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In-corporeal-ating architecture: The living body and a place of death

Svedberg, Robert Joseph, M.Arch.
Rice University, 1992
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IN-CORPOREAL-ATING ARCHITECTURE:
THE LIVING BODY AND A PLACE OF DEATH

by

ROBERT JOSEPH SVEDBERG

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
MASTER OF ARCHITECTURE

APPROVED, THESIS COMMITTEE

Peter Waldman, Professor
Architecture

Elisabeth McKee, Assistant Professor
Architecture

Josiah Baker, Visiting Critic
Architecture

Houston, Texas

May, 1992
ABSTRACT

In-corporeal-ating Architecture:
The Living Body and a Place of Death

by

Robert Joseph Svedberg

The history of the senses will be looked at in terms of a concept of viewing emerging from the visual, and domination that this viewing holds over the other senses (and sensing in general) in architecture. A change in the hierarchy of the senses becomes evident during the late Gothic period, it is institutionalized in architecture by Durrand and in philosophy and art criticism by Kant. What this separation of viewing from vision (as a sense) and the isolation in Kant of the cognitive faculty from the aesthetic, does is impose a severe mind/body split. It is this dialect that informs the very basis of modernity, science, and architecture within the university. Architecture has the power to deny this mind/body split, and this potential has been realized concurrent to the domination of the visual.
ACKNOWLEDGEMENTS

I would like to thank my Advisor, Peter Waldman for the encouragement, inspiration, and advise that make a project like this possible. I am also grateful to my two readers, Jay Baker, and Elysabeth McKee, for their many criticisms and encouragements. It is the support and insights of friends that sometimes proves most valuable, and I would like to thank them all for their interest. And finally, this work is really the product of six years of critics and teachers, and all of them deserve a special appreciation.
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PREFACE

"More than other senses, the eye objectifies and masters. It sets at a distance, maintains the distance. In our culture, the predominance of the look over smell, taste, touch, and hearing, has brought about an impoverishment of bodily relations... The moment the look dominated, the body loses its materiality." That is, it is transformed into an Image' Luce Irigary, quoted by Craig Owens in 'Feminists and Postmodernists'; The Anti-Aesthetic, p70

This history of the senses in architecture, looks at the hierarchical relationship among the senses. It looks critically at 'the impoverishment of bodily relations' and asks how the 'predominance of the look' came about. It is easy to see how this emphasis on the visual is at work today, in the age of television, of information, of Post-Modernist architecture, etc. It is an integral part of the way architecture is taught. History is taught through slides, the identification of the image becomes the benchmark of success. This sensual tyranny projects a powerful control over our lives, our language, our sciences, our architecture, and our bodies. The visual relates more readily with the rational, the discursive, that which can be reduced to forms, signs, and explained. The goal of Humanism is, in the end, a totalizing rational structure, free from the 'unmeasurable' burdens of chaos, feelings, and desire. It is in architecture, however, that this drive to a totalizing visual sensual experience breaks down.

"Theories of reading, when applied to architecture, are largely fruitless in that they reduce it to an art of communication or to a visual art, dismissing the 'intertextuality' that makes architecture a highly complex human activity. The multiplicity of heterogeneous discourses, the constant interaction between movement, sensual experience, and conceptual acrobatics refute the parallel with the visual arts. ... It means going beyond reductive interpretations of architecture. The usual exclusion of the body and its experience from all discourse on the logic of form is a case in point."

It is easy to see how architecture has attempted to follow the fine arts in their drive for the totally visual, but the reality of architecture precludes a totally visual possibility. Once something is built, in three dimensions, and becomes occupiable, it automatically and irrevocably speaks to the total body. No matter how flat architecture tries to become, its reality is not just in the visual. An architecture of pure signs is not possible.

The body is an instrument of sensing the outside world that we all, to some degree, share. Architecture is the creation of man in which the body dwells. It holds a unique place among the arts and sciences, it is architecture which speaks to all the senses, protects, and makes us aware of our bodies. In the end, our bodies define our realities. In-corporeal-ating architecture means understanding and acting upon the bodies capacity to read architecture.

"The tactile resilience of the place-form and the capacity of the body to read the environment in terms other than those of sight alone suggest a potential strategy for resisting the domination of universal technology." Kenneth Frampton, 'Towards a Critical Regionalism: Six Points for an Architecture of Resistance, The Anti-Aesthetic, p28
CHAPTER ONE: VIEWING THE MIND AND BODY

The history of the senses will be looked at in terms of a concept of viewing emerging from the visual, and domination that this viewing holds over the other senses (and sensing in general) in architecture. A change in the hierarchy of the senses becomes evident during the late Gothic period, and is institutionalized in architecture by Durrand and in philosophy and art criticism by Kant. What this separation of viewing from vision (as a sense) and the isolation in Kant of the cognitive faculty from the aesthetic, does is impose a severe mind/body split. It conditions this dialect that informs the very basis of modernity. Architecture has the power to deny this mind body split, and this potential has been realized concurrent to the domination of the visual.

In her article, "The Floating Eye", Nicole Pertuiset illuminates a distinction between vision and viewing, and explores "the ways in which the instrumentality of vision has come to dominate our discourse since the Renaissance. . . Vision has been for so long dominated by 'viewing' that we no longer have a sense of how vision and all our senses can be used in movement as well as in space."¹ This subtle distinction between viewing and vision becomes a critical issue within a history of the senses. To some extent viewing removes vision from the body, as a sense, and aligns it with a disembodied mind. Likewise, Pertuiset points out, that if we speak of tactility alone we are also reinforcing this split. "However, when we oppose the tactile to the visual or the body to vision we corroborate the erroneous type of vision and we endorse the

mind/body split."\(^2\)

The reintroduction of techniques of perspective may have first allowed this distinction between viewing and vision. Kenneth Frampton points out that "according to its etymology, perspective means rational sight, of clear seeing, and as such it presupposes a conscious distancing from a more direct experience of the environment."\(^3\) The technology of perspective, along with a continuing string of inventions that reenact vision become the physical manifestation of this distinction between viewing and vision.

