Exhibitions

Architectures non standard
Centre Pompidou, Paris
10 December 2003–1 March 2004

Curated by Frédéric Migayrou with Zeynep Mennan, Architectures non standard presented the works of twelve groups of contemporary architects known for their innovative use of digital technologies in architectural design and production. Projects by Asymptote, dECoI Architects, DR_D, Greg Lynn FORM, KOL/MAC Studio, Kovac Architecture, NOX, Objectile, Oosterhuis.nl, R&SIE, Servo, and UN Studio were exhibited along with a selection of some 272 images, mostly from the twentieth century, of buildings or designs or works of art or science that the curators evidently consider as referents for, or precursors of, the present developments. In the accompanying catalogue, four critical and historical essays, by Migayrou, Mennan, Mark Burry, and Walter Pinigge, precede brief statements by the participating architects.

Both the show and the publication are noteworthy for having brought the issue of the “non-standard” to the foreground and for consolidating its position at the core of contemporary discourse. Discussions about the “non-standard” in architecture (past and present) have been lively and ubiquitous since the opening, proving that the exhibition was successful in capturing and reshaping the spirit of the time. The show and catalogue also amplified some collateral misunderstandings of the topic, both theoretical and historiographic, which derive, perhaps inevitably, from the very nature of the subject, the variety of its sources, its multidisciplinary application, and its urgency in current architectural practice.

When seen as a mode of production, “non-standard” means the serial reproduction, or mass production, of nonidentical parts. This represents a reversal of the logic of mechanical reproduction familiar in the West for the last five centuries. From its beginnings in the fifteenth century with the invention of printing with movable type, and more significantly after the apogee of the Industrial Revolution in the nineteenth century, mechanical mass production has delivered economies of scale based on the condition that all products in the same series are identical. This paradigm climaxcd with the invention of the assembly line, and it famously started to influence architectural theory at the beginning of the twentieth century, when many thought that architecture should come to terms with the logic of mass production and achieve the same ends (namely, standard quality and reduction of unit costs) by the same means: identical reproduction and product standardization.

On the contrary, recent digital technologies seamlessly applied to design and manufacturing—also known as “file-to-factory” technologies—make it possible to introduce variances in a mass-produced series at no additional cost. Within given limits, products can now each be different (or customized, randomly or by design) and still be serially reproduced, hence made at the same unit cost as if they were all identical. This process is often referred to as “mass customization,” an expression that, far from being an oxymoron, aptly represents an essential trait of the new digital environment: mass production and customization can now coexist.

This technical revolution has huge implications for architectural theory and practice: as Migayrou explains in his catalogue introduction, for the first time architects now have to deal with an inescapable technological environment that is alien (and one could even say aversive) to all the technologies that inspired twentieth-century modernism in architecture (13). This point is eloquently argued by several contributors to the publication, in both the essays and the architects’ entries. Yet oddly, on the basis of the visual evidence provided by the exhibition, most conspicuously by the display of historical images, many visitors may have left the Galerie Sud of the Centre Pompidou persuaded that “non-standard,” when referring to architecture, simply means all architecture that is, was, or ever will be, round. This perception may be misleading, but it is in part justified and corroborated by a deliberate theoretical stance of the curators, outlined in particular in Migayrou’s and Mennan’s texts.

The reason for this apparent contradiction is that alongside the technological definition of “non-standard” mentioned above, the Paris exhibition offered an alternative, based not on technology but on form. Yet there are many ways to define what a non-standard form is, and there is no consensus on the matter. Additionally, if the focus shifts from the way of making things to the way they look, the discussion of non-standard architecture runs into some snags, and it may become confusing. In the museum presentation, the theory underpinning the choice of the nearly three hundred images of round, serpentine, sinuous, flaccid, floppy, and fluid forms presented as precursors of today’s non-standard design is that contemporary non-standard forms are the logical sequel of most “anti-standard” doctrines that punctuated the twentieth century. Preeminent among these precursors are many organicist, expressionist,
and even spiritualistic theories that reacted against the rise of the machine age in the twentieth century and, in architecture, of the style that was predicated on it. As Mennan concludes, all those architectural tendencies that were excised and marginalized by the imperialism of mechanization in the twentieth century—first and foremost organicism—are vindicated by the current technological environment (36). Through the intercession of the new digital technologies, yesterday’s losers are fast becoming today’s winners.

