Quatremere de Quincy defines type as "... the rule for the model ... the inherent structural and formal order that allows architectural objects to be grouped together, distinguished and repeated" (Argan, On The Typology of Architecture, 241). Historically, it has been considered as the essence of architecture, the raison d'être. On a less general level, the typology of a certain architecture to be understood within the social and cultural fabric around which it exists. This understanding is further evident in its form. Similarly, one can note the forces acting on an amoeba or spirogyra, for example, due to its ever-changing form. On a morphological level, type can be seen as an adaptable organism which influences form and explains or diagrams the program or functions acting on form (Thompson, On Growth And Form, 11). Following along the same trajectory, the form of Sendai Mediatheque was heavily influenced by its lack or definable program requirements, its environment and events surrounding the time period in which it was conceived.
The form of the Sendai Mediatheque took a route that was distinctively different from traditional form finding methods. Firstly, buildings inception occurred during the infancy of the information age. With so much unpredictability regarding the definition of that period, what it would comprise of and deal with, the building needed to be categorically modular. “It needed to be the image of a new urban function space for a new age (Ito, Sendai Mediatheque, P:9)” … fusing sensual media with electronic audiovisuals while creating a space which affords communication on varying scales. In other words, it needed to be program-less.
As a response to designing a building with no apparent program (especially if traditionally, program/function/force was the main determinant of form) the architect needed to view the project from a different lens in order to accommodate the building’s needs. He notes: “The aim of our proposal … was a simple, prototypical building. By prototypical, I mean to say not a specific form of building but rather a system capable of meeting any and all programmatic conditions that might arise” (Ito, P.11). Ito sought architectural inspiration from a source whose morphology was anything but static. He described the “erotogenesis of his Sendai Mediatheque to be rooted in the experience of observing languorous plants and piscine movements through the glass wall of a giant aquarium” (Witte, Sendai Mediatheque, 29). 

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The outcome of this study birthed a conception of space that was different from most architects of the post-modern era and still distinct in many ways today. Structurally, Ito was influenced by the Domino system (which as name suggests, utilizes the process of vertically stacking columns and beams) from Le Corbusier’s modernist architecture ‘catalogue’.

Ito retained the idea of the stacking Domino effect with floor slabs,

the columns would be replaced by structural members placed asymmetrically - reflective of the buildings modular nature.
The resulting form consists of three basic architectural elements, plates (the building’s floors), tubes (the plant-like columns which dissect each floor) and the skin (the facade or exterior walls). Ito thought of these elements as the basic necessities for the form of any architecture. However, it is important to note that the floors, columns and skin don’t necessary make a building. Spaces for circulation, entry and exit, and spacial designation were also necessary. Interestingly enough, once these spaces have been added, one has to question whether the resulting form can now be classified as part of a certain type and normative, or atypical and of no type at all.
"Tethered to one another, the Mediatheque's constituent elements operate within a different rule-set from those propounded by the rules … which were modern architectures arbiters of control" (Witte, 18). This is demonstrated in various areas throughout the building. For example, the girders within the floor system are arranged based on their need to transfer loads to the irregularly shaped columns splattered throughout the building as opposed to more conventional means of load transfer. Also, similarly, the circulation system on each floor is organized around the furniture, partition walls and information areas whose influence extends radially no more than four of five meters from each particular element. The influence this has on the building is that each floor is so characteristically different in terms of organization that each floor could be seen as a different building or type as they relate to their current program and concurrently as the same building tied by the intersecting tubes structurally driving the form of each space.
The prototypical nature of the building is further explored in the design of its exterior. With seemingly no surrounding pattern language to go by when considering the urban fabric of Sendai, the architect devoted what seems like a prototypical cladding strategy. The exterior surfaces connecting each floor on the east side of the building were differentiated which I hypothesize visually responds to the lack of program in the building and the lack of a clear urban pattern in that region. The adjoining exterior surface on the south-side however, dispels that notion and is read singularly with one material understanding.
It is evident that combination of the buildings elements serve as a metaphor for the form of the building itself. This gestalt theory of perception is prevalent on many levels throughout the building. On one degree of function, the building serves as a space that affords different activities for different groups of people. On one degree of form, the irregular sizing of the tubular structures, the differing spacial qualities on each floor and the surface differentiation on the buildings exterior, all serve to highlight the buildings lack of program. Ito allowed form to be a determinant of program, and designed a building which was representative of ‘programlessness’ which program could seamlessly engage with.
Critically speaking, one could argue that the resulting form is a typical box-like structure. Designing a building without type will more often than not result in the perceived ambiguity that is evident in the Mediatheque’s form. If one considers a building with no type to in fact be a type, Sendai Mediatheque is the first building of its kind. But because of the building’s prescribed function, one questions whether future buildings of this type will produce the same kind of form. And if so, whether design process can be altered to introduce variety in its type-form while not inducing the qualities that define other building types.
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INTRODUCTION

