Reinvesting in the Power of Interpretation & Representation

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Abstract

During few other periods of human history has the power of representations had such a tremendous effect on human consciousness and behavior. We live in a world increasingly defined *as* and *by* representation. The fact that architectural design must engage and respond to ever expanding volumes of simulacra poses growing challenges to both the practitioner and the educator. If this were not enough, architectural design depends on representations to develop and explain concepts. The result are concerning, for as we become ever more submerged in our ability to technically create representational space, our cognitive power to understand why we create such depiction threaten to atrophy.

Waking up from the media-induced numbness requires a clear understanding of the nature of our representations. We propose that architectural education should prepare students not only for future architectural practice but also for the responsibility of clearly engaging social and cultural issues. It is therefore our aspiration to confront the nature of representation through an accelerated design process with carefully focused attention in a context of media and textual diversity. We can build no better education legacy than introducing students to the challenges of contrasting between the truths and illusions created by simulacrum.

To accomplish this goal, we created a project that explores the nature of representational space through a series of depiction types and media morphings, moving from literature to architecture. The pedagogy of this assignment introduces students to a system of inquiry of interpretive and representational iterations. In this process, the students learn how to deal with representations' main paradox: their capacity to reveal as much as conceal.

Introduction

Perhaps the main ability that characterizes humanity is representation, be it expressed through verbal language, visual artifacts or the myriad of hybrids populating the spaces between them. Although the new tools of digital technology have become an important part of this ageless symbolic mechanism, the fundamental role of our representational capabilities remain: the possibility to communicate, make, and think about the world.

It is hard to think of any other time in human history when the power of representation has had such a shaping effect in human consciousness and behavior. Current philosophers, such as Baudrillard, believe we live in a world increasingly defined *as* and *by* representation.[1] The fact that architectural design must engage and respond to overwhelming amounts of simulacra poses growing challenges to both the practitioner and the educator. If this were not enough, architectural design depends on representations to define its concepts. The results are troubling, for as we become ever more submerged in our ability to technically create representational space, our cognitive power to understand why we create such depiction threatens to atrophy.

This very situation characterizes our zeitgeist: the crisis of the real vis a vis the culture of the simulacrum. Waking up from the media-induced numbness demands understanding the true nature of representation. It means to become fully aware of the acts of interpretation we are engaged in**.** The need for such conscious interpretion transcends even the lofty goal of realizing selfhood and becomes a survival skill. Interpretation is the ultimate tool that creative individuals must possess to assess the value of the worlds of simulacra with which they are being continuously bombarded. Informed decisions may only take place when we become aware that the medium is not the message . . .

We feel that developing such understanding in our students appears to reinvest their designs with renewed potential. To design means to choose one way of constructing things out of many, thus collapsing the space of multiple possibilities into one. Design, like interpretation, synthesizes, takes a position and is a value-added process that requires intentional filtering, a biased act of reading. In a way, the design act is essentially an interpretive act.[2] Hence, design provides the opportunity to prepare students not only for future architectural practice but also for responsible citizenry.

In principle, there is nothing new in this methodology of multiple iterative phases. After all this is the way in which the design process naturally advances. What differentiates this approach is its conscious attempt to address what we consider the enormous representation and interpretive challenges that we face today. Our aspiration is to confront the nature of representation through an accelerated design process with carefully focused attention in a context of media and textual diversity. We can build no better education legacy today than introducing students to the challenges of the culture of simulacrum they live in.[3]

To do so, the premise of this pedagogy is that architecture is not making a building but rather participating in the construction of a culture's cosmos. In this view, architecture is a way to externalize to a culture the reality of its own making. Put it differently, the educational job is to transform the perception of representations as beautiful signifiers into signifieds awaiting critical involvement. Here hinges the possibility of recognizing reality from simulation.

In this process, the role of the architect/designer is one of *interpreter*, as opposed to *imitator* or *consumer*, of one's surroundings, culture, tradition, etc. The duty towards one's culture is not to represent culture but rather to re-present it,[4] to make ourselves aware of the ongoing discourse. This obviously challenges today's accepted media's basic tenets of passivity that requires almost no interpretive effort (‘ready-made meanings’).

