

TYPOLOGY, DYNAMISM AND THE IDEA

neeraj bhatia
99 076 873

The concept of purely dynamic architecture is contradictory to the idea of type. Whereas dynamic architecture is concerned with being flexible, diverse, and ephemeral, typology is a result of precedents, codes and regulations. Because museums are containers of culture, as a typology they are concerned with reflecting the current culture of society more than other buildings. The interest in creating 'dynamic' architecture is rooted in our modern, temporal culture, as stated, "Novelty is so ephemeral and cycles so short that they cease to exist. Logic has accelerated to such an extent that it becomes simultaneous and perpetual"¹. It is this speed and ephemeral condition (a reflection of our current culture) that architects are aiming to instill in their buildings.

In the modern conception of architecture, the interior programme of the building is reflected on the exterior façade. This becomes an inherent dilemma in designing a museum for an artist whose artwork is highly influenced by digital technologies, and is therefore always in a state of flux. This is because architecture is static; it must have a constant thermal envelope, adhere to codes and regulations, and is therefore always *rooted* in typology. More specifically, this static nature of architecture means that it is a reflection of culture at a *definite point in time*. How, then, can architecture respond to the transient and temporal quality of modern culture?

According to Hancock, although *rooted* in typology, architecture can still evoke the *idea* of dynamism, as expressed, "The typology argument today asserts that despite the diversity of our culture there are still *roots* of this kind which allow us to speak of the *idea*"². Aspects of the idea that were of concern to the design of the Nam June Paik Museum [NJPM] were the use of circulation, expressive icon, siting, materiality, form, and skin. This idea of dynamism is most clearly noted in The Guggenheim by Frank Lloyd Wright, The Kunsthal by the Office for Metropolitan Architecture and The Technology Culture Museum by Asymptote Architects. Each of these projects is *rooted* in museum typology but still invokes the *idea* of dynamism in architecture, and is therefore a response to our transient culture.

¹ Cerver, Francisco Asensio. "The Architecture of Museums". New York: Hearst Books International, 1997. page 4

² Hancock, John E., "Precedent and Invention. Between History and Tradition: Notes Toward a Theory of Precedent – volume 5". Boston: The Harvard Architectural Review.

THE GUGGENHEIM MUSEUM | Frank Lloyd Wright | New York | 1945 - 1959

The use of Circulation and Icon



FIG A1 - CONTINUITY BETWEEN FLOORS

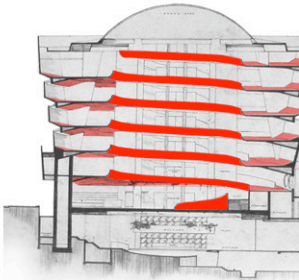


FIG A2 - PERFECT PLASTICITY OF PRESENCE WITH THE USE OF A CONTINUOUS RAMP



FIG A3 - FLW WITH HIS ICONIC BUILDING OF ORGANIC PROGRESS

The Guggenheim Museum by Frank Lloyd Wright was perhaps his most famous commission and the first dynamic museum. Wright's aim for the museum was that it "provide a perfect plasticity of presentation"³. This plasticity was achieved with his innovative use of both circulation and icon.

The Guggenheim museum uses a spiral plan. The exhibition is located on circulation ramps instead of in rooms. Wright reconceived the manner in which the modern patron views art. The modern patron is moving while seeing art, the entire process being dynamic in nature (Fig. A1).

The spiral circulation ramp also ensures that the patron is moving continuously in three dimensions spatially (Fig. A2). Whereas in a conventional museum the patron is moving on flat floor plates (a two dimensional plane) and encounters abrupt thresholds between floors. The spiral works as a continuous whole, wherein the floor, ceiling, and wall act as one to produce a fluid experience, as described by Wright, "After taking the elevator to the top, the visitor 'drifts down' the curving ramp, carried along by its slow regular, pulsating movement. No level horizon line is visible across the open well – only the rising and falling shapes of the parapets, curling like undulating water."⁴ Wright's 'perfect plasticity' was achieved with the use of a continuous ramp that was able to dissolve thresholds between rooms and between floors. Movement down the ramp was intended to "feel effortless, as if one were being carried along the crest of "a curving wave that never breaks"⁵. Inevitably, the circulation in the Guggenheim enables a fluid experience that instills the idea of dynamism in the building.