The introduction of another technology, the slide, provides an example of how this distinction is made very real in our institution of education today. "The photographic image enables the materiality of building to enter the immaterial space of the university. All the different sizes and types of buildings in the world could be brought into the same frame of the camera, assembled, and compared. The photograph [and 'lantern slides'] literally provided the frame of reference for a new discipline."\(^4\) With the slide as the tool to teach architectural history, the experience of a building is reduced to an image, appropriated solely through the eye. This image is the viewed, it is outside of the bodily experience of the building. Vision as viewing ceases to function as a sense and acts as the sole minion of the mind. The slide communicates a very small and superficial understanding of the building, and leads to a misunderstanding of architecture. Architecture loses its materiality, its space. The university specializes upon the action of the building on the mind and ignores the body+mind. Viewing also presupposes vision from a distance, from above: 'of assemblage, and comparison.' It is what the feminist critics refer to as the male gaze. The relationship between viewing and vision as a part of an integrated sense is made analogous to viewing a pornographic

\(^2\)ibid., p 10
image versus actual participation in sex. The viewing is a simulation, a mental activity requiring the action an uninformed imagination, while vision is a part of a total experience, an experience in which the total body and mind are simultaneously implicated.

Is it possible to establish a time when this domination of the vision by viewing did not exist? As the senses emerge in the Renaissance dominated by the gaze. The facade becomes the great program of the Renaissance. These facades were appended to medieval churches. The church, as a building in the Middle Ages, is not concerned primarily with the facade, the look, the image. The medieval church is more concerned with the interior spatial experience, and how the acoustics match the type of liturgy. The Florentine church of S. Maria Novella is designed by Fra Sisto and Fra Ristoro and is constructed from 1278-1350. The church is designed from a medieval attitude toward the senses. It is obvious that this and most other cathedrals of this period are almost entirely unconcerned with what the exterior 'looks' like. Their effort and energy is expended in the creation of the inhabitable space -- the interior. It is this space that the body inhabits and reads with all its haptic and intellectual powers. As with many of these churches the facades are ignored; not only does a concern for a visual, viewed and un-occupied object not exist, but an attitude about this object in relation to the larger city also is unimportant. In 1456, 106 years after its completion, Leon Battista Alberti is commissioned to design the facade. The power exercised by the church upon the body in the interior, is now shared with the power of the city on the exterior. This new power is no longer communicated by a uninterrupted flow of bodily stimulations, but by the isolated glance. This new power is communicated visually. Furthermore, the project of the facade is an episode in a larger drama of attempting to order, 'assemble, and compare', the non-rational of the medieval into a tidy visually discursive package.

Immanuel Kant (1724-1804) institutionalizes the mind/body split in philosophy
and art. In his 'Critiques of Reason' he establishes three separate faculties: pure reason, practical reason, and judgement (the aesthetic). For Kant each faculty is totally separate from another, discrete. He establishes the mind (reason) as distinct from aesthetic judgement. The three faculties never consult one another. As an example of how this distinction works in nature, Kant relies on the developing fields of science. As a model he uses the theory of sense perception. He argues that the senses are separate, and none can influence another. Kant's ideas were directly applied to the visual arts, and a formalist tradition is begun where the aesthetic can never be about reason, ideas, the cognitive -- only form.\(^5\)

The mind body dialect is made official in architecture by the work of JNL Durrand (1760-1834). Because architecture is not solely a visual disciple and implicates the whole body, it is not possible to apply Kant's rigid distinctions until a rational way of viewing architecture is developed. This view of architecture is provided by Durrand with his radical typology. Durrand's typology is visually reductive, it takes complex relationships of body to building and reduces them to the simplistic geometrical, line representation. These are then arranged in a taximetric grid. This violent act of removing architecture from felt experience, in essence, allows for the discipline of architecture to emerge -- it allow for it to be discussed in a rational fashion. Theory is removed from practice, and the body is removed from theory.

The reality of architecture, its built manifestation, never allows this clear of a distinction, however. The acceptance of this view of architecture conditions modernism's relation of architecture and the body; yet the body can never be eliminated. This trend of increased visualization in architecture runs concurrent to both explicit and implicit questionings of this dogma. Mitchell W. Schwarzzer\(^6\) speaks of August Schmarsow, a

\(^5\) Thomas McEvilley, Class Notes, Notebook, p57
member of a group that called themselves Perceptual Empiricists. Schmarsow set about
to develop a theory of space, or Raumgestaltung (spatial forming). In doing so he comes
to realize that the awareness of space is not solely a visual phenomenon (as the theory of
perspective leads one to believe), but instead implicates the entire body through
movement. This theory provides an important foundation for what came to be the
Modernist's theory of space. Merleau-Ponty attempts to take this idea even further and
to, in effect, overturn a ridged distinction between the mind and the body in regards to
perception. "As soon as we cease thinking of perceptions the action of the pure physical
object on the human body, and the perceived as the 'interior' result of this action, it seems
that every distinction between the true and false, between methodic knowledge and
phantasms, between science and the imagination is ruined."7 Moreover, as Gilles
Deleuze points out, the idea that one can view, or know the whole is itself impossible.
"When one recomposes movement with eternal poses . . . one misses the movement
because one constructs a whole, one assumes that all is given, whilst movement only
occurs if the whole is neither given, nor givable. . . "8

In Architecture the mind body dialect is explicitly challenged in the writings of
Tschumi, Ando, and Frampton. In 'Architecture and Limits III'9 Tschumi states that
theories of purely discursive reason are 'largely fruitless' to architecture. That
architecture is more than a visual art, it is "the constant interaction between movement,
sensual experience, and conceptual acrobatics that refute the parallel with the visual arts".
He seems to argue here for an architecture that is not a slave to the discursive, and
refuses Kant's separation of the faculties. For Ando there is no distinction made between
body and mind. "Shintai is ordinarily translated as 'body', but in my use of the word I do

7Maurice Merleau-Ponty. The Visible and Invisible. (Evanston, IL: Northwestern University Press, 1968)
Fertuise, 'The Floating Eye', op. cit.
not intend to make a clear distinction between mind and body: by Shintai, I mean a union of spirit and flesh.”¹⁰ In the work of Frampton, he invokes a return to a tactility in architecture as one of the major points of his Critical Regionalism argument. While he does not specifically comment on the issue in terms of the mind/body dialectic, he does proclaim the body's ability to read architecture. And within the context of his argument this reading also has a critical dimension. The problem with Frampton, however, is that he is at risk to reinforce the dialect by speaking of the tactile as a separate and separable entity, as Pertuiset points out.

