid's work is at times angular and prismatic (Car Park and Terminus Hoenheim-Nord, Strasbourg, France, 1999–2001), at other times rectilinear (Lois and Richard Rosenthal Center for Contemporary Art, Cincinnati, 1997–2003), sinuous (MAXXI National Centre of Contemporary Arts, Rome, 1997–ongoing), geomorphic (Ordrupgaard Museum Extension, Denmark, 2001–ongoing), plastic (Ice-Storm at MAK, Vienna, 2003), and mixed (BMW Plant Central Building, Leipzig, Germany, 2001–05). While these buildings, and even such formally hybrid ones as the Phaeno Science Center in Wolfsburg, Germany (1999–2005)—which is part curvilinear, part angular, part distorted rectangles—draw on modernist research into the possibility of a universal language, they also imply that the language of architecture today is more inclusive, mutable, and personal than it was in the past. Hadid continually distorts, morphs, stretches, and stresses the forms she employs—animating them with energy, direction, variability, and speed.

As opportunities for building her visions gradually arose, Hadid found for architecture the equivalent of the material and sensuous qualities of Suprematist painting—the effects of Malevich's handling of pigment, techniques of fading, and combining of colors. Beginning with the Vitra Fire Station (Weil am Rhein, Germany, 1990–94), she has looked to concrete for its formal malleability, structural flexibility, and expressive capacity. Echoing the monumental plasticity of concrete buildings mid-century by Marcel Breuer, Oscar Niemeyer, and Eero Saarinen, Hadid has often foregone tectonic expression and used concrete to emphasize form and surface, defy gravity, and evade regularity. For furniture and interiors, she often works in fiberglass and plastic for similar reasons and to similar effect. She prefers to mold and cast than to construct and assemble.

Hadid's way of working married the generative permutations of Suprematism with the step-by-step generative design method devised by Ginzburg and other Constructivist architects. Ginzburg's "functional method" began with the abstract diagramming of given functional requirements and their potential to change over time, and then turned to new industrial materials and methods of construction to "crystallize the social condenser." The resultant spatial form could then be assessed and refined for its ability to "organize perception," since it was understood to be active with respect to the inhabitant rather than passive. By combining generative processes from art and design, Hadid effectively discharged the residual metaphysics of form that limited Malevich. She absorbed his formalism into an ever-expanding repertoire of form-generating techniques—the explosion of matter in space, the bundling of lines and ribbons, the organizing of fields, aggregations, and pixilations, and the warping, bending, twisting, and melting of forms—and put these to work in reorganizing life.

Over the course of her career, Hadid has developed a distinctive calligraphic mode of sketching with which she begins her projects. While her lines at times recall those of Kandinsky or Chernikov, they are more spontaneous and probing. Where Erich Mendelsohn's fluid ink sketches inaugurated the massing and profile of buildings such as his Einstein Tower (near Potsdam, Germany, 1919–21), Hadid's lines explore possible organizations that can gradually be developed into plans, sections, and three-dimensional forms. Likewise, her drawings should not be confused with expressive sketches that seek to manifest the unconscious psyche, such as Coop Himmelblau's drawing with eyes closed for their Open House of 1983 (Malibu, California). Rather, Hadid's drawings capture and reveal the intangible forces, flows, and rhythms already at play in the sites that she is to develop and the building briefs that she is given. Like her paintings of urban sites, they speculate from external givens. Most recently she has refined this kind of diagramming through computer modeling, which is capable of handling vast amounts of information as well as producing complex and mutating geometries. By linking the analytical and generative uses of computing, Hadid demonstrates how powerful a tool it can be for designers eager to participate productively in the evolution of physical environments always and already in motion.