³ Levine, Neil. "The Architecture of Frank Lloyd Wright". New Jersey: Princeton University Press, 1996. page 334

⁴ Levine, Neil. "The Architecture of Frank Lloyd Wright". New Jersey: Princeton University Press, 1996. page 355

⁵ Levine, Neil. "The Architecture of Frank Lloyd Wright". New Jersey: Princeton University Press, 1996. page 335

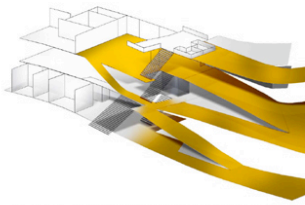


FIG A4 - INTERIOR CIRCULATION ROUTE - CONTINUOUS SET OF RAMPS

The Guggenheim has a very clear and expressive icon in the spiral. Wright felt that the spiral was a symbol of “organic progress” (Fig. A3) as stated, “The spiral contained the possibility for expressing ... the idea of artistic progress and the sense of communal absorption in that process.”⁶ Not only does the spiral symbolize the progression of art, but also society’s involvement in the process - inherently linking the icon to the collective vision of the museum in New York City and vice versa. Furthermore, by using the expressive symbol of the spiral, the building’s exterior is a reflection of the dynamism on the interior.

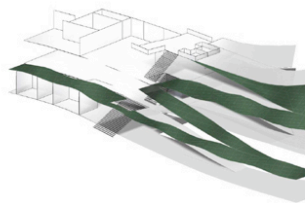


FIG A5 - EXTERIOR CIRCULATION ROUTE - CONTINUOUS SET OF RAMPS AT AS SCULPTURE GARDEN

In the design for the NJPM, we were interested in using the building as a means for both transversing the hillside and viewing art. The exhibition was put into large ramps or ‘fingers’ that followed the natural contours of the hillside (Fig A4/A5). The patron is constantly moving along and down the hill, as well as through the museum encountering no abrupt thresholds. The museum, therefore, becomes a path from the city to the park. The subtle yet continuous movement from the city entry (top of the hill) to the Sangaal National Park (bottom of the hill) induces the idea of dynamism in the building – the building is both a route and a destination.



FIG A6 - STRONG ICONIC PRESENCE OF N, VISIBLE FROM HIGHWAY

It was crucial that the NJPM had a clear, yet expressive icon facing the major highway and city entry. This icon would be identified as both the symbol of the museum and the city. Because of the innovative nature of NJP’s work and Kyonngi’s interest in being identified as a progressive city, we opted for a modern icon. We used an iconic crystalline structure for the main lobby entrance (Fig. A6). The crystal is both strong yet welcoming, and visible yet not overpowering to the park while still being a technological innovation. Just as the iconic Guggenheim is linked to New York City’s collective vision of progress, the innovative Crystalline form of the NJPM is hoped to be linked to Kyonngi’s collective identity, and although rooted in type, it can still induce the idea of being transient and dynamic.

⁶ Levine, Neil. “The Architecture of Frank Lloyd Wright”. New Jersey: Princeton University Press, 1996. page 353

Siting Condition and Materiality

The Kunsthal by O.M.A had an analogous siting condition to the NJPM. It is wedged between a highway to the north and a museum park to the south. Koolhaas responded to the siting with massive ramps that cut through the building. The ramps serve two purposes. First, they connect the higher level of the city to the lower level of the museum park. Secondly, they are used to connect the interior programme of the building, as expressed, “A ramp is a luxury. It travels through time, collecting moments of arrival and departure, its line through space touching all parts and mixing adjacencies”⁷. By having the ramps connect both the city and park as well as the interior programme, the building becomes intrinsically linked to both elements –city and park (Fig B1). Thus, the building is both a museum and an entrance gate to the park as stated, “The Kunsthal... is urbanistic in the priority it gives to circulation, which takes the form of a continuous path through the building. Progression along this path is like the unfolding of a film narrative.”⁸

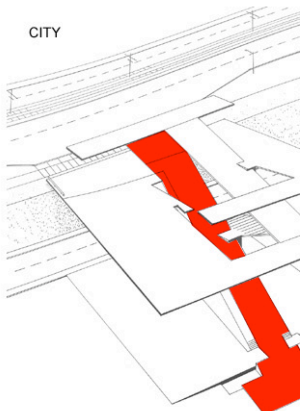


FIG B1 - CONNECTION OF RAMP TO CITY, INTERIOR PROGRAMME



FIG B2 - CITY ELEVATION - LARGE INDUSTRIAL BUILDING RELATING TO THE CHARACTER OF THE CITY



FIG B3 - PARK ELEVATION - SMALL SCALE BUILDING WITH CIVIC PROGRAMME (CAFE)