This argument is legitimate and stimulating. As Migayrou points out, this interpretation of current developments draws from and at the same time prompts a new reading of the architectural history of the twentieth century, particularly of the history of modernism (33). Yet it invites two objections. First, from a technological standpoint, round forms, or even continuity of form, are not relevant to the notion of “non-standard.” In fact, no specific form is when looked at on its own. The objects numbered one, two, and three in a non-standard series are by definition incrementally different from each other, regardless of their individual form—square or round, smooth or rough, angular or curvilinear. As Gilles Deleuze argued long ago, when he introduced the “objet/subject” dyad, this is a new definition of a series where what counts is not what objects are but the way they change.1

Second, attention to form making, regardless of the technological environment in which it takes or took place, may alter the meanings the forms were or are meant to bear. On the one hand, the creation of round forms in a context such as that of the early twentieth century, when mechanical technology privileged the reproduction of square forms, based on elementary Euclidean geometry, carried a clear anti-technological message. It was a statement against the machine age. On the other hand, the creation of round forms (for example, those based on complex topological geometries) at a time when new computer-based technologies vastly facilitate their creation and production carries a clear pro-technological statement. The difference in the implications of round forms is one reason why drawing a parallel between Antoni Gaudí and Greg Lynn (46) may appear a bit off the mark.

The architects’ statements published in the catalogue confirm, compound, and sometimes confound the notions of non-standard architecture with a wealth of references to diverse issues, which sometimes hark back to earlier phases of the IT (information technology) revolution in architecture: the heritage of deconstructionism, the theory of folding, blobs, materialization, virtuality, interactivity, intelligent reactivity, morphogenetics, catastrophe theory, fractals, non-Euclidean geometries, topology, and so on. Patterns of creative individualism occasionally transpire: if one forgets about the underlying logic of non-standard seriality, each non-standard item is ostensibly one of a kind, a very special pièce unique. But at the same time, new concerns for social responsibility are also emerging. Every technology carries specific constraints, which interact dialectically with the uses that can be made of it; this feedback loop between technical availability, cultural desire, and social demand is the ultimate motor of technical and social change. Several authors in the book suggest that the rise of the new and so-called non-standard technologies should invite a critical assessment of the new standards that will inevitably come with them (see esp. 92, 129, 138, 187). This debate appears poised for new developments, and we must be grateful to Migayrou and Mennan for having provided a new start, a fresh focus, and an intelligent platform for ongoing discussions at a very critical stage in the brief but already meaningful history of the digital revolution in architecture.

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Publication related to the exhibition:

Note

Zwei deutsche Architekturen, 1949–1989
Kunsthaus Hamburg
21 June–29 August 2004

Städtisches Kaufhaus, Leipzig
15 September–31 October 2004

The title of the exhibition under review subtly signaled the intention of the curators to de-emphasize the social and political differences of the two former German states, and to focus instead on the evolution of two “architectures,” both stemming from a common set of factors following the end of World War II. The exhibition was noteworthy not only as a study in architectural history, but as an active cultural statement as well. The implications of the desire to present the architecture of East and West on an equal footing was immediately understood by most German observers, including the author of a review titled “System Confrontation Completely Relaxed for Once.” For an American audience, however, the reconciliatory aspect of this exhibition may require some explanation. Of all the former Eastern-block states that existed before 1989, East Germany was the only country to completely disappear from the map, to be absorbed by a state and society that shared the same historical and cultural background, but that had embraced a completely different social system and had even belonged to an inimical geopolitical sphere. This situation has had many enduring aftereffects, the worst being the destruction of the architecture of East Germany as the symbol of Soviet occupation and the division of the country. Following reunification, there was also a fascination with the architecture of the East among Westerners because it had so long been closed off, often resulting in a cultural distancing that interfered with objective evaluation. In addition, much of the architecture of the West dating from the 1960s and ’70s has also been little appreciated, and this comparison may lead to a reevaluation of that body of work as well. The exhibition was therefore a wel-