The fact that this pedagogy proposes that new architectural ideas may come from non-architectural sources is also an important objective. An interdisciplinary approach to solving architectural problems may yield new and unusual solutions while it also opens the possibility for potential feedback moving from architecture to culture in general.

The Morphing Project

We created **The Morphing Project** as a means to investigate the dialectic potential between representation and interpretation in order to advance beginning design students’ understandings of representational issues**.** Morphing teaches how representation space permits/constrains the progressive unfolding of ideas. This project has been used twice with similar results, hence our decision to share it with a larger audience.[5] The concrete goals are to:

(1) develop interpretive and communicative capabilities (i.e., deciphering, transcribing, communicating, restructuring, recording, etc.) in diverse language domains and encourage analogic and metaphoric mentations (all high levels of cognitive, affective and motor functions)
(2) attain a progressive realization of the relationship between different representations and media and thus an understanding of their differences and strengths;
(3) develop an experimental and exploratory attitude towards learning new technologies,
(4) verify that continuous translations and reformulations of what is being developed deepens the design process,
(5) approach representation reflexively, thus opening up the opportunity to reflect in the nature, among others, of simulation, likeness, and reproduction,
(6) improve design outcomes.

The project was assigned over a two week period during the Fall quarter of the First Year Architectural Design Studio. Our students were randomly assigned to work in teams of three. A lottery was used to assign each student with one Memo (a chapter) from Italo Calvino's *Six Memos For The Next Millennium*.[6] This specific text was chosen because of its hybrid representational nature and suggestive allusion to a future rooted in the min(d)ed (i.e., critically extracted) past. Like other Calvino's texts, "Six Memos..." has strong reminiscences to the tectonic world and experiences, thus offering a highly open-ended interpretive potential.

The Morphing Project proceeded in four stages with each stage being presented to the students as the preceding stage was completed. We titled these stages Morphosis I through IV and associated them with different kinds of (representational) spaces. This morphing process was presented as an act of active and progressive interpretation ('reading') and representation that is informed by its own unfolding. The emphasis concerned how the 'reading' and representations evolve as a continuum, how each stage was read/depicted in the context of the others, and finally how the whole morphing was grasped at once. Thus, the initial interpretation of the topic/issues addressed by the text is significantly transformed by the act of moving the interpretation forward in a staged process. The specific information gained from Calvino's *Six Memos For The Next Millennium* became increasingly peripheral as the student's interpretive and representational leaps distanced them from this departure point; which involved looking for value in the past to satisfy the needs of the present and the future.

As part of this morphosis process the students were asked to migrate to the initial foreign "textual" country defined through the selected Memo. Once in that little known land, they were to explore and analyze its mindscapes in order to build a conceptual space that expressed their understanding of it in image, detail and model formats progressively. The students were to focus on the differences and commonalties among all the realities, processes, and potentials presented by the text. Each student was to move within the morphing sequence by using representations, media techniques and ideas in association with intentional interpretation (i.e., 'reading').

More precisely, the stages of the project were presented to the students in the following order. *Morphosis I (textual space)*, asked the students to consider issues of framing. Such framing required the transformation of the Memo into a paragraph (no longer than 6 sentences) that was both precise and full of potential. The students were required to take a position — a parti that clearly explained their relationship with the assigned Memo. The students needed to extract meaning from the existing text (i.e., past). *Morphosis II (image space)*, required the production of a visual image demonstrating the student's position. This was presented as a two dimensional graphic (e.g., collage, pastel painting, text, multimedia construction assemblage, etc.) representation of the Memo. *Morphosis III (detail space)*, entailed the production of a 3D assemblage of a part of a *concept based machine***.**[7] This detail was to describe how tectonic

connections translate the Memo to materiality. Finally, *Morphosis IV (physical space),* involved the creation of the machine itself. The concept based machine was to be a three dimensional assemblage (i.e., the whole) that expresses spatially, formally, tectonically and operationally the literary concepts of the student's assigned Memo. The student's machines could not be larger than 18" nor smaller than 10" in any direction.

