

Being vulnerable: Zaha Hadid in Cincinnati

Bhaswar Mallick

University of Cincinnati, Cincinnati, Ohio

ABSTRACT:

The digital turn revolutionizing ways of construing, analyzing and disseminating information has brought the focus on architectural techniques – how they inform, generate and communicate. A globalized world is also increasingly influenced by the same agendas, publications and images, while being mindful of a visual bias, misrepresentation, and overt reliance. As such it is essential now, more than ever before, to define the scope of architectural techniques as an instrument driving the design process and representing positions of architecture and architects in society.

If Zaha Hadid is a relevant architect famous for her typical drawing techniques generating a unique architecture, the realization of Rosenthal Center of Contemporary Arts at Cincinnati established her credibility for realizing in built form the excitement her drawings promised. This paper aims at revealing the ambiguities, triumphs and compromises, that architectural techniques bear witnesses to, through Zaha Hadid's Contemporary Arts Center project.

The research stems from a narrative commentary of the design process, as witnessed through the various drawings, paintings, physical and digital models published in relation to the project. Each of these representations, in each stage were described, and their relations to the immediately previous and later representation commented. As a written account describing the evolution of the design emerged, it was compared with the published objectives of the clients at various stages of the process, and the architect's justifications published after completion. A visit to the building was undertaken, and an account of the experience was compared to the intentions and achievements claimed.

Ethical dilemmas will be revealed in the process that show the vulnerabilities of the Architect and her technique, and strategies that she adopts to accommodate the same. It will show how design processes have an inherent ethical vulnerability, and how Hadid's admittance of the issue and her response to that is instructive.

KEYWORDS: Globalization, Digital turn, Ethics, Instrumentality, Design process.

INTRODUCTION

The digital turn revolutionizing ways of construing, analyzing and disseminating information has brought the focus on architectural techniques – how they inform, generate and communicate. A globalized world is also increasingly influenced by the same agendas, publications and images, while being mindful of a visual bias, misrepresentation, and overt reliance. As such it is essential now, more than ever before, to define the scope of architectural techniques as an instrument driving the design process and representing positions of architecture and architects in society.

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To establish a proper context for this analysis, the circumstances of the initiation of the project, and appointment of Zaha Hadid as its architect would be first discussed, to understand the objectives and vision that the clients and their architect embarked upon with. Thereupon, the design process will be critically analyzed to show the motives, discoveries and compromises that drove its evolution. Dilemmas will be revealed in the process that show the vulnerabilities of the Architect and her technique, and also strategies that she adopts to accommodate the same. Finally, a discussion of the experiential discoveries of a visit to the site would conclude the analysis. It will be shown how design processes have an inherent vulnerability, and how Zaha Hadid's admittance of the issue and her response to that in this project is instructive.

1.1. The Architectural project

The Contemporary Arts Center at Cincinnati was founded by three women in 1939 as 'Modern Art Society', drawing upon the experiences of MOMA, New York. It was initially housed in the Cincinnati Arts Museum, but moved to its first custom-built space – a first for any contemporary art gallery in America – in 1970. Although the new site was in the central business district, being located on the 2nd level, it was cut off from the traffic on the street, with poor access and visibility. Then, in the early 1990s, the institute successfully defended the rights of Cincinnatians to view controversial photographs by Robert Mapplethorpe, which brought it into the public eye like never before. It earned a reputation of encouraging openness to new ideas and different ways of seeing the world. Thus by 1995, the institute could finally raise enough money and have a moral backdrop to search for a building of architectural distinction, located boldly at one of the most prominent intersections in downtown.

A public symposium was organized in 1997, to define a vision for the building. It concluded in aspiring for:

'a purposeful expression of ideas about art museums and their public, about urban environments and people who inhabit them, about constructed spaces and human interactions within'
(Dochantschi 2008).

