Architecture Representation:
Abstraction and Symbol within Design

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All architecture must deal with constraints—physical constraints like dimensions, costs and building codes or ideological constraints, which can stem from sociological or political issues. These constraints cause architecture to transcend the realm of purely ‘making by doing’ and propel architecture to propose a solution for a given set of problems. These problems ultimately provide the architect the ability to creatively address a solution. Architecture must be considered for both its physical value—form, measure, scale, materiality and its poetic nature—symbolism, sign and meaning. Architecture can only exist with both of these components, without both, one has either art: devoid of problem solving, or construct: devoid of meaning. The constant evolution of design through architectural representation is critical to its success.

“Architecture is the art of making space.”¹ Fundamentally controversial, space making can be rooted in physicality, something tangible like a boundary; formologically driven based on tectonics or derived from Classical architecture, to name a few. Durand argues that structural reasoning comes from economy and that the goal of architecture comes from “public and private usefulness.”² Laugier in contrast suggests the order of architecture comes from the three necessary elements: column, floor and roof, and functionality.³ The wide variety of spatial ideas between the fundamental reasons for building methods, either social or formal, show that the rationalization of space is constrained in how it is represented. To critically examine how one represents architecture, the meaning and purpose of representation must be questioned.

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**What is Architectural Representation?**

Architectural representation can be derived from signs, symbols, experience and even form. In its definition, representation is the “expression or designation by some term, character or symbol” that is capable of “presenting a picture to the mind.”\(^4\) To be a representation there must first be something to correspond to, an original. In addition, for representation to be presented to the mind, it must be capable of being perceived.\(^5\)

Clearly stated, before something can be represented- it must exist and it must be real. The purpose of representation is to communicate an idea, which shows the process of thought and design. It is in this that architectural representation becomes multifaceted. It begins to transcend past what the representation stands for and orients around how it is perceived and the architectural ideas associated with the experience of this perception. These ideas can be found in architectural design practice, as it becomes process based, as architecture begins to present ideas and construct experiences.

Through design work the ultimate manifestation comes through the representation of the image—whether a realistic rendering, an abstract analysis or simply a sketch. All realms of capturing the essence of a designed project (built or unbuilt) must be representations. These pieces are just fragments and layers of the original- composing how the work can be perceived until it is physically constructed and experienced.

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\(^5\) Ömer Akin and Eleanor F. Weinel, 1-25.
Architectural Space and Representation as Experience

Tschumi’s ideas of architectural space making are dependent upon how one experiences the space. He postulates that architecture goes beyond being a “thing of the mind” and becomes about the sensual experience. He frames his argument by questioning the place of representation in architecture. For Tschumi, architectural meaning is determined through function and program with ideological and philosophical meaning, leading architecture to become “nothing but the space of representation.” Once it is distinguished from the simple building it represents something other than itself - it becomes representational. Contrary to this idea, Tschumi questions, “understanding architecture as a language that refers to meanings outside itself.” In this way architectural representation can relate to symbols, virtual function or to its own history - acting as an ‘autonomous organism’. Negotiating this need for representation Tschumi clearly delineates between architecture as knowledge and architecture as experience. It is in the perception and personal experiential moment that gives architecture meaning which becomes fundamentally “pleasurable.” Without the experience and perception, he justifies that symbolism for symbolism’s sake is meaningless.

Similar to Tschumi’s ideas of the importance of the experiential qualities of architecture, Michael Graves argues that architecture “must provide for an active participation of the culture at large.” The perception of architecture must transcend

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7 Bernard Tschumi, 221.
8 Bernard Tschumi, 221.
9 Bernard Tschumi, 227.
10 Michael Graves, “Representation” in Representation and Architecture, ed. Ömer Akin and Eleanor F.
what it is, and cannot be solely about what it is substituting for as an act of representation. It employs participation by the observer. This task transcends the physical construct and must deal with what is perceived. As much as one does not experience an entire building while in one space, it is the overall perception that one gets from one particular space that allows for the inference of the whole. If the observer’s role is to experience, what is the architect’s role in making representation?

If representation becomes about a participatory experience, it must be considered holistically which includes how it represents what it does. One cannot look at architectural representation as a tangible finite idea, instead it should be considered as a process where we define ourselves by how we understand the world. It is with this personal experience that our “perception is our own form of knowing.”

Architectural Representation as Abstraction

Eisenman criticizes present representation as ‘fiction’ and negotiates it as the “simulation of meaning.” He argues that by using representation to embody the idea of meaning to architecture one destroys what architecture is. Eisenman claims that during the Classical era, “truth and meaning were self-evident.” The exterior skin of the building provided the necessary articulation to convey a certain truth.

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13 Peter Eisenman, 524.
Renaissance, with the repetition of the Classics and the destruction of new designing, blatant regurgitation of the buildings of the past was used to give meaning for the “new” architecture. Not only was it not new but, also, in its claim to be truthful, it was flawed.