The potential in the statement, 'the body's capacity to read architecture', is truly, the promise of Ando's Shintai - the union of flesh and spirit. It shows the possibility of an architecture where the boundary between mind and body, theory and practice, is blurred to the point of extinction. This architecture looks like nothing -- is must refuse the circularity of styles and categorization. And finally, it is the reality of architecture, its power, to free the body from the cognitive/aesthetic, mind/body dialectic, and turn to create an discourse that can be read by the body and the mind.

CHAPTER TWO: A MUNICIPAL CEMETERY

The project really began my first semester at Rice, when researching a paper, I came upon the El Lissitzky quote: "We reject architecture as painted coffins for our living bodies." Looking back on it this became my manifesto for the creation of a cemetery.

Today, it is the visual, and viewing which dominate the other senses, (and sensing in general). This visual dominance affects the way we experience and make architecture. It removes from consideration that ability of our bodies to read architecture in other non-visual ways. "The moment the look dominated the body loses its materiality"\(^{11}\), and the architecture that this domination allows becomes the 'painted coffins': spaces we cannot feel. Architecture becomes 'real' and very powerful when the senses are considered as one thing, inseparable. "The senses really can be considered as one thing."\(^{12}\) This project attempts to create and architecture for the exploration of this sensing, feeling body. A place where we become aware of our body's 'capacity to read architecture' (Frampton), and its mortality. It is at the threshold of the living and the dead that this issue will be explored, through the design of a cemetery. Architecture is not a 'painted coffin' which we cannot feel, but an instrument we feel, read. An event which makes us aware of our bodies and provokes a fight to live.

The site of this project is on a strip of land between the Youghiogheny and

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\(^{11}\)Irigary, Luce. op. cit.

Monongahela rivers in southwest Pennsylvania has been the home and final resting ground of men for well over 2000 years. It first attracted modern man for its roaming herds and fertile soil on the Earth's surface, later for the black coal two hundred feet below the fields. Because of the coal and the rivers the area also attracted the blast furnaces. With the blast furnaces came the workers, managers and engineers who sought out this area for their homes. As the blast furnaces grew forever cold, this once proud township of Elizabeth was slowly disserted for better opportunities, leaving an aging population only its love for its home.

A municipal cemetery will be constructed on this piece of ground surrounded on the north by a public golf course, on the east by a farm, on the south by wilderness and the west by high tension power lines. It will close another chapter in this area's history and serve as a testament to the brave people that turned their dreams into steel.

The unofficial history of the site, a true history, reveals Indian ruins and burial mounds, an old dance hall that was destroyed in a tornado. There are the remains of bear pens, where three Black Bears were kept as an attraction to a park that never happened. Adjacent to the site is an apple tree planted by Johnny Appleseed himself, and a house where George Washington stayed. On the site there is a natural spring that feeds a man-made lake.

Program:

- Propylaeum open
- Funerary Chapel (120 people) 1500s.f.
- Indian Memorial open
- Burial Niches 4000
- Burial Plots 6000
- Ossuary 4000
- Crematorium 1600s.f.
- Nursery open
What I set out to do in this project was to invest in the body's ability to read architecture. This reading does not come at the expense of the eye's reading to the mind, or discursive reading, because I have tried to refuse the mind/body separation, and instead to view the two as one. The project begins to address how one goes about making architecture after rejecting one of the fundamental dialects of the modern disciple. Instead, I took as a starting point that what the senses can read in a much more profound way than a reductive, superficial, applied meaning. In this project it becomes impossible to view, only to see, feel, think and sense. And in the end, I feel, that it is in architecture's domain, and its strength, that it alone among the arts and literature can communicate with the senses, the body+mind. The starting point of architecture is a feeling, not a look. The attempt is not to 'embody' that feeling, but to bring it about.

The issue of drawings, and how to represent these ideas and feeling becomes a primary concern, and the majority of the research went into ways of using drawings as a tool to better attempt this nebulous building/feeling. The first experiment I undertook was to walk around campus, with sketch pad and charcoal, and experience different spaces while recording my ideas about what a cemetery could be. These recording were then reinterpreted as monoprints, which became the spring board and referent for the rest of the project. These prints were then interpreted, not literally, but through my reinvestigation of them, a program, site, and conditions, and in the end came out with a building that I would hope captures a similar range of feeling and are true to the desires that created the prints. An architecture that makes one aware of ones body, in a cemetery. Another approach was with the design of the crematorium, I wrote very explicit, sequential specifications as a way of coming to know, instantaneously, what a building is on the level of material, size, concept, and detail. What all of these approaches have in common is a non-linear, process with inexplicable jumps. With the rejection of the mind/body dialect comes a rethinking of almost every belief and
convention, one of the primary of these is a linearly explicable scientific method. The act of interpretation and subjective judgment became parts of a person discovery that at the same time, never disallows a common communication to other, thinking, feeling people.
Plate 1: Conceptual Diagram, Entry Sequence. Monotype on paper
Plate 2: Perspective, Entry Sequence. Monotype on paper

Plate 3: Perspective, Entry Sequence. Monotype on Paper
Plate 4: Drawing, Entry Sequence. Gesso, pencil on paper.
Plate 5: Sight Plan. Ink on paper.
Plate 6: Conceptual Diagram, Chapel. Monotype on paper

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Plate 24: Conceptual Diagram, Mausoleum. Monotype on paper.

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Plate 30: Model, Chapel. View from South

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Plate 39: Model, Mausoleum. View from Southeast
Plate 40: Model, Mausoleum. View from North
Plate 41: Coal Mine Map of Elizabeth Township, PA.
APPENDIX TWO: ORAL DEFENSE REMARKS

These remarks are taken from the oral defense of this Thesis, which occurred on April 17, 1992. The remarks have been edited for length and clarity. The participants in the jury were Steven Harris (SH), Ellen Whitmore (EW), Peter Waldman (PW), Elyasbeth McKee (EM), Jay Baker (JB), and Myself (RS).

SH: One of the things the is frustrating is that you show us nowhere, how these things exist in the ground. You abstract ground in model and the bases are distracting. The relationship of what they do in the landscape should be important.

EW: I agree, because there is something very moving about this, and very incredibly interesting. Your drawings exist at the level of what would be conventionally be a conceptual diagram, sketch - product of science. You give this conceptual diagram such status and avoid giving the other . . . There are a lot of things you are avoiding purposefully, you are avoiding the plan. It brings you back to architecture at a very profound level. With no interpretational mechanism of drawing the plan first. It really does convey the sense of being in those spaces. The conventions, plan, then I'm very unnerved that we don't know what the site is like. The trees, ground, landscape, in never there, its very frustrating.