Hadid insists, like Malevich, on seeing art and architecture as a totality, but figures it more concretely as the urbanization of the planet. Her conception of the whole is dynamic, indeterminate, and emergent, rather than static and resolved. In this, she clarifies something


03 Installation view of paintings by Kazimir Malevich at The Last Futurist Exhibition of Paintings: "0.10", Galerie Dobychina, Petrograd, 1915

04 Kazimir Malevich, *Suprematism (Supremus No. 56)*, 1916. Oil on canvas, 31 7/16 x 28 inches (80.6 x 71.1 cm). State Russian Museum, St. Petersburg
Kazimir Malevich, Suprematism No. 55 (Spheric Evolution of a Plane), 1917. Oil on canvas, 25 1/4 x 19 inches (65.6 x 48.3 cm). Kawamura Memorial Museum of Modern Art, Sakura, Japan

Kazimir Malevich, Alpha Architekton, 1920 (1925–26). Plaster, 12 3/4 x 31 3/4 x 13 3/4 inches (31.5 x 80.5 x 34 cm). State Russian Museum, St. Petersburg

Vasily Kandinsky, White Cross (Weiess Kreuz), January–June, 1922. Oil on canvas, 39 1/4 x 43 1/4 inches (100.5 x 110.6 cm). Peggy Guggenheim Collection, Venice 76.2553.34

that Malevich himself struggled with. His worldview was theological and transcendental, yet he sought to account for the evolution of art as part of human history. \(^{15}\) He explained Cubism, Futurism, and Suprematism as adding elements to art from the outside, from the world of modern technology and experience. At first the audience, he recalled, was shocked and dismayed by such abnormalities, but then came to accept them, thereby expanding the horizon of perception, and of the perceptible as such. \(^{16}\) He considered individual works to be "constructions" that pushed beyond the closed system of art, which was merely "on its way" toward a future system. Later, after Stalin rejected modern art in favor of Socialist Realism, Malevich painted abstract depictions of peasant life, which he still considered to be Suprematist, suggesting just how much he believed Suprematism to be historically contingent. Hadid extended this contingency into the twenty-first century and understands the relationships of part and whole, on and many, past and future, as immanent. The whole is given but elusive. It does not need to be produced through human works, although they participate in its ongoing metamorphosis. For Hadid, the special contribution that an architecture of form—abstract and dynamic—can make is to stand in for that totality, which eludes every effort, every model, and every allegory that seeks to represent it, in science as in philosophy, theology, and art.

Like Piet Mondrian and van Doesburg, Malevich believed in a hierarchical relationship between art and utility. He was indifferent to function, even when it came to architecture. But Malevich spoke of his art producing psychological affects, expressing things like the "sensation of flight," the "sensation of metallic sounds," the "feeling of wireless telegraphy," and "magnetic attraction." \(^{17}\) In expressing such sensations, he brought the experience of modern technology into art abstractly, without overt representation. He provided an opportunity for the observer to reexperience these feelings directly through perception, which he held to be more capable than the conscious mind of accessing the absolute. As a result, his images are profoundly ambiguous, open to interpretation but also misinterpretation. They have the poetic character of an open work, which, as Umberto Eco has described, rejects definitive conclusions and instead, multiplies possibilities and encourages acts of conscious freedom. \(^{18}\)

While Malevich gave priority to form over function and material, he recognized that forms could have applications and utility in quotidian life as teapots, decorated for unexpected events and emergent ways of using. These functions, like her furniture, are bigger than their functions, multivalent and multifunctional. They are the infrastructure and support for unexpected events and emergent ways of living as well as programmed scripts. They tease and enable their inhabitants to experiment with other ways of doing things. The subjects of her buildings are both generators of forms and participants in the life and completion of the work over time. It is this combination of attentiveness and openness that defines Hadid's social vision.

Indebted to the catalytic ambitions of Suprematist art and Constructivist architecture, Hadid's modernity is fully self-reflexive, aware not only of its devices and the contingency of its dreams, but also the risks it takes. In a world of instability, contrariness, uncertainty, and deception, she produces an architecture that embraces flux and polyvalent mixtures. Urbane, daring, and exuberant, her oeuvre supports a vision of life as an art—lived intensely and expansively, with imagination and style. Like life itself, Hadid's modernity is constitutively unfinished and always surprising.