The students' morphing efforts were organized both at the group and individual levels. It was explained that each student needed a methodology to access, appraise and make their new intellectual space. In this process they were to find metaphors that permitted the 'architecturalization' of ideas (i.e., spatialization, materialization, etc.) without necessarily being concerned about architecture. Interpretive differences between the individuals within the team created the pedagogical arena where to make students realize and invest in the nature and need of both difference and negotiation. The politics behind convincing communication was a difficult challenge for most students as this was their first design team experience.

Analysis Of The Project

In the process of developing the project we considered the following issues;

(1) Morphosis I: textual space.
Reading texts expands the often too narrow territory of architectural thought and production. Texts are environments full of resources that unlike its physical counterparts may be used without ever being depleted or destroyed. Texts are great examples of virtuality and simulation because they open opportunities to deal with the world. Interpretation may be said to be the craft of extracting those resources, a mindful act of mining the textual landscape in search of insight. Doing so demands metaphoric or analogic leaps between the particular issues that the text brings forth and those suitable for architectural investigation. It is precisely this leap (whose potential transcends the purely aesthetic, and moves into the philosophical, social, and/or political) that is exciting. The text becomes an instrument for shifting our ordinary perception in order to see reality, culture and architecture in a new light. Textual Space can thus inform Architectural Space, and, in turn, the architectural mind can heighten the experience of the text. In this part of the project, design was the construction of a theoretical site with flexible yet clear arguments.

The students had to write a short paragraph explaining their interpretation of the assigned writing. Here the students were asked to distill their positions to the most important concepts. This required numerous rewriting and group discussions concerning hierarchy of ideas within their text. We found that through the process of clearly and concisely defining their interpretation of the written text, students can also learn of the importance of creating similar definition representationally. Below is an example of a student team writing about the Memo dealing with “Multiplicity”:

> *“An infinity of ideas, thoughts, concepts all interrelated with a multitude of connections, relationships and intersections. Embracing the scope of these [im]possible worlds cannot be encompassed in a single moment. But through devoted inquiry and pursuit we can begin to become aware of an infinity of ideas and possibilities, layer by layer. Discovering the depths of relationship - the repetitions of ever different patterns and never ending cycles of change, with each cycle - effecting another creates an endless network of linkages of human existence. The path to a point of recognition varies and the perception of a thing depends on ones point of view.”* (Team: Baros, Blaser, Uchiyama)

(2) Morphosis II image space. Extracting concepts, metaphors, or theories embedded in the textual terrain and manifest them in 2D image space required the construction of visual arguments and elements. At this stage, design was the building of imagery contextual to the theoretical site without losing the idea and feel of the MEMO and yet pushing toward a spatialized new life.

FIGURE 1 (Multiplicity)
Team: Baros, Blaser, Uchiyama

FIGURE 2 (Visibility)
Team: Brown, Lee, Wong

FIGURE 3 (Exactitude)
Team: Gowers, Foley, Timmerman

FIGURE 4 (Lightness)
Team: Meyer, Jackson, Braun

FIGURE 5 (Quickness)
Team: Harrison, Jacob, Steward

(3) Morphosis III: detailed space.
This phase required students to jump from the 2D image space into the tectonic and spatial world without paying attention to the whole object. Focusing to express the memo materially and formally releases the pressure for the 'big idea' and at the same time emphasizes the tectonic drama of representing the MEMO in the relationship (i.e., connections, juxtapositions, processes, etc.) between metal, wood and glass. At this stage, design was the selection and juxtaposition of technologies and tectonic states that defined a small but meaningful relationship (i.e., an interaction based on intention).