SH: I'm intrigued by the methodology. These diagrams as representations of a sensation, I think what I'm a little concerned about - and it may be there -- I'd love to see work you've done before. My suspicion, because you choose not to talk about is that your probably a very adept formalist; that you could parti, and slice and dice with the best of them. You side stepped, a lateral move out of this, but the issue you have not addressed is the critical dimension to the sensate representation. That's what I am concerned about, and the site. I think this is probably a slightly reactionary project on
your part. I sense that there is a great deal of specification about the making of it. A very willing opacity to what you made. Everything you made is already highly subverted in its representation. In your attempt to circumvent the tyranny of the visual, we can only respond to representations of this sort of building if real part of this is made out of real materials with the sound affects, we can't evaluate it on those terms. We could say that this looks like it has that capacity. As a methodology it is extraordinarily dangerous, because expression without critical engagement becomes a very private language very quickly, now yours does not do that. It is the combination of this as a counter proposal to another way of working which brings into it an informed intuition. Which already has a kind of formal facility and critical faculty to dance back and forth.

RS: Two points: first, the issue of the site. I could not work at fiftieth scale, I could not get my hands on it at that scale, but the relationships in the ground are a primary concern and I regret that that does not come across. Secondly, the program did provide a disciple, along with the process, to partially remove my intentions, and to restrain my hand.

PW: There is a history of the site, and a number of grounds, he is concerned with. Last semester all you did was mapping. Your not explaining the mapping here, the story of Johnny Appleseed and the Indians would help bring that across.

SH: Then show a site model that shows what is of the ground, I'd love to see a collapsed mine . . . I don't think he need three bolts. I think he needs a bloody representational Model!!

SH: Your site plan is incredibly structured formalism.

RS: But that's all your left with in a site plan.

EW: We are not asking for a complete site plan, you could never understand this project by site plan alone. Now there is a problem with this model, its hovering between being an abstraction and a representation; I think that is a dilemma, now how you get
beyond these things to an actual building I don't know.

SH: I think you've made that transition reasonable well for now. . .

RS: For me the formal relationships between the buildings are not the issue, I would hope to make the connection materially and hope they speak together, I'm not interested in the view from above.

SH: Were the perspectives?

RS: Interior? (gesture towards wall)

SH: No, exterior.

RS: I made a conscious decision not to explore the buildings as exterior entities.

SH: How do you see out of it not the landscape?

RS: Well here is a perspective coming into the Chapel. . .

SH: No, it isn't. It is a diagram of what you want the space to be.

RS: Yes it is. It depends on how you are willing to read it. I mean you have to be willing to read it in not just a singular way -- there are many different levels of information that can be communicated by it.

SH: I agree, but your proposing the sensual engagement of a building somehow precludes any capacity or any responsibility to simultaneously engage ones mind.

RS: No it does not. That's accepting something that I've tried not to, I don't want to make a mind/body distinction. That you need to read them cognitively as well as sensually; you go through it in not and way or the other, but both. It is not something tacked onto the walls, it is not just touchy-feely; there is a critical dimension in it, what it means to have a crematorium like this a Chapel that . . .

SH: How do you represent that?

RS: That what the ink was getting at and the specifications. They are both specific in a conventional architectural way. I wasn't trying to be purposefully obtusive -- hopefully the drawing would allow someone to enter the project through the back door. You can
see it defined and then fade back to the process.

JB: What is really great about this is that the body is everyman's thesis, and it doesn't matter that it is a cemetery. The whole issue of experience and tactility might suggest a way to take effort to make sure that it is executed in the fashion you desire. The drawing I wish I could see is a very large ink, gesso, color print, drawing.

SH: I think that with representation these pieces inevitable become objects, commodifyable. If we could have representational models . . .

RS: No, because then the issue is simulation, and that becomes problematic. I regret that I did not invest the same faith in building the models as I did in making the drawings.

EW I think you can never, as you say exactly represent what it will be like. The one thing you do not have is construction drawings that just imply and not simulate.

PW: You did not simulate the space as you pushed this wall back before you began. This is a space about the width of your chapel -- the territory you left. Before the space was too narrow, we occupy that and stand in it, our very actions, I'd like to think, are traces of it. Maybe you need verbs along with nouns to describe it.

SH: Are there a lot of things that occur between this atmospheric drawing and the next. Are there forty-three versions that are in between.

RS: What you see is it.

SH: How does one decide how far apart these two doors are? If indeed you went from this to this one, could question what becomes of the two and keep the process open longer.

RS: I worked over the Gesso drawings so the steps are buried under this, it could have been different, but it isn't. There was never a distinction between form and materials, it was instantaneously everything. I guess that sounds know of goofy, but its true. There wasn't a conception of it then I knew what it was, everything then was there, I just had to
draw it.

EW: Did you know everything, where it was?

RS: Within each specific building, more or less.

JB: You can do a 1/4" detail and still get nailed on the job site, I want to make sure your not hiding from yourself.

RS: If I thought something and it was just a shape. I rejected it. The relationship on one material to the other is just as important as what you see in the model.

SH: It seems to me that you need some intervening criterion. A way to question critically, engage, that first move. This may be a glorious mausoleum, but there might be 15 that would be better. Presumably one does this to find things that one could not find using conventional tools. It seems that if one proposes a notion -- knowing and used that as a tool for interrogating not only the drawings but also the first conceptions of it -- I'm talking about knowing in the full sensate meaning. What way of approaching it can allow you to muck around in between.

RS: And that's what the gesso drawings allowed me to do, it allowed me to some extent to explore.

PW: That's crucial, its gessoed over.

RS: The project is not un-critical, it may be critically impoverished, but its critical.

EM: It is un-critical

RS: No it is not. In a way its critical, highly critical, the critical dimension is there, there is an idea and criticism in each piece. I was trying to work them all together.

EM: (It's un-critical)

EW: Maybe its easier than we're making it. I think it is critical, critical in a general level, critical of a sort of conventional mythology. Maybe your being too black and white. Maybe you should be more operative. In the end your causing a reshifting of how we make and work in a way that is critical, there is a need at the moment to engage
architecture as what it is. Its the subject of so much theory and criticism. It's hard to... its moving... it has made us see this as new again. You're really asking for a repositioning.