Representation as a process of abstraction is a more appropriate way of understanding representation.\textsuperscript{14} Representation must come from “reality” but must also contain enough appropriate information for its intended purpose.\textsuperscript{15} By accepting that representation of an idea is not the same thing as the idea, one can differentiate between the thing and the meaning. This is much like Tschumi’s idea that “the concept of a dog does not bark, the concept of space is not a space.”\textsuperscript{16} Eisenman would argue that architectural representation is a simulation- where one abstracts the representation from the form.

**Architectural Representation as Simulation**

A simulation is something that “imitates the appearance or character of something.”\textsuperscript{17} The misguidance in representation as simulation is when it is believed to be real. Simulation in architecture is a distinctly different idea than representation in architecture. Philosopher Baudrillard criticized society’s fascination with simulation through the process of simulacrum- replacing reality with symbols and signs.\textsuperscript{18} Through simulacrum, disassociation from reality becomes so severe that the ‘simulation’ is

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\textsuperscript{14} Abstraction defined here (as a process of representation) is not meant to be confused with Eisenman’s idea of the modernist movement of abstraction, which aimed to “strip” the Classical style of architecture away from the modern movement, in attempt to focus on functionality instead of tradition. Eisenman thought the modernists were unsuccessful at this reduction as the Modernists were still using it to “represent reality itself”.

\textsuperscript{15} Omer Akin and Eleanor F. Weinel, 5.

\textsuperscript{16} Bernard Tschumi, 226.

\textsuperscript{17} Akin Ömer and Eleanor F. Weinel, 12.

completely fabricated. This simulation created is not representing anything as it hides the original, with “no relation to reality whatsoever.”

As Eisenman would argue, as a retrogressive idea, representation can be flawed if it does not come from the architectural discipline itself. Understanding the distinction between the facets of representation: reality and simulation, one can better understand the role of representation. Instead of simulation being something represented, it is its own phenomenon. Since it cannot claim to be the original, it must be understood and appreciated in its own value as something secondary. This distinction transforms how representation is further classified and distinguished.

‘As Is’ versus ‘As Message’

Eisenman makes the delineation between representation ‘as is’ and representation ‘as message’, The purpose of representation hereby is questioned. Eisenman thinks there is no purpose in defining a meaning for architecture if it cannot be honest. The regurgitation of past valued architecture led to the historic simulacra- the representations of representations. Here there is nothing newly created or invented. In complete contrast, Perez-Gomez suggests architectural representation can come from the “creating of order.” With architectural representation comes the idea of symbolism-how architecture can be represented. Perez-Gomez states that, “symbols embody specific historical and cultural values.”

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19 Jean Baudrillard, 6.
20 Michael Graves, 27.
21 Peter Eisenman, 524.
Architectural representation develops ‘as message’ with the use of materials to heighten our understanding of a space, as this process develops beyond the vision of the creator and becomes a condition. Without representation, Perez-Gomez criticizes architecture typologies that are rooted in geometry and functionalism. Emphasis on these values strips the experience of architecture, from the perceptual holistic to an ordered standardization and mimetic nature of the Classical. The goal of architectural representation is in constructing a phenomenon that transcends the literal, giving architecture value.

Representation ‘as is’ is a different scenario than representation ‘as message’. A flawed idea, representation ‘as is’, cannot exist specifically because the idea of representation is not what something is, but an interpretation of its origin. Seen in Platos’ “Allegory of the Cave”, the shadows described emphasize this deception, as “truth would be literally nothing but the shadows of the images.” Through the observer’s discovery it was revealed that shadows were truer than the object making the form- becoming a duplication or a copy. In contrast, representation ‘as message’ can exist as its own fundamental thought- its own unique component to architectural meaning. The fruitful nature of representation comes when it is incorporated in the all-encompassing value of architecture - and where it has its place.

Below, representation ‘as is’ (see fig. 1) is compared to representation ‘as message’ (see fig. 2). Through the use of imagery, a more literal way of representing something is considered as a finite moment- with little room for interpretation. When creating representation through image there is a specific idea being addressed (see fig.

25 Plato, 259.
1). Contrast to this, architectural representation ‘as message’ addresses the ambiguities of what is being represented (see fig. 2). The literal alley way is juxtaposed with the composition on the right; a representation of one’s perceived sense of place in the world. Instead of focusing on an objectified image, representation through message allows for a continued process of perceiving architecture and a richer understanding.


Representing Architecture: The Duck, the Folly and the Primitive Hut

Through defining representation and differentiating between ways it can be used, it is important to see a literal comparison of these ideas. Venturi’s ‘Duck versus Decorated Shed’ argument, Tschumi’s ‘Folies’ and Perez-Gomez’s symbolism of the ‘Primitive Hut’ are three examples of fundamental ideological arguments that acknowledge the ideas of representation. These three concepts are very different from each other and each frames the idea of representation in a certain way.