Body in architecture can be described as the progressing distancing of the body from the building. It involves a gradual extension of the anthropomorphic analogy into wider and wider domains. The three stages in this successive transformation of bodily projection seem especially important for contemporary theory: the building as body; the building epitomizing bodily states or states of the mind based on bodily sensations. In essence, an all encompassing personification. In Sendai Mediatheque, this personification is embodied by the building’s presence as a structural body and an integrated body, which in combination, help transform its overall perception.
Sendai Mediatheque during conception, was the epitome of innovation. The evolution of communication, spatiality and the social economy in Sendai required an innovative response which was present in the concept of the Mediatheque, its structure, and its eventual perception from an architectural perspective. This perception is most evident in the body of the building - the building in form, function and appreciation.

Any single body, physical or metaphysical is based on a certain principle in order to maintain its structure. For the human, this principle is balance, achieved through the tripod formation of the heel, big toe and smallest toe. These apparatuses are necessary for walking, running, climbing e.t.c. If any are missing, or cease to work, structural stability in the human would be difficult to achieve. In the Mediatheque, structural principle arrives as a result of space. Because Sendai is a highly seismic region, the body of the Mediatheque innovated in structure in order to accommodate its surroundings. As Witte explains, “The structure of the four large corner columns changes at the basement level from a lattice truss above ground to a ductile-type rigid frame structure below … This allows us to greatly reduce the earthquake [of the body] by absorbing [the greatest amount] of seismic energy at the basement level” (Witte, 46). This idea is not dissimilar to Merleau-Ponty description of the unity of body. He notes, “…I want to reach the telephone, … the movement of my hand towards it, the straightening of the upper part of my body, the tautening of the leg muscles are all enveloped in each other.” (Merleau-Ponty, Phenomenology of Perception).

In the human body, the heel, big toe and smallest toe works in tandem to maintain its structure and respond adequately to the changes in topological space surrounding it. The Mediatheque as a united body achieves this by each mechanism working in tandem to provide structural stability in response to the high seismic space surrounding it.
The Sendai Mediatheque stands for integration in every sense of the word. From the tangible level of integration that is involved in the combination of concrete building elements such as, slabs, columns, beams and the like, to those which are intangible such as the waves of wireless data surfing through the air, each aspect is in some way, integrated with each other.

Although similar, it is important to note the difference between the structural body and the integrated body. It lies in their goals. The goal of the structural is stability, while the goal of the integrated is interoperability.

On a macro scale, the initial concept of the mediatheque itself was centered around the combination of different spaces: A new building for the Sendai Civic Gallery, a replacement structure for the dilapidated Aoba-ku Branch of the Sendai Public Library, and improved Sendai Audiovisual learning center and and information services center for the audio-visually impaired. As a result the building itself serves as a working body which fosters the integration of these service centers.
Similarly, the phenomenology of the building involves certain biological and kinetic qualities which obscure its perception as a building. As tubes are a central aspect its phenomenology, they are capable great movement as well as feats of energy absorption designed in response to the potential of earthquakes in the seismic region of Sendai. In further personification, Witte notes that “Several elevators slowly … [rise and fall] to electronic tones; [tubes are often] clouded with condensation, apparently from an air conditioner, and filled with subtly changing daylight that emanated from within. It was as if the building itself were starting to breathe” (Witte, 26). The personification of the building explains its qualities as a singular anatomical body as it responds to its environment.