An architect selection committee was formed and of 300 qualified applicants, 12 were interviewed. Of them, Daniel Leibeskind, Bernard Tschumi and Zaha Hadid were selected as finalists. The finalists were commissioned to produce concept booklets. Hadid responded by redefining exhibition flexibility, by proposing a kit of different sized galleries, independent volumes fitted together in a three-dimensional jigsaw puzzle, hung from a warped concrete plane (Dochantschi 2008). Hadid's initial quest was to release the site from requirements of a box. It was forceful, so as to break the grid, but not with vulgarity. She showed quick sketches, not of a building, but a kind of energy diagrams. The committee found Hadid exciting and indecipherable, while embracing and extending the institute's central view of its relationship with the audience – providing experiences beyond boundaries (Dochantschi 2008). Zaha Hadid was thus chosen as the Architect for the project in 1998.

It is instructive to see how Zaha Hadid, coming across as unassuming, undecided and vulnerable in these initial stages, endeared herself to the committee, for they could relate to the same. Moreover, proposals in the early 90s had been rejected for being situated at the fringes of the downtown, which show that the institute craved for an individual identity, embedded in the heart of the downtown. They aspired to establish themselves as a contrast to elitist art museums, isolated on a hill. Zaha Hadid was herself an outsider in more ways than one, whose work was unapologetically individualistic, yet civic minded. In Hadid's words, the institute would be a place that has the potential to carve out new memories and generate authentic experiences in an age that offers little opportunity for such encounters.

1.2. The Design process

In this section, the design process of Zaha Hadid is discussed, eliciting the ambiguities and dilemmas that feature within. It is opportune to note at this point that the sequence of design discussed henceforth is speculated on the basis of the development of various design elements. These processes do not seem to be defined linearly in time, and often develop simultaneously.

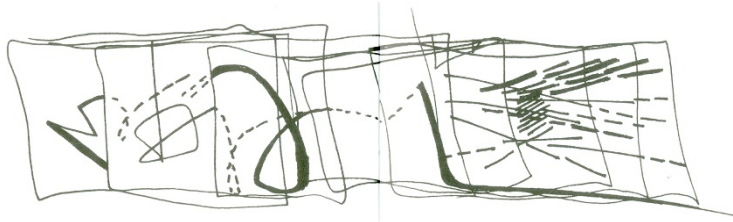


Figure 1: Energy diagram. Source: (Dochantschi 2008)

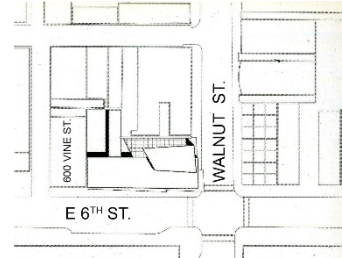


Figure 2: Site plan.

The earliest sketches¹ (Fig. 1) show a sequence of parallel planes, traversed and stitched together by a frolicking line diving in and out of the planes, becoming notional or revealed as it bends and folds – the primal conception of diverse spaces being linked together by a zigzagging circulation path. An acrylic model translates this line as a spiral ramp connecting different floor levels, weaving in and out of an inner wall, while being harbored on a second parallel wall. This ramp strategy can be traced back to the 1992, Guggenheim museum exhibition in New York. Since then, through the many unrealized projects of the 90s, Zaha Hadid can be seen exploring this idea of a spinal, spiral ramp organizing discrete exhibits and spaces into one sweeping experience.