FIG B4 - SECTION THROUGH SPINE

This narrative includes the manner in which the city pours into the park and conversely, how the park climbs up to the city. The city flows through the building in the form of urban functions along the park’s edge (cafes, restaurants), and materials (glazing along the park’s façade). Equally, the park materializes in the building through tree trunk columns in the lower hall and rooftop gardens facing the highway. The museum becomes an ‘in-between’ piece united by a circulation spine that carries people through and into it (Fig. B4) as expressed, “Circulation not only provides unmistakable orientation but is also dynamic – one has the feeling of being literally propelled from one space to another”⁹ As a threshold between city and park, the Kunsthal has a constant traffic moving through and within it, and

⁷ Balmond, Cecil and Jannuzzi Smith. “Informal”. New York: Prestel, 2002. Page 101.

⁸ Newhouse, Victoria. “Towards a New Museum”. Germany: The Monacelli Press, 1998. Page 232

⁹ Newhouse, Victoria. “Towards a New Museum”. Germany: The Monacelli Press, 1998. Page 234

CITY

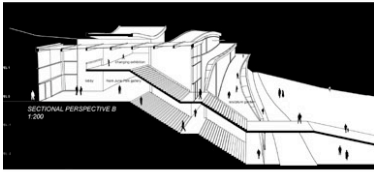


FIG B5 - SECTIONAL PERSPECTIVE THROUGH 'SPINE'

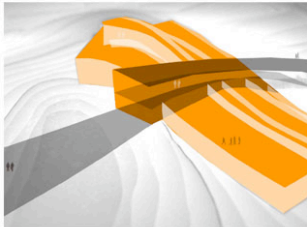


FIG B6 - TWO CONCURRENT AXES. SPINE AX IS INDICATED IN GREY

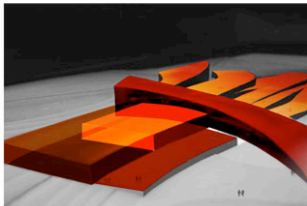


FIG B7 - CENTRAL AXIS SERVES AS A MEDIA POINT BETWEEN ANCHORED ELEMENTS. FLOWING ELEMENTS IN THE BUILDING

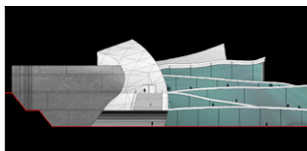


FIG B8 - EAST ELEVATION: DIGITAL EXTRUSION LANDSCAPE

therefore an imposed sense of dynamism.

The façade of the Kunsthall along the highway's edge relates to the speed and scale of the city. For instance, super graphics on the façade correspond to the magnitude of the city and speed of passengers on the highway. Furthermore, large glazed and steel panels mimic the industrial quality of the city (*Fig. B2*). Conversely, along the park's edge, the museum is clad with smaller scaled stone, relating to the tranquil and material quality of the park. (*Fig. B3*). The subtle shift in materials to the diverse elements on either side evokes the idea of dynamism in the building – the building's skin is flexible, both a result of interior and exterior tensions.

The siting condition for the NJPM had a highway and city to the west, and a national park on a lower level to the east. We sited the museum in 'fingers' along a hillside that ran N-S down to the park. The entry was naturally located at the top of the hill, in line with an existing museum. The exhibition fingers that ran down the hillside are all linked with a massive circulation spine. The spine intersects each exhibition ramp and also connects the city to the park (*Fig B5*). Furthermore, the circulation spine also links the interior exhibition fingers to the roof top sculpture garden (located above the fingers). Thus, by connecting the city and park, as well as the interior programme, the circulation spine inherently links the exhibition fingers directly to both city and park (*Fig. B6/B7*). The exhibition therefore becomes the threshold between the city and park (man made vs. natural). The city flows onto the park's west façade in the form of LCD television panels. The park rises into the city, in the form of roof top gardens. Therefore, by siting the building at the threshold between the park and city, there is a constant movement of people through and within the museum. The building is no longer static; it is a connection and threshold between two distinct spaces – the museum becomes evanescent in nature.