RS: Your right. In that the critical work has come before, that is how to explain it's critical dimension, that I took the criticism and stood on it.

SH: I'm trying to propose another critical dimension. The criticism began with writing, but I think there is a way to be critically engaging to the irrational. If you are proposing that the mind and body are one, then that's an impossibility. Then one cannot create internal conversation. If you are to engage other issues, issue of text, of pure... something that you want sound to do in counterpoint to what the material does.

RS: That is the very critical dimension employed, it was not just gratuitously touchy-feely design. How do I make a space consistent to the prints. My inability to accept dialectic does not preclude this type of critical architecture.

EW: Maybe its the way your understanding Mind and Body to come together, maybe they are not simultaneous but operation between them... maybe your right...

SH: There is another way to ask the question, how do I ask something that feels and has meaning. If you make a passage that's 1'-8"...

RS: I did, its in the chapel and for precisely those reasons...

SH: In the chapel you have. If you remove sign crematorium could it be a villa? In terms of how it is, it can be anything... I think there is a way, I'm worried that these things may be too resolute, too finite, to unmovable. It seems a little as though you kept building at bay and sooner or later it came over and (clap) it was a building, I'd much rather it wasn't a building yet!

RS: That's kind of... you don't really wish it wasn't a building. I wanted it to be a building, it was never not a building, if not what is it!

SH: I wish it weren't a building yet, I wish it wasn't quite such a done deal.
RS: I think I'd appreciate much more the criticism that the done deal then was, in some way, out of the spirit, or inconsistent with the rest of the project. Then I wish it wasn't a done deal . . .

SH: It's hard.

RS: But is your statement, its kind of like, I love it, I love your process, but don't try to tell me it can be a building.

SH: I'm not saying it can't be a building, I just wish it wasn't a building yet . . . It seems to me that there was a point that there was a deadline looming and all of a sudden this process quit.

RS: No that's definitely not the case, In fact . . .
APPENDIX THREE: MIDDLE AGES

"During long periods of history, the mode of human sense perception changes with humanity's entire mode of existence. The manner in which human sense perception is originated, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well."

Walter Benjamin
"The Work of Art in the Age of Mechanical Reproduction"

It is very difficult to generalize about the Medieval attitude toward the senses because such attitudes are quite diverse and obscured by time. One consistency in this era dominated by the church is its deep suspicion of the object. It was a fiercely iconoclastic time. The Greek search for reason to rule over the body becomes, in the Middle Ages, a search for a perfected soul to rule the mind and body. Greek logos becomes the 'Word', Christ. (Gospel of John). The Greek search for the highest, perfected form is translated into the Medieval search for the Christian Trinity. It is the time of the Gnostics, a sect that "hates the nature of the body . . . [and] censures the soul for its associations with the body."13 The Gnostics strive for divine knowledge to rescue their souls from the human body. From the time of Augustine onward (500 CE), the world of bodily sensation and the world of internal thought are opposites. Images must always be interpreted through reason, yet in the world sensations images are the tools with which we think. The image is inbetween the sensory world and the mental world, it acts as a filter. It is a time when all bodily sensations were held suspect, yet a clear distinction between the senses does not exist, that is to say, that one sense is not privileged over

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another. Saint Thomas Aquinas believed that "all material for knowledge is to be derived from experience"\textsuperscript{14}. He also held the belief that we are not aware of these senses until reason allows us to perceive them. Moreover, the mind is not held as separate from the body, they both work in service to a soul.

In Medieval art, the icons are flat, faces conform to specific rules, and the eyes are empty. The viewer is not to be seduced by what (s)he is seeing, it implies a seeing beyond — a presence of the divine in its absence. The senses are all held in the same mistrust. The pleasures of touch and taste, the seduction of smell, and the laughter of hearing are all a base and shameful link to the animals, rather than to God.

The Medieval, however, is also the time of the marvelous, the monstrous. It is the un-official, and much more pervasive, attitude of the middle ages to the sensual. A time of magic, of shifting boundaries between the real and the unreal, where the senses can be satisfied and explored in their most primitive and intense states. It is this tradition (Pagan tradition) that the Church at the same time both subsumes and represses.

The mind and the body are both set in the service of the soul, where conscious activity (internal sense) is developed by information received from the external senses. "It was principally by way of humors and not through nervous information that the body was capable of modifying the activities of the soul and, in turn, of being modified by the soul"\textsuperscript{15}. Thus the senses do provide a useful service, and are essential for the purification of the soul. It is from the iconoclastic tradition and the monstrous, in conjunction with the senses ability to affect the soul, that architecture of this period springs.

In the Middle Ages, hearing is an important generator of architecture. In his book, \textit{Experiencing Architecture}\textsuperscript{16}, Rasmussen elaborates a connection between

architecture and sound -- architecture as sound. He traces the development of the Chants in the old Basilica of St. of Saint Peter in Rome to the needs of communication and of filling with sound this great lofty, vaulted space. He shows that the cathedrals had great vaulty spaces, not just for the sake of the visual and light, but also for acoustical reasons. Specific music was composed for different architectural environments, such as Giovanni Gabrielles composition for the Byzantine Cathedral of Saint Mark in Venice. With its great domed spaces it reflects sound in a very distinct way. The music is composed so that two opposing lines would reverberate through different domes, thus creating a conversation between them. Rasmussen also points out that after the reformation changes in design and material are needed to 'adapt the edifice for the new religion of preaching in native language', thus reverberation time is reduces. And this in turn, allows for the creation of a much more complex music than before.

Taste (and touch by etymological association) argues Marco Frascari is a legitimate generator of knowledge and wisdom. "In Greek and Latin 'taste' is a term related etymologically and semantically with the act of generating knowledge, sapienza, i.e. wisdom, is related to taste (sapor) . . ." Taste and touch then are related to knowledge, where the visual is in suspicion for superficiality. "The tactile 'measure', the bodies understanding of the signs of space, is the basis for taste and is the dimension which enables us to see whether there is tasteful correspondence of general relations of signification among the 'architectural facts' producing a non-trivial architecture."