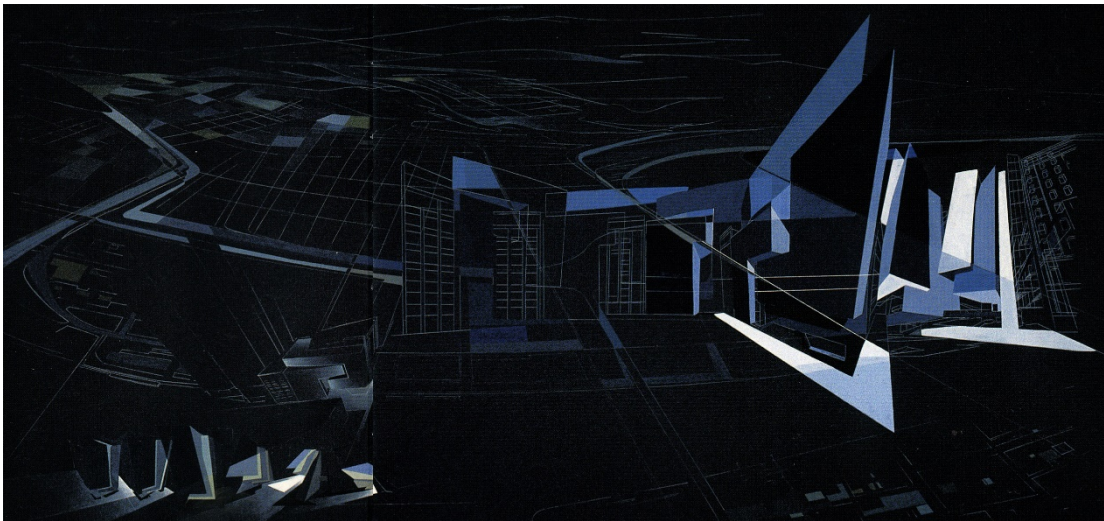


Figure 3: Collage of context. Source: (Dochantschi 2008)

The assimilation of the urban context through fragmentation of the landscape into the site was then explored in a series of Suprematist paintings, which help form the idea of an Urban carpet and define the massing strategy (Fig. 3). Starting off with the immediate context, the height of the Contemporary Arts Center is defined, matching that of the rest of the block, and of those across the street. A collage of paintings shows the drawing of sweeping references from the road networks in the context – the highways sweeping into downtown and energizing the architecture it harbors. The zigzag of the highway to the West, is mimicked by the zigzag of the massing at the Contemporary Arts Center, albeit in two different planes: in plan and in elevation. Zaha interprets the deviations in three dimensions of the massing construct, defining and acknowledging the translation of a two-dimensional road network's geometry into architectural form. The vertically accentuated 'Center at 600 Vine' (Fig. 3) symbolizes a screeching halt to the highway, or an upward shooting up of the highway, manifested by its violent but valiant defying of gravity: defining the skyscraper. This interpretation of the highway sweeping into an expression of exaltation against natural forces, perhaps incites the idea of the Urban carpet, but for being situated in the contrasting axes. In the bottom left portion of the collage, the illuminated 1st level floor plane of the Contemporary Arts Center site marks its presence in the flow of the E 6th street. The white paint strictly adheres to the constraints of the site, and has no indications of sweeping upwards. The roof as seen in this part does not feature an illuminated edge, and the Urban carpet thus, does not yet sweep upwards.

A complimentary mass completes the zigzagging mass, making an interlock, under whose crevice the 1st floor is kept hollow, enticing the public to enter and explore the crystalline caverns it promises to harbor. A muted buffer box between 'Center on 600 Vine' and the Arts Center, feature a grated facade of regular windows

indicative of the administrative office space, and the place for back-end functions that are typical of gallery spaces.

A separate sequence of overlapping perspectives, in right end of the collage (Fig. 3), shows the transition from the Walnut street elevation to the E 6th street elevation. The sidewalks are signified as luminous planes. In the Walnut street elevation, the vertical shaft harboring the ramp along the rear wall associates with the luminous sidewalk as components of public circulation, and is similarly rendered luminous. The stoic straight vertical plane of the shaft, while signifying the verticality of the rear wall, also cuts off this new construct from the adjacent older, typical Walnut street façade. As the building object is turned, the perspective is distorted to look at the underbelly of the masses, as seen from the lobby on the 1st level. The marking of the site by a luminous ground plane, conforming to the extents of the site along the E 6th street, can be seen connecting with the luminous vertical circulation shaft in the rear. The sweep of the Urban carpet turning upwards into the rear wall can herein be seen in its conception.