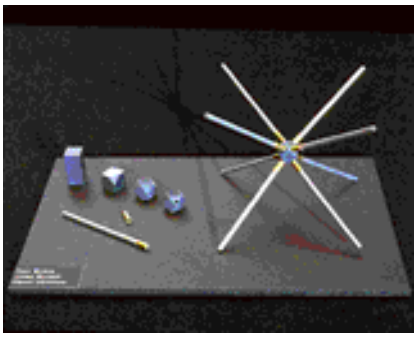

FIGURE 6 (Multiplicity)
Team: Baros, Blaser, Uchiyama

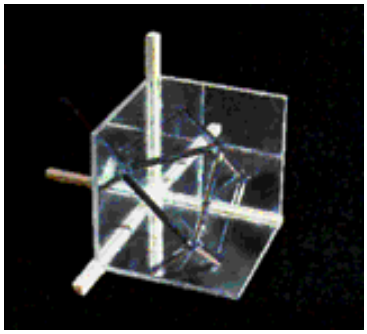

FIGURE 7 (Visibility)
Team: Brown, Lee, Wong

FIGURE 8 (Exactitude)
Team: Gowers, Foley, Timmerman

FIGURE 9 (Lightness)
Team: Meyer, Jackson, Braun

FIGURE 10 (Quickness)
Team: Huber, Workman, Jones

(4) Morphosis IV: physical space. The detail space was further extrapolated to a full fledged physical space frozen as a machine. Such an assembly was to explicate and extend the MEMO by its mere presence and, if appropriate, working. This stage had the hidden agenda of making students realize the concept of architecture as a *passive thinking machine*. Issues of scale, craftsmanship, materiality, that is, topics of extreme reality and concreteness were to be seen in the light of maximum abstraction as they have to refer back to textual space.

FIGURE 11 (Multiplicity)
Team: Baros, Blaser, Uchiyama

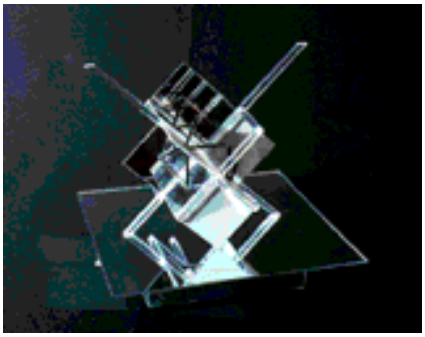

FIGURE 12 (Visibility)
Team: Brown, Lee, Wong

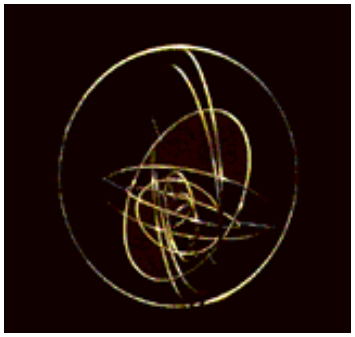

FIGURE 13 (Exactitude)
Team: Gowers, Foley, Timmerman

FIGURE 14 (Lightness)
Team: Meyer, Jackson, Braun

FIGURE 15 (Quickness)
Team: Harris, Jacob, Steward

The demonstration of concepts within these four types of spaces demanded an engagement in both abstraction and analysis, and to manifest its insights through appropriate depictions (e.g., written, graphic, or tectonic texts). The students were made aware that this process bridges the highest level of abstraction (i.e., the written word representing reflection, the intangible) with the highest level of concreteness (i.e., the physical, the tangible).

Project Evaluation

A project such as **The Morphing Project** can sometimes be difficult for faculty to critique. Additionally, beginning students may become confused when attempting to develop criteria with which to analyze their own work. In this project we attempted to set rules of evaluation that were clear but still allowed the students a certain amount of creative play in their design definitions. We evaluated the project using the following criteria.

The first criteria involved the demonstration of insightful and progressive interpretation of the originally assigned Memo. This criteria included issues of breadth or how comprehensively did the student engage the issues behind the problem. We considered the depth with which the student investigated the main concepts defining their machine and the creativity of the morphing process. Finally, we looked at the method and clarity of the student's inquiry in terms of its representational and interpretive logic.