Michel Foucault in Discipline and Punish looks at the relationship among the senses in terms of the shifts in political control. He describes a shift in the Renaissance from a society based on the spectacle and the sensual (when all the senses are equally

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17 ibid., p 231
18 ibid., p 231
19 Marco Frascari, "Semiotica ab Ebendo, Taste in Architecture", JAE, Fall 1986, p4
20 ibid., p. 4
valued) to a society based on observation (where the look dominates). Before the control of surveillance (the visual) social control is achieved through the spectacle. "Antiquity had been a civilization of spectacle. To render accessible to a multitude of men the inspection of a small number of objects: this was a problem to which the architecture of temples, theatres, and circuses responded. With the spectacle, there was a predominance of public life, the intensity of festivals, sensual proximity. In these rituals in which blood flowed society found new vigor and formed for a moment a single great body."\(^{21}\)

In a society controlled by the spectacle, the body is the central focus of the ritual. It is acted upon as a means of control. Public executions, tortures, communicate to the masses the power of the rulers. It is a society of repression, before even the concept of individual rights. The body is acted upon in politics as a means of power, in religion as a means of salvation, and in everyday life as a fact of existence and as the home of ecstasy and disease. It is a fiercely iconoclastic time, when images are held in suspect and art did not strive for 'realism'. It is the architecture of 'temples, theatres, and circuses' that spanned from the pyramids to the cathedrals.

The great architectural project of the Middle Ages is the cathedral. The cathedrals are a product of an age that did not make a distinction between the senses; it is an architecture that attempts to affect the soul through the stimulation of the senses. It is a dense architecture that defies reproduction, representation, and easy explanation. The great sculpture provides a rich visual feast, the rough coldness of the stone and warm aroma of the candles; the reverberation of the chants and the overwhelming sense of space, the play of light and the taste of wine all converge at the body to stimulate, exalt, and reform.

APPENDIX FOUR: RENAISSANCE

"Perspective is a way of thinking about observation, a method of harnessing and organizing space . . . While Copernicus's idea that the universe does not revolve around our planet was first being disseminated, the advocates and users of perspective were resolutely maintaining in every painting . . . that the center of the universe is the individual looking at it. All things were reduced to signals received on the retina; all things led to man."


It is significant, in a history of the senses, that the first major act of the period that became known as the Renaissance is the 'invention of perspective'. Kenneth Frampton states that "according to its etymology, perspective means rational sight of clear seeing, and as such is presupposes a conscious suppression of the sense of smell, hearing and taste, and a consequent distancing from a more direct experience of the environment."22

As the church begins to lose power to the growing mercantile class, the old prohibitions on realism in the arts begins to break down. The doubt in the human subject is replaced by faith, and art no longer needs to show its artifice in representation. The result of this is the Renaissance, and the rediscovery of perspective. Just as realism and the ideal in art are suppressed in the middle ages, so are these same values when projected onto architecture -- the 'pure', the presence of the human ability to achieve perfection is in the same way called into question. Now that the image no longer has to proclaim its artifice, the power of the human subject can once again be celebrated, the architects of the time were free to 'discover' the classical orders. With the slackened power of the iconoclasts, and the renewed faith in the human subject, the visual sense begins its long assent to

22Frampton, op. cit., p29
domination over the 'lower senses'.

If the Middle Ages are a time when the human subject (and his/her body) is held in deep suspicion, then the Renaissance is a time when the human subject is reinvested. With Descartes' statement 'I think, therefore I am', not only did he reflect man's new role as the center of the universe, but also a new privileged position of reason. Descartes believed that we perceive only representations of things, not the things themselves. "Knowledge is possible because truths are indubitable . . . and there is a method by which human knowledge can be shown to be guaranteed."23 The senses are not discounted, but they can only be relevant when the newly developed 'scientific methodologies' are applied to them. The sense's role in the generation of knowledge is reduced to only that which can be spoken of discursively. This is not, however, the only view toward the role of the senses. A debate is engaged as to the "extent to which . . . knowledge is derived form the use of our senses (Hume, Locke), as opposed to the use of our reason (Spinoza, Descartes)."24 The belief in the scientific method of rational observing, however, is strong in both camps. In the new experimental sciences, proof slowly begins to replace faith; the ability of the visual to communicate to a rational mind replaces spiritual explanations and allegories.

Andrea Carlino ('The Book, The Body, The Scalpel', res 16) views the attitudes towards the body in terms of the new art of medical illustration. "A change in attitudes towards the human body thus occurred simultaneously in both Art and Medicine." He eludes to an architecture that knows the body in a new way. Before the 'known' body was the body of faith, superstition, and fable, now the body is 'known' through the science of the observable. Carlino researches medical illustrations, and in reading him one cannot help but see that it is no coincidence that the practice of measuring buildings

23Hamlyn, op. cit., p59
24ibid., p59
and reproducing them came at the same time as a renewed interest in dissection and anatomical representation. (a point also made by Marco Frascari in Implementing Architecture, Nexus Press). An entire technology emerges, based on the scientific observation of the body. Perspective is just the first of the developing technologies of vision. The development of the lens, telescope, microscope and eye glasses opens up a new world that is clear to vision -- "an obscure art of light and the visible was secretly preparing a new knowledge of man."25 Similar prosthesis were not developed for the other senses.

This period loses interest in the concept of the soul and reintroduces a conception of mind -- a mind increasingly separate and dominate over the body. Perspective helps establish this distance. It allows for a realistic simulation, but a simulation of the seen over the sensed. It is perspective that opens up the discipline of architecture to the rational potential of exact representation. Almost from its inception, however, perspective is also challenged, and vicariously the limits of the human subject. The most prominent among these detractors is Pirenese, who uses the techniques of perspective to prove that it is not totally rational, but also contrived. The main use of perspective, however is in the 'measuring and calculating of objects'. Albret Druer invented a perspective machine, where a subject (usually a woman) would lay upon a table. In between her and him was a glass screen, divided by a grid. He would draw an exact replica of what is seen onto a grided piece of paper.

Perspective and a rationalizing of the senses does not, however, instantly create an architecture 'bereft of tactile pleasures'. Perspective is just one way that architecture is conceived in the Renaissance. Building designers are also sculptors, painters, and even sometimes musicians. These sensibilities are lent to their buildings. The rational had not yet achieved victory over intuition and faith. The rediscovery of Vitruvius and a return

25 Foucault, op. cit., p171
to 'pure', rational orders is probably the most obvious sign of the shift from a suspicion of the image to a fascination with beauty. "The secular cult of Beauty, developed during the Renaissance and prevailing for three centuries, clearly shows the ritualistic basis in its decline."26 Perspective, along with the revived orders affects the Renaissance city almost completely. The early Renaissance experiments in perspective are taken up in the design of gardens. The Bobili Garden in Florence (1550+), with its perspectival axes and focuses of vision, becomes the mode of an entire era of city building. This concept of garden, based on visual stimulation and motivation, contrasts sharply with concepts of gardens in other parts of the world. The gardens of Japan, for instance, never develop this predominate visual focus, they remain much more shared by all the sense. This restriction of the body in terms of garden design reaches its pinnacle in the Nineteenth Century English Garden. In the English Garden the observer is not to leave a paved path, and can only gaze in longing at the picturesque landscape.