Although the acrylic model had already featured the curvilinear sweeping up of the urban carpet, the reference to the sweeping in highway hint at another inspiration. Moreover, a series of paper models exploring the weave of the ramp, also simultaneously explored the connection between the wall and the street across the base. The curving of the base to form the wall, was modified, rejected and brought back. Whereas the non-linearity of the evolution of the urban carpet, is typical of design development, the drawings evidence the origin of the idea being story-ed in multiple ways. It reveals the architect's dilemma and subsequent efforts, subjugating the multiple inspirations to rather present a story of design conception that makes a more convincing linear argument.

The cascading concrete façade, the jostling volumes and the cavernous massing evidence the inspiration of Magritte's floating rock paintings. But as the following would show again, multiple objectives that were required to be resolved, influenced the design process. Zaha's drawings and models in this phase can be understood as multiple story-making exercises that would assimilate into a seamless fusion. Yet, being true to the AA school's practice of fragmentation and 'social condensers', Hadid can be distinguished for not aiming at definitive solutions. Instead, as if to maintain vitality of these differences, she makes the elements vulnerable. In essence these vulnerabilities are what evidence the tensions, and make the project a dynamic experience – corrupted by, and thus relatable to everyday life's triumphant struggle.



Figure 4: Elevation in Plan

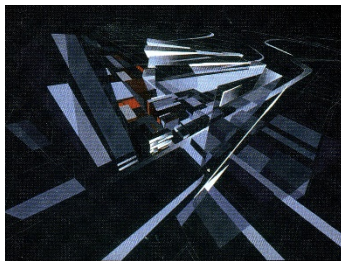


Figure 5: Context to North-East

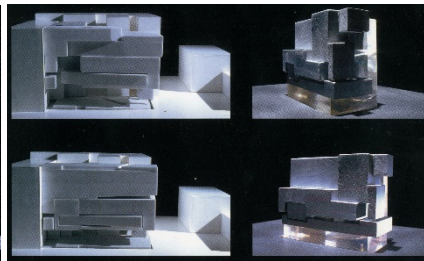


Figure 6: Early massing models.
Source: (Dochantschi 2008)

The next abstract painting (Fig. 4) shows the E 6th street elevation represented in plan, as mid-rise narrow boxes and closed spaces. The perspective distorts and folds as it approaches the Contemporary Arts Center site. The elevation along the E 6th street, by correspondence of the context, is thus depicted as a bunch of discrete narrow midrise boxes. But because the site is restrictively small, similar boxes overlap one another and become a jostling bunch on site. The spinal ramp and the Urban carpet can be seen as the 1st level is revealed, while the other masses float above. The elevation along the E 6th street thus becomes a collage of discrete pure-geometric squarish faces, notional of the plan along the street edge in this context. Further, an overall bird's-eye view shows the context to the North-East (Fig. 5). The connections flowing in from Highway 71 into Cincinnati from the East are accentuated as suggestive parallel spatial volume-flows. The horizontally stacked massing of the Contemporary Arts Center resonates with this interpretation of the context.

The crudest early paper models (Fig. 6) show a stack of volumes segregated by floors. In this, the notion of the Urban carpet and the rear wall are absent. But, in the next model, the crevice of the interlocking, developed in the early paintings, appear as if transforming to a subtle fusion. A ribbon window that seems to originate from the double height space with a glazed façade replaces the complimentary counter mass to the zigzag mass, that now comes together as a ribbon window framed within an opaque volume. Over the next few variations, the overall composition shifts from one with a light corner but a heavy double height volume at the other end, to being centrally balanced in the second variant. This evolution anticipates the ultimate loss of the

vertical elements along the E 6th street, for they add or remove weightage to the Urban carpet. Rather, the pure horizontality of the masses eventually reduces the Urban carpet's dominance, making it vulnerable. The 'Center at 600 Vine' anchors one end, while the corner is deprived of a balancing vertical element. Making the Urban carpet vulnerable is essential for it allows the alternate oblique connection of the rear wall with the road intersection to start fostering itself. Finally, an all-red and an all-white acrylic model (Fig. 7) were also made to study the cavernous volumes formed inside, and how the ramp connects through them, even as it clings on to the rear wall. The connections of the stoic back-end service block with the galleries on every level are thus understood.