The second criteria examined the student's demonstration of meaningful conclusions about the project. This included the student's ability to clearly demonstrate the relationships between the various architectural components in the final product: the student’s concept based machine. Here we weighed the strength of the student's architectural idea (parti) in relationship to the original Memo. Next, the student's clarity in articulating conceptual and physical orders was evaluated. Finally, we considered the students ability to develop a relationship between intentions and design.

The third criteria evaluated the student's ability to demonstrate and engage the various aspects of representation, tectonics and craft. We feel strongly that the student's ability to physically construct their representational and interpretive stand was an important part of this project. Here we evaluated the student's capacity for interaction between issue of craft and representation, thought and design products.

Conclusions

The Morphing Project elicited good results both in the products produced and the process involved. The students as a whole were enthusiastic about the project.

Specifically we found the project was quite successful in requiring our students to engage the following questions; (1) How does depiction as an universe of discourse affect and is affected by what it represents? (2) What is architectural about the qualities of a text? (3) Is there any spatial, technical or compositional structure to a particular form or depiction? (4) What is the relationship between symbolic, thematic, and experiential content and the representational medium?, and (5) How does the 'reading' of a text inform today's (architectural) theoretical and/or practical production?

We believe that when beginning design students face these representational issues they open their minds to understandings that are necessary to respond and thrive in the information civilization we live in. This is achieved by realizing that the concepts of architecture and representation may be thought of the why and how cultural beliefs are constructed. **The Morphing Project** develops the student's confidence in facing representational and interpretive challenges by increasing their critical, communicative and design abilities.

Design can thus be used to bring our students out of today's simulacra saturaded culture if we carefully conjure up the forces of interpretation and representation that are natural to architectural inquiry.

End Notes

1 Jean Baudrillard, *Simulacra and Simulation* (translation: S.Faria Glaser) (Ann Arbor, MI: The University of Michigan Press, 1994)

2 The relationship between design and perception was well argued by S. Glynn, Science & Perception As Design; *Design Studies*, Vol.6 #3, pp.122-26 (1985). See also Professor Richard Wollheim's (the aesthetic philosopher) argument of how representational seeing is connected to the intentions of the designer. This study relates the idea of architectural representation to the concepts of visual analogy and metaphor, which are used to help define greater issues beyond simply a future building.

3 Baudrillard, ibid. Mark Taylor & Esa Saarinen *Imagologies. Media Philosophy*. (New York: Routledge, 1994).

4 K. Harries, Philosophy and the Task of Architecture, *Journal of Architectural Education*, Vol.40 No.2, pp.29-30 (1987)& Representation and Re-presentation, in *Via 9* (1988)

5 **The Morphing Project** builds on an earlier project. Missing reference refers to authors.

6 Calvino, Italo, *Six Memos for the Next Millennium* (Harvard University Press, Cambridge, Massachusetts, 1988)

7 Of course, the project plays with the fact that the making of a concept based machine is a paradox in itself. It brings forth images associated with technology, operation, functionality and materiality that seem to contrast with those of speculation, inmateriality, impracticality, etc. The concept of the machine has also been very influential in architectural thought in history (e.g., Vitruvius' *The Ten Book on Architecture*, the Modern Movement) and therefore deserves special consideration in a time that many people define as the post-machine age. Machines can be considered one of the objects most closely associated with the fortunes of architecture. See for example Alexander Tzonis and Diane Lafaivre ("The Machine in Architectural Thinking, " Diadalos 18, 15 December 1985, p. 16). They can be seen as analogous to inspiration, the force which moves the human mind. (Marco Frascari, "A Secret Semiotic Skiagraphy: The Corporal Theater of Meaning in Vincenzo Scammozzi's 'idea' of Architecture, Via II, 1990, p. 33) Marco Frascari writes, *"If we consider architecture to*

be a machine that is analogous to the human mind, then buildings suggest rather than determine or impose." (ibid, p.36) One might also wish to consider the writings of Vitruvius, who viewed machinery as not only devising construction but also connected to the proportions dictated by the shadows of a building.