As the senses emerge in the Renaissance dominated by the visual (and the body by the mind), so did architecture emerge dominated by the look, the facade. The facade becomes one of the great programs of the Renaissance. They were appended to the medieval churches that were more concerned with the spatial experience of the interior. It is the first hints to what becomes a strong trend of the eighteenth century. Architecture becomes a garment, and as a garment susceptible to fashion and the circularity of styles. (Johnston, JAE- Alchemy and Architecture). The bodily experience is no longer stimulated by the building, just simulated by the garment.

The Florentine church of S. Maria Novella is designed by Fra Sisto and Fra Ristoro is constructed from 1278-1350. (Banister Flectcher) The church is designed from a medieval attitude toward the senses. It is obvious that this and most other cathedrals of this period are almost entirely unconcerned with what the exterior 'looks'  

26Walter Benjamin, "The work of Art in the Age of Mechanical Reproduction". Illuminations, p.224
like. Their effort and energy is expended in the creation of the inhabitable space -- the interior. It is this space that the body inhabits and reads with all its haptic powers. As with many of these churches the facades are ignored; not only does a concern for a visual and un-occupied object not exist, but an attitude about this object in relation to the larger city also is unimportant. In 1456, 106 years after its completion, Leon Battista Alberti is commissioned to design the facade. The power exercised by the church upon the body in the interior, is now shared with the power of the city on the exterior. This new power is no longer communicated by a uninterrupted flow of bodily stimulations, but by the isolated glance. This new power is communicated visually.

Foucault identifies the plagues of the Renaissance with a shift in modes of political control from the sensual and spectacle to that of observation. This shift in social control triggers a new relationship with the body, it is a shift from a perception of the world based on all the senses to a growing dependency on the visual. The great plagues provide the crisis necessary for the modes of control to change. The plagues give a sense of urgency that is met by a developing attitude toward scientific methodology and a rational sub-dividing of the population to watch over and observe. The medical crisis provides the excuse (it's for your own good) for the shift that begins the process of the domination of the other senses by that of sight.

Because of the great plagues, a system of observers and police are established to watch over the population. The advent of the investigative disciplines proves to be much more effective means of control than the arbitrary threat of retribution of the spectacle. "The disappearance of public executions marks therefore the decline of the spectacle; but it also marks a slackening of the hold on the body."27 The body begins to serve as "an instrument or intermediary: if one intervenes upon it to imprison it, or to make it work, it is in order to deprive the individual of a liberty that is regarded both as a right and as a

27Foucault, op. cit., p. 10
property"\textsuperscript{28}. Authority less frequently acts on the body, now it manipulates the body to act on the mind.

The Control of observation from the middle ages begins a process of the domination of the visual. It separates and analyzes, it 'makes' individuals, it is responsible for specializations of fields and stratification of knowledge along the lines of simply observable 'facts'. The 'play of calculated gazes' is substituted for the' spectacle of public events'.\textsuperscript{29} In the traditional society power is everywhere seen, it is the subjects that are invisible, in a society controlled by observation it is the power that is exercised invisibly though a rationalizing gaze, the subjects are made visible, power is invisible.

Within this new society, a society controlled by the visual, humanism is born. "The play of signs defines the anchorages of power; it is not that the beautiful totality of the individual is amputated, repressed, altered by our new social order, it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies."\textsuperscript{30} The Age of the Individual is born, and is used, in so far as an individual's rights are denied, to control the population that is earlier controlled by the spectacle -- from the realm of bodily sensation to discipline of rights and privileges. "...[T]he punitive theatre: available to the social body, was replaced by a great enclosed, complex and hierarchized structure that was integrated into the very body of the state apparatus, A quite different materiality, a quite different physics of power, a quite different way off investing men's bodies had emerged."\textsuperscript{31} Foucault outlines the changes in the role of perception of the body from a study of punishment. He also states 'that the moment when the sciences of man became possible is the moment when a new technology of power and a new political anatomy on the body were implemented.'\textsuperscript{32}

\textsuperscript{28}ibid., p11
\textsuperscript{29}ibid., p177
\textsuperscript{30}ibid., p217
\textsuperscript{31}ibid., p116
\textsuperscript{32}ibid., p193
APPENDIX FIVE: ENLIGHTENMENT

With industrialization in the late eighteenth century and the lead into the nineteenth century the body and our perception of it enters a new phase, that of a commodity. This new exploitation of the body is a result of the quest of reason, and the rational subdividing allowed by observation. "The human body was entering a machinery of power that explores it, breaks it down, and rearranges it... let us say that disciplinary coercion establishes in the body the constricting link between an increased aptitude and an increased domination."\textsuperscript{33} The body is discovered as a target of power, "a body that is manipulated, shaped, trained, which obeys, responds, becomes skilled and increases its forces... a whole set of regulations and by empirical and calculated methods relating to the army, the school, and the hospital, for controlling or correcting the operations of the body."\textsuperscript{34}

Bodies must be subordinated to the visual sense. Bodies become useful pieces of economies and subject to the need for efficiency. In this politics of the senses, Napoleon stands as a transitional character, he creates the great apparatus of surveillance that in the end makes him obsolete. The written, regularized, consistently implemented law makes life reducible to a discursive and rational ordering that did not depend on the "necessarily spectacular manifestations of power."\textsuperscript{35} These manifestations of power 'were extinguished one by one in the daily exercise of surveillance in a panoptism in which the vigilance of intersecting gazes was soon to render useless both the eagle and the sun."\textsuperscript{36}

If the domination of the visual, as the only 'rational' sense is the project of the enlightenment, then architecture, in its desire to legitimize and establish itself as a

\textsuperscript{33}Foucault, op. cit., p 138
\textsuperscript{34}ibid., p 136
\textsuperscript{35}ibid., p 217
\textsuperscript{36}ibid., p 217
'reasonable' discipline in the new age of reason, must frame itself within the gaze of rational discourse. To do this it must categorize, separate, and create a taxonomy, a history, a language, and a set of rules (a methodology). It must join into the empirical and rational spirit of the times, jettison or ignore the baggage that does not fit this narrow definition (and that which could not be framed and discussed within the academy).