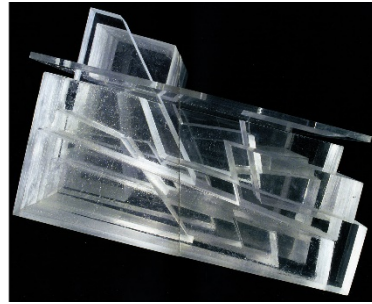
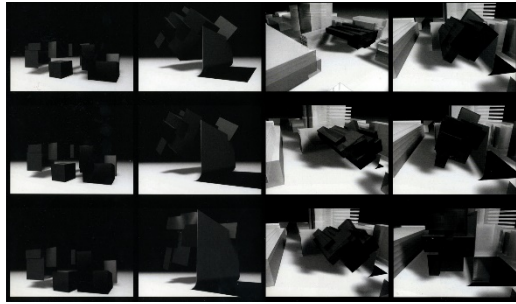
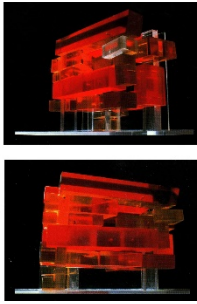


Figure 7: Massing

Figure 8: Folding the mass, computer modelling.

Figure 9: Volumetric study

Computer generated monochrome graphics (Fig. 8) correlate the assembly of fragmented mass elements being tightly packed and the Urban carpet folding upwards to harbor the same. The scale of the constituent pure-geometric blocks empathizes with the small scale buildings of downtown. Two different sequences show this transition, thus evidencing a subtle difference in telling the story. In the first, the carpet is already folded up and the mass turns and aligns itself along it. In the second, the mass stays aligned with the carpet being peeled off, and as the carpet folds, the mass turns with it. Again exploration of different ways of saying, or justifying, a design development indicates the effort to maintain and effect the many objectives and inspirations – multiple ways leading to a fragmented but coherent solution.

Computer generated three dimensional models (Fig. 10) helped visualize walk-throughs along the ramp, exploring views of, and from, the same. The galleries developed a parapet wall at the edge and the floors were terraced, that is, the edge of the floor above receded away from the ramp, allowing generous views of the vertical volume along the rear wall for comprehension of the complexity of the ramp weaving in and out. The drama of the ramp connecting the terraced floors of cavernous gallery spaces, each of different shapes and sizes, was thus explored. The rear wall and structural columns, unforgiving in their verticality, contrast the otherwise varied interior landscape. The parapet along the edges of the ramp resonate with those along the floor edges, transforming the identity of the ramp from being a distinct tool facilitating vertical transport, to becoming the vertically fluid spatial extension of the exhibition floors.

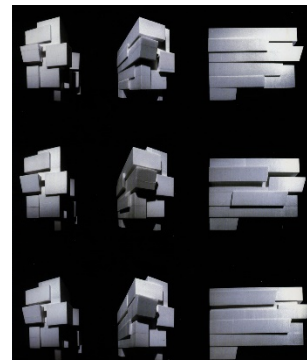
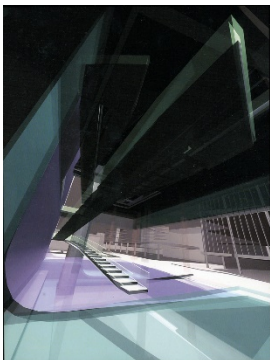


Figure 10: Computer generated walk-through. Source: (Dochantschi 2008)

Figure 11: Façade Study.