On a smaller scale, the mediatheque allows for integration of the community as a body to the building. As per the initially prescribed concept of the mediatheque, it is clear that it was to be accessible as well as useful to anybody within the surrounding community. That is, a space for the audio-visually impaired, a fully functional library which would cater to all ages, and a civic gallery. The building would then serve as a space for integration of these bodies. Therefore, the interaction of these bodies with the building results in an institution for bodies to interact.

The combination of the mediatheque’s conceptual spaces, the connection of the surrounding community to the building, the building to people and thus people to people transform the building itself into an integrated body.
The combination of body to body in the building inform the building both as a place and the transformation of an idea.

According to Vidler, "organs are arranged in and around the body as a function of its needs and necessities... Furthermore, like a body, buildings can become sick and die... killed by men for some reason or another" (The building in Pain, Anthony Vidler, 4). In this instance, body as well as information are the organs which sustain the mediatheque and its postulation. Both must co-exist in order for the building to function because as the building is the representative and source of information, information is propagated through body and body transforms information into ideals and ideas.

The idea of the Mediatheque was conceived in the infancy of the information age. This involved a paradigm shift which caused a transformation of communication and communication technologies spearheaded in particular, by the internet. This transformation was literally and figuratively reflected by the building through its transparency.

As Witte notes, "this was no ordinary transparency, but something more physical and substantial. It was almost as if an x-ray photo was instantaneously exposing every part of a darkened interior to view... [this transparency was beyond] something light and ephemeral" (Witte, 24). Dissimilar to the Freudian uncanny which is actuated by memory based perception, the Mediatheque, being the first building of its kind had no did not influence body. Its transparency resulted in a transformation of perception; a paradigm shift which was symbolic of the relationship between body and information. As a result, body itself transformed - In use, communication and information sharing.
Sendai Mediatheque is a specifically engineered, adaptable organism. An amalgamation of parts which operate in a certain order and cause some sort of change to occur. For it to serve its proposed function, firstly, it has to have its structural qualities intact. Secondly, there needs to be a system which will foster interoperability among the various structural qualities of the building which are further integrated to the building. Because those two results, the third order of the building, transformation is achieved. That is, transformation of body through information and transparency.

“If buildings can become sick and die ... killed by men” as Vidler declares, in this instance, the cause has to be slightly altered. Body is the organ which transforms the perception of this building and in order for the mediatheque to die, the organ first has to fail.
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Technique fostering Spatiality

Ito in designing the Sendai Mediatheque sought inspiration from the process of viewing languorous plants and piscine movements through the glass wall of a giant aquarium. This technique, although unbeknownst to him at the time, would become the catalyst that would forge the spatial nature of the building. The perception of those plants and the spatiality they exhibited in their movement which was created as a result of the kinetic properties they had and exhibited, being inside of a system and being of that system. Thus the plants, as an architecture in and of itself, were defined and activated by the space in which it inhabited and extended by Ito's presence and observations. Bergson in the meaning of life assures that “as living beings, we depend on the planet on which we are and the sun that provides for it” (Bergson, 229). Similarly, it seems the spatiality of the building is a technique which is activated by and is a response to its environment - consequently creating what seems to be new time or event specific spaces as an extension of itself already defined spaces.

Technique fostering Technique

The resulting form resulting from Ito’s spatial explorations could be summed up in the word movement. Or more specifically, fluidity. Ito defines fluidity as the main technique which governs the structure and workings of the information age. However, it is important to be able to distinguish the abstract fluidity of the space forming languorous plants from the structural and highly specific fluidity of bits and bytes that make define the information age.