"There is an obvious analogy between architectural typology and iconography . . . the type therefore, is formed through a process of reducing a complex of variants to a common root form . . . by sublimation into a 'type', they assume the indefinite value of an image or a sign."
Guilio Carlo Argan
trans. Joseph Rykwert
"On the Typology of Architecture"
Architectural Design, 12/63

The domination of the visual, the objectifying gaze, in the enlightenment becomes institutionalized with Quatremere de Quincy, Durrand, and the introduction of typology as an empirical way of 'looking' at architecture. Typology, historically as well as today, is based on visual similarities and ignores, in favor of the Cartesian mind, the body's ability to read and understand architecture.

The idea of typology develops in the late 18th Century with the great movement of encyclopedic knowledge. "Quatremere de Quincy gives a precise definition of an architectural 'type' in his historical dictionary. The word type, he says, does not present so much an image of something to be copied or imitated so much as the idea . . ." (Guilio Argan) De Quincy wishes to establish this methodology in a scientific way without resort to the purely visual. Within the ensuing debates on typology, however, this attitude becomes antithetical to the ideology, forces, and desires that spawned it. With Durrand and the Ecole Polytechnique, the sensual and experiential nature of architecture is reduced to a diagrammatic image arranged in a grid, on a page, and accepted as the
pieces of a puzzle to be arranged based on visual similarities. The equation of 'this looks like that, therefore, this is that' becomes the dominate mode of analysis in design.

With the Modern Movement's rejection of history, it becomes assumed that typology, as an ideology and methodology, is also rejected. In fact, during the Modern Movement the concept of type is taken to its logical extension. The industrial economy and mass production transforms type into prototype. (Moneo) The 19th Century's interest in typology is not an interest in history, just in a newly constituted history based on the visibly observed. Durand and his rationally modern diagrams are a case in point. Typology is never about history, only about the project of reason and rational seeing.

After modernism's fall from grace, there is a renewed interest in 'historical' typology. This new typology is ever more dependent on the visual, but not concerned as much with visual pleasure as with communicating information. Rossi wrote of typology as 'juxtaposition of memory and reason . . . because it is through the concept of type that the process of communication is made possible. "37 This communication, however, exists only at the level of the image, the visual communicating with the rational mind, and not with a feeling, sensing body. "For Venturi, type is reduced to image . . ."38

Moneo states, "the only sensation of reality left for architecture today resides in its history. The world of images provided by history is the only sensible reality that has not been destroyed by scientific knowledge or by society."39 Moneo refers to history, but really to a visually constituted 'kit of parts' history. These 'images' of history are precisely defined by scientific knowledge. A reliance on the 'image' precludes reality. As Guilio Argan states, this false faith in a 'reality' of the image is like the architect "who assumes classical architectural typology, not classical architecture."

37 Rafael Moneo, "On Typology", Oppositions 13, p 37
38 ibid., p39
39 ibid., p41
"Without doubt, this new approach to architecture was related to the appearance of schools."40

All of this came about because of architecture's need, in the second half of the 18th Century, to define itself as a discipline within the general environment of the enlightenment. It is in the enlightenment's quest for truth through reason, that for an endeavor like architecture to remain legitimate, it must rely on principles of scientific observation and methodology laid out by other disciplines. It must establish a syntactic language, write a history, and establish rules of methodology. As a reward for this conformity, architecture would become a part of the academy, the university, and the institute. Typology helps architecture create a repeatable taxonomy of pieces, and helps in the naming of objects. "... language also implicitly acknowledges the concept of type." (Moneo) Architecture as a visible language communicating meaning develops as a goal of the architects of the Revolutionary Period: Le Doux, Boullee, etc. Victor Hugo in *Notre Dame de Paris* expresses this new role of language in architecture well:

"Architecture began like any other alphabet... later formed words... finally they wrote books."41 This statement shows the reduction of architecture to a visually communicated art. Typology provides a way of ordering history, a very specific linear history based on visual evolution. Typology becomes a set of rules, a kit of parts to be assembled easily, quickly, efficiently, and easy way of making a very superficial architecture.

"As chemistry emerged from alchemy without metaphysical dimension, likewise did architecture relinquish to engineering the technical plane. At the Ecole de Beaux Arts architecture became a mere chiton, a mythological garment draping a scientific frame, formulated most likely at the Ecole Polytechnique. Garments, however, are subject to fashion, and fashion is susceptible to change."

George Johnston  
"Architecture and Alchemy"  
*JAE*, winter 1988, p12

40Ibid., p 31  
If typology is a method of organizing history, and history is understood as a kit of parts, it is easy to understand how architecture becomes merely an issue of style. Style exists primarily at the level of the image. It is visually consumed. "The vicious circularity of styles testifies to the oblivion of foundations amongst the frantic excess of measuring and calculating objects." (Daniel Libeskind, *Between Zero and Infinity*) If architecture's only role is to communicate to a disembodied mind, then it becomes only an issue of style -- which style to communicate which message. The modern movement successfully attempted to remove the issue of style from this debate for a short period of time, but in many cases only interpreted itself on a visual level, thus condemning itself to become merely one style among many.

"Was it not perhaps at the very point where the idea of type became clearly articulated in architectural theory at the end of the 18th Century, that the reality of its existence, its traditional operation in history, becomes finally impossible?"\(^{42}\)

In the end typology fails to do justice to architecture because it excludes consideration of the body/mind in favor of a disembodied mind. The body's capacity to read architecture is as great as the minds. For me the existence of a thing called typology is just the acknowledgement of tradition (not history), and a desire to learn and understand the past. However, this understanding must take place on many levels, not just on the visual level. The realization is not that tradition is in the past, but that it is 'an event in which we are inextricably caught'. Nothing we can do is outside of tradition because we are products of those traditions as apprehended by our senses. Our purpose then is to push, challenge, and question those traditions so that instead of being valid just for our ancestors, they are valid to us, our bodies, our time, our place, and technology.

\(^{42}\)Moneo, op. cit., p.21
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