The materiality in the NJPM shifts on the different edges of the building to relate its exterior context. Along the park's façade, the exhibition rooms/ fingers are embedded into the earth. They contain an intensive green roof with a sculpture garden. Clad in LCD panels, the walls represent the digital extrusion of the natural landscape; the energy of Nam June Paik's work from below pushing upwards (*Fig B8*). These subtly embedded fingers tear away from the earth and define themselves at the top of the hill in response to the city's presence. Furthermore, the West (city) façade is primarily clad with large-scale steel panels and glazing – relating to the scale and form of the city. Ultimately, the transformation of the museum's materiality and form, as it relates to the varied conditions on either side infuses the museum with the *idea* of change.

TECHNOLOGY CULTURE MUSEUM | Asymptote Architecture | New York | 1997 – present

Material Skin and Form



FIG C1 - ORGANIC FORM OF TCM CONC
THE COMPUTER. DIGITAL SKIN
CONTINUOUS STATE OF FLUX

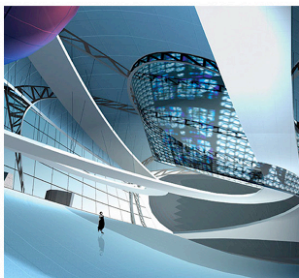


FIG C2 - SCALE OF INTERIOR SPACE IS
TO CONCEIVE

The Technology Culture Museum by Asymptote Architects is perhaps the first example of a truly dynamic museum. Dedicated entirely to the display and celebration of new technology it was crucial that this museum had the same transient quality as our current culture, as declared, “The conception that everything is in a state of flux — that the narrative, the image and plasticity are elastic and undergoing continuous change — is absolutely central to the idea of new media”¹⁰. The technology culture museum is the most literal, yet the closest to the idea of dynamism in building, while still rooted in typology.

The skin for the Technology Culture Museum is made of LCD “video signals” that are wired to web cams surrounding the site. The web cams relay real time images onto the entire building façade. Additional projections from other web cams around the world are superimposed on the façade. The skin of the building is constantly in a state of flux, determined by the site, the patron, and activities from around the world (*Fig C1*). The skin ultimately is a product of the conditions that produce our ephemeral culture – technology, image and the user. In this conception, the skin truly reflects the interior programme on the exterior façade, liberating architecture from its stable nature, and instilling the sense of flux into the museum.

The form of the Technology Culture Museum was conceived through the use of 3D computer technology. The fluid shape, with no defined edges produces a building that is difficult to understand in scale and form. This incomprehensible quality actually instills the idea of dynamism into the museum. As the patron walks around and through the building, it constantly seems to be taking new form. Furthermore, because of the challenge in comprehending the scale,

¹⁰ Couture, Lise Anne and Hani Rashid. “Flux”. New York: Phaidon Press, 2002.

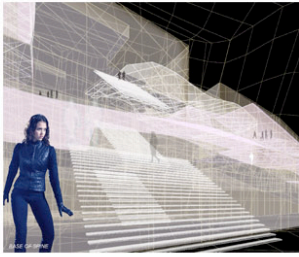


FIG C3 - COMPUTER MODELLING WAS USED IN THE EXTRUSION OF THE LAND

the spatial connections within the building become hard to understand (Fig. C2). Since the patron has difficulty pin pointing spaces (as there are few spatial references), all spaces seem to be new – provoking an ephemeral quality to the museum.



FIG C4 - PROJECTION SCREENS IN THE INTERIOR MAKE IT DIFFICULT TO COMPREHEND SPACE

While producing a building for an artist whose medium is technology, we deliberately used the same medium for the conception of the project. The exhibition fingers are extruded upwards to produce space below. The term extrusion implies a stretching of a form from a stable state. The walls of these extruded fingers therefore represent the instability of the process. These are the walls clad in the LCD video signal skin (Fig. C5). This produces a deliberate juxtaposition – a highly dynamic, technology based skin, embedded in a static, natural earth (Fig. C3). This juxtaposition is purposeful, as it is a critique on both Paik's work and the specific siting of the project. The museum is both a response to the city and the park.

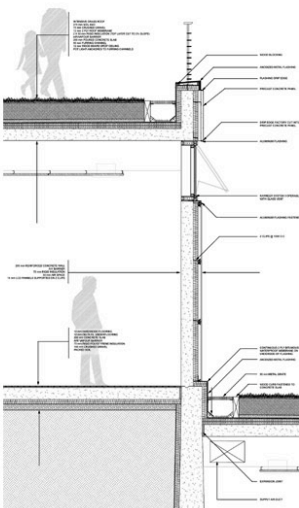


FIG C5 - DETAIL WALL SECTION SHOWING PANELS AND RELATIONSHIP BETWEEN INTERIOR AND EXTERIOR

The form of the museum was produced through 3D software. With the aid of the computer, we were able to sculpt the idea of dynamism onto the form of the building, and play with the juxtaposition between fluid and static spaces more subtly. The fingers that run down the hillside have been extruded in different amounts to control the speed that the patron moves through the museum and to alter their experience. Furthermore, the rooftop gardens have been extruded in a different nature to produce a varied event on top of the building. The computer enabled us with the capacity to integrate the idea of dynamism through form into the project. Moreover, it was important to depend on technology for the conception of the project, just as Paik's work is highly dependent on technology. The language of technology is transient, ephemeral, and in a constant state of flux – by conceiving of the project through the use of it we were able to graft that same language onto the project.