Venturi’s argument contrasts the formological building types: the duck and the decorated shed. A duck is a building that looks like its function or that allows its internal
order to be displayed on its exterior. A decorated shed is a building that functions like a billboard, where any kind of imagery (except its internal function) conveys a message accessible to all.26 These ideas show the futility of representation in the arbitrary sense of signage. Having such a graphic distracter on a building is not architectural. Instead, Venturi proposes the duck- the truthfulness in representing what it is. It transcends representation, as it is what it is, and ‘what it is’, is its message.

Tschumi uses the disassociation of symbol in a more drastic way than Venturi. His repulsion to the idea of representation leads to his creation of the ‘folies’, architectural follies that are devoid of hierarchy, form and structure. His blatant dismissal of these fundamental architectural ideas allows him the freedom to design without the constraints of what has already been- which he criticizes.27 By creating the follies, which are fully dependent upon the personal, physical interaction and perception of the space, the architecture becomes meaningful.

In contrast, Perez-Gomez criticizes representation of superficial symbolism, understanding that man’s role of his thoughts and actions is based on the “creation of order.”28 Perez-Gomez analyzes Laugier’s theory of the primitive hut: as Laugier criticizes the structure (the order of columns) as ornamentation, where architecture becomes decoration.29 This use of ornamentation derails architectural meaning, as the “original architecture of Nature” is lost (see fig. 3).30 This original architecture comes from the order and poetics of what Perez-Gomez considers as good architecture. What

26 Peter Eisenman, 526.
27 Bernard Tschumi, 27-50.
29 Alberto Pérez-Gómez, “Built Upon Love: Architectural Longing After Ethics and Aesthetics”.
Laugier depicts is similar to the Vitruvian idea of the primitive hut- one based on the relationship between form and necessity.\textsuperscript{31} This contrasts the empirical ideas of Semper’s ‘Primitive Hut’, which Perez-Gomez would consider as an example of the superficial symbolism, based on empirical values or the Classics, (see fig. 4).\textsuperscript{32} Semper’s proposal described a “highly realistic exemplar of wooden construction”, something literal, with no interpretation.\textsuperscript{33} With this reliance on ornamentation the representational architectural value is lost. For Perez-Gomez, reliance on poetic architecture helps develop value through what it represents.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure3.png}
\caption{Figure 3. Charles Eisen, “Frontispiece of Marc-Antoine Laugier”, 1755, Engraving. Paris: Bibliothèque Nationale de France.}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure4.png}
\caption{Figure 4. Gottfried Semper, “The Caraib Hut” in Style in the Technical and Tectonic Arts (Los Angeles, CA: Getty Research Institute, 2004), 666.}
\end{figure}

\textsuperscript{31} Marc-Antoine Laugier, 15.
\textsuperscript{32} Presented in “Architecture and the Crisis of Modern Science”, this idea relates directly to Perez-Gomez’s criticism, discussed earlier, on representation ‘as is’, depending too much on the literal, instead of the relationship between things. His criticism of the reliance on the Classics for architecture is much like Semper’s reliance on ornamentation for architectural value in his proposal for the primitive hut.
\textsuperscript{33} Gottfried Semper, Style in the Technical and Tectonic Arts (Los Angeles, CA: Getty Research Institute, 2004), 665-667.
Conclusion

Through Perez-Gomez’s classification of representation, the comparison between the natural and the empirical is critical in understanding the architectural value of representation. It is important to question representation in architecture, because based on pure geometry and formula we lack the deeper meaning of architecture and why we build (the construct without the meaning). It is with the mindset that as architects we transform the physical world which then enables us to use our personal experiences and feeling to create a symbolic connection necessary to give architecture meaning—whether purposeful or done inherently.

The ideas of architectural representation certainly translate to the design practice. Studio design becomes a process of designing architecture that presents the ideas of a project, before it can become representational by the literal things we make. These tangible constructs can take a variety of form, (drawings, models, images etc.). Similarly architectural meaning can come from a variety of techniques and methodologies, seen through how the work is presented (see fig. 5 and 6).

Figure 5. Anastasia Hiller, *Transparent Skin Study*, 2011. Figure 6. Anastasia Hiller, *Theory Construct Examining Perceptual Representation*, 2011.
Arguably the experiential qualities of a space provide the observer with the way of interpreting and deriving meaning. As seen in the images above, representation of architecture creates a dynamic interplay between the construct and the condition. It is fundamental for this derived meaning to come from the architecture- the space making. As this is such a personal experience, this can take form from many means.

Ultimately it is naïve to look at architecture inconclusively. Only with the careful blending of both form and reason (representation ‘as is’ and representation ‘as message’) can architecture exist. Representation must be considered as its own part of architecture- an integral and defining component. Considering representation as part of the process of design and how architecture is perceived is fundamentally important. In ignoring the practical sides of architecture and only fixating on poetic meaning trivializes the thought and precision architecture must also incorporate, but building for the sake of building ignores meaning. In defining architecture as a process of designing- a cognitive activity- the capabilities of representation become critical, as “representation allows thought and design to take place.”

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34 Eleanor Weinel, 270.
35 Ömer Akin and Eleanor F. Weinel, 3.
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