Finally, a series of foam block models (Fig. 11) were used to refine the proportions and composition of the E 6th street and Walnut street elevations. Cycling through variants, the elements were fragmented in one way and assimilated with another, searching for a balance between dynamism and relatable scalar association with the small scale buildings of downtown Cincinnati.

1.3. The experience on site

The temporality of spaces is an important facet of the CCA project. The rigor to achieve the same may be witnessed in the models and drawings exploring the 'jigsaw puzzle of masses', 'the façade study' and in transparent acrylic 'the void study' (Dochantschi 2008). But only when one travels through these spaces does one realize the invitation of those intimate niches. And only when you embark upon exploring this niche, do you find this interesting door tantalizing you into an even more intimate space, and so on. Each space is uniquely squarish, low ceilinged, double heighted or narrow. There are no windows, and since there are no windows, these characters are the only clues to finding your way back. Only when you are some way into the sequence, this tedious remembering gives way to panic and awareness of entrapment. Then, it is only the artwork that assures and transforms the experience to one of exploration and discovery (Betsky 2009) – typical ideals of contemporary museum design – reimagined.

Another feature that the publications fail to portray is the role of the ramp as provider of 'relief space'—another idiom of contemporary museum architecture. The double flight to each floor is punctuated by the mid-landing (Fig. 6), which invariably is nearest to the only, otherwise unapproachable, curtain wall. So each time one embarks on the spinal ramp, he is taken from the hermetic galleries to a view of the busy urbanity of downtown Cincinnati, and then brought back refreshed. The contrast of 'inside and out' manifests from monochromatic interiors to polychromatic outside and back, from silence to urban noise and back, from abstraction of art to realism of life and back, and so on.

The colors and materiality of the Center are the sole impositions of Zaha's palate unperturbed by the context. There maybe two explanations for this. Firstly, it must be remembered that the process of deconstruction is essentially reductionist. The landscape and the context are stripped off of their materiality for unencumbered fragmentation. As it is, the fragments present a chaotic distorted world, where lack of materiality reduces confusion. The focus essentially is formal. This may be attributed to the loss of information and ignorance of materials in context. Secondly, the project marks a pivotal phase of Zaha Hadid's career, when her colors start deviating from being representative to formally influential. It also is when she goes from being a paper architect to constructing projects in different continents. The concrete 'Urban carpet' does borrow from, and relate to, the concrete pavement all around. But the ramp, which is such a well published element, and one of the exterior masses, feature heat-welded, glass reinforced polyester which is most clumsily executed – as seen in the handrails of the ramp. Such ambiguities and inconsistency in material selection and application indicate an architect finding her material sense, rather than a mature master with an established repertoire.



Figure 5: Relief spaces. Source: (Author)

1.4. The Ethical dilemma

The design process as an instrument to achieve aspired and defined objectives, creates a principled narrative. The integrity of an architect is often associated with these principles and how stringently held-fast the modern architect's narrative can remain thus. A principled design process comes across as rational and intelligent. The architectural techniques of the architect thus bear the weight of being this instrument to achieve good design. Yet, according to Dewey, ends, goals or ideas do not arise out of nothing, but develop through action as a method of dealing with a real situation. "End in view" are also instruments to achieve eventual real ends. The techniques of an architect being exploratory leads to discoveries, requiring compromises. The ethical dilemma arrives when the narrative of the process is negotiated as well to retain the moral responsibility of truthful depiction of the situation, environment and present time, all judged by his, or her, adherence to stated principles.

Zaha Hadid's architectural technique is a lesser instrument in construing architecture than her principles of fragmentation, allowing vulnerability. The rebellious language of the Suprematists search for a truth, by daring to portray the individuality of the 'other' is Zaha Hadid's response to the ethical dilemma, portraying contradictions to allow a more truthful reality to emerge.

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ENDNOTES

¹ This is possibly a variant of the energy diagram that the selection committee referred to, exhibited during their first visit to her office.