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conclusion

Upon winning the competition for the Eyebeam Technology Museum, Liz Diller stated, “The great challenge ahead is to reconcile their discrepancy in speed: architecture is permanent by nature and new media is transient by definition.”¹¹ This discrepancy between speeds was a great challenge in the design for a museum dedicated to a technology driven artist. Because modern culture is highly based on technology, and because technology is so rapidly changing, our modern culture is in a constant state of flux, as declared, “The technological revolution arising from the development of information technology and media has undoubtedly led to a transformation of the museum. It is not that what is past is out of date; what will happen within two years time is already out of date.”¹² Since the Nam June Paik museum is both a permanent building and a containers of our transient culture it needed to express this juxtaposition, as expressed, “When properly designed, new museums should be as varied as the virtual reality that complements them, as varied as the art they contain”¹³ It was this aim to induce the idea of dynamism into the project that inspired the examination of projects that strived for the same transient quality as our current culture.

Typology is a response to building codes, fire regulations, and the scale of human activity. It is therefore a basis for building. In Hancock’s assertion, “The typology argument today asserts that despite the diversity of our culture there are still roots of this kind (typology) which allow us to speak of the idea “. ¹⁴ Hancock states that buildings are rooted in architecture, but it is the idea that can shift. Thus to produce a dynamic building, you must look at the *idea* of dynamism in the building. This *idea* of dynamism was clearly noted in The Guggenheim, Kunsthall, and Technology Culture Museum. Each project was rooted in typology, but still invoked the idea of dynamism through devices such as circulation, icon, materiality and form. Likewise, the Nam June Paik Museum was *rooted* in typology, but learnt from the *idea* that these projects produced of dynamism. Ultimately, typology is the root of architecture and the idea is design. It is this idea that will produce architecture that is both innovative and relevant to our transient society.

¹¹ Arcspace.com/architects/dillerscofidio/eyebeam/. “Eyebeam”. April 8, 2002.

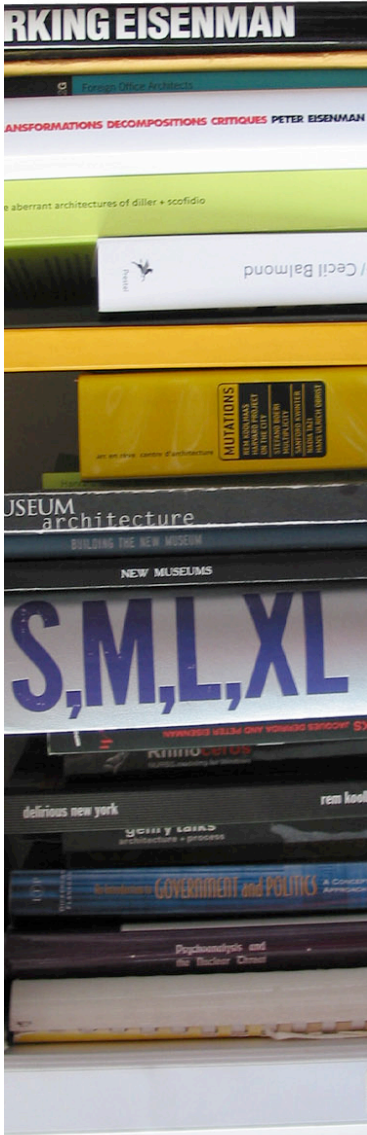
¹² Cerver, Francisco Asensio. “The Architecture of Museums”. New York: Hearst Books International, 1997. Page 4.

¹³ Newhouse, Victoria. “Towards a New Museum”. Germany: The Monacelli Press, 1998. Page 270.

¹⁴ Hancock, John E., “Precedent and Invention. Between History and Tradition: Notes Toward a Theory of Precedent – volume 5”. Boston: The Harvard Architectural Review.

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