The technique of managing a fixed set of data flows in return altered the technique of information retrieval in the information age. The perceived laborious activity of going to an information resources centre, talking to an attendant who then starts searching through archives in order to retrieve a specific set of information, can now be achieved instantly through the omnipresence of the internet. The Mediatheque was one of the mediums which fostered that fluid technique. As the process continues, and as individual bytes are created, one could presume that they would find interrelations within themselves - systems that would enable a byte identify another, “speak to one another”, and thus creating a further evolution of the flow of information regarding the retrieval process and technique. Here humans tend to become less relevant as the actuators of such flows due to the fact that fluid nature of data allows it to use self-replication as a technique to foster such flows. “It suddenly seemed that a chicken was eggs [technique] for getting more eggs. (McLuhan)

Form as Technique

The fluidity that data presented was not only useful in increasing its accessibility, it was also useful as a means of communication. By data in this instance, I am referring to information as a whole - from the words in a book and images on a screen to objects in space. The Mediatheque's form was no different as a technique of communication. “[It] is clearly meant as visual expression of some of the characteristics of the information age… With a transparency that strives to abolish the distinction between exterior and interior, the entire building becomes an interface between the city and the cultural life of the buildings interior (Witte, 62)”. The architect uses the metaphor created by the building’s form as a technique to communicate the building’s purpose which ironically, is also communication. It in essence, embodies Reston’s axiom: The Medium is the Message. The message in this instance being the evolution of culture and communication within the building, and the building itself as a medium is used as a technique to represent that message.

It seems the layers of information which symbolize communication as a whole have smaller micro-qualities of communication in themselves. This gives further insight into how each of the buildings elements serve as micro-organisms which contribute to a larger being - a mutation of the technique of communication. The diagram also introduces people as a large part of the communication catalyst - the form of human population within the building is a result of the form of the building which is a result of the technique necessary to catalyze the interconnectedness which it exhibits.

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The Sendai Mediatheque as a building forms space which embodies the idea of multidimensionality and interconnectivity mainly through Toyo Ito’s architectural realization of the concept of omnipresence. According to Banham, architecture has evolved to blend interior and exterior spaces and a joint space rather than separating the two. In the Mediatheque, materials qualities on a physical level help create that quality. That is, the fenestration that clads the building on all ends which serve to render the building as both anonymous and celebrated. On a metaphysical level those qualities also occur - space becomes less of a material quality, a felt presence and more of a concept which is understood. The mediatheque creates a space that extends and redefines space - its purpose as a building fosters the transcending of space, with the vehicle being multimedia and the internet. Toyo ito correctly initially recognizing this important factor in the buildings concept. That is that the “phenomenon of architecture must be conditioned by the unstable, fluctuating society of the information age” (Witte, 2002).

Gilles Deleuze brings up the conversation of smooth and striated space versus smooth versus straighter space in the 1400: Smooth and Striated discussion. In the context of the mediatheque and its interior of striated space, the mediatheque as we envision it engenders many qualities. For instance, considering the structural tubes which make up the building, one could consider the space they create on the inside diameter of the tubes to be smooth. That is to say, something extremely low viscosity such as air, gas, or even water to some degree could flow through the space and remain smooth. On the other hand, the structures themselves seem striated as a result of their irregularity in construction and in arrangement. In this instance these tubes execute that system quite well in both their aesthetic and function to create the idea of space.

If the building were to be designed in the future, especially considering the fact that the world’s population is increasing exponentially, as we contemplate the idea of the building on a much smaller scale. That is, to rein in the purpose of the building (communication) and make it less expensive allows that amount of space in a structures to be more flexible. This is important as more flexibility leads up into a concept, as each room less physical space through multimedia, cell phones, tablets and computers. It is not fantastical to say that the world has become the mediatheque and vice versa.

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