

**INTENTION CONSTRUCTION: TOWARDS A NON-SEMANTIC
ARCHITECTURE**

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BY

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A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University

of Manitoba in partial fulfillment of the requirements of the degree

of

MASTER OF ARCHITECTURE

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INTRODUCTION

This thesis focuses on the relationship between aesthetic intention, meaning and architecture. The present context of pluralism, commodification and a schism between theory and practice both guides and limits the making of architecture. What nature of meaning and authorship is possible in this context? Architects structure their intention in relation to meaning. The prevalent tendency is for architects to rely on semanticization and overconceptualization. This underemphasizes the embodied experience.

This thesis proposes a shift from an architecture of semantics to an architecture of experience. This allows for a grounding of authorship and the bridging of theory and practice. It is a shift towards the realm of the real: material directness; the non-semantic; and the visceral dimension of architecture. The aim here is to construct a theory of architecture that might support authorship and aesthetic intent. Minimalism is advanced as a preferred approach.

Construction, which has become increasingly separate from design, is identified as the principal medium by which this more visceral architecture is realized. A reassessment of the primacy of construction in relation to aesthetic intent is proposed. Through a process of demythification and remythification, a new conception of construction is formed. The fragmented nature of the construction process, the result of the division of labour, and the diminished role of the architect make it even more necessary to understand the reality of construction and building materials.

Finally, 'montage' is proposed as a specific strategy that can be employed in situating this more visceral architecture within a postmodern, pluralist context. Montage allows differing fragments and voices to coexist. It is here where a renewed authorship can occur.

LITERATURE REVIEW

Several authors have explored areas of construction, authorship and meaning in relation to architecture and art. The following writers deal with these issues and have informed the development of this thesis in a fundamental way.

Construction Intention Detail, edited by Kevin Alter and Mark Gilbert, presents five works of architecture by five Swiss Architects. Essays by Martin Steinmann and Wilfried Wang describe the methods and approaches of the architects and come to identify a common intention by the five architects. The aesthetic intent is toward non-semantic representation. Steinmann notes the importance of construction in each of the works as a way of achieving this aim. His writing relies primarily on interviews and writings by the five architects to support his assertions.

The Return of the Real by Hal Foster reassesses certain art movements from minimalism and pop, starting thirty years ago, to the present. Foster argues that after art-as-text and art-as-simulacrum paradigms of the 1970s-80s, 'a return to the real' is emerging where practice and theory are grounded in actual bodies and social sites. One of those potential real sites is an approach based on a redefined minimalism. In reassessing minimalism with the help of Rosalind Krauss, Foster asserts that minimalism's dismissal as a reductive approach was inaccurate and goes on to describe minimalism's concern for site, birth of the viewer and phenomenological vision.

Foster examines the relation between historical avant-gardes and neo-avant-gardes and argues that "the avant-garde returns us from the future, repositioned by innovative work in the present." ¹

In *Differences*, a series of ten essays that contemplate the differences in current architecture, Ignasi de Sola-Morales concludes that there is no single way to approach today's practice. Instead he elucidates contrast, diversity and tension. His writing is supported by phenomenology and Deleuzean post-structuralism. Beginning with the period after WWII, he constructs a description of modernism's subjectivity. Some of the ideas that he discusses are: existentialism; minimalism; montage; and difference and limit. His book focuses on the nature of authorship and practice in today's postmodern context.

In *Ontology of Construction : On Nihilism of Technology in Theories of Modern Architecture*, Gervork Hartoonian develops his arguments with a particular emphasis on historical contextualism. Hartoonian sets out to map the secularization of construction as it appears in theories of architecture with a particular focus on the nihilism of technology. The primary figures in his writing are Semper, for his general theory of tectonic culture, and Loos, for the scepticism he brings. He proposes montage as a postmodern strategy to drain metaphysics from the tectonic and ultimately redefine it. The underlying impetus for his writing is the theme of construction and its poetic implications for architecture; the pursuit of the question of technology beyond its empirical dimension.

In *Constructions*, a series of intersecting essays on architecture and art, John Rajchman looks at a new way to construct theory; one that strives to be neither purist nor utopian. His ideas are developed from the philosophy of the late Gilles Deleuze. He begins by discussing notions of folding, lightness, ground, abstraction, other geometries and future cities. He asserts that new constructions need to be looser, more flexible, less complete, more irregular and yet still hold together. He refers to the principle of Deleuze's aesthetic when he suggests that a work is always a montage. Rajchman's aim is to 'construct' a new space of connections and ultimately suggest a new architecture.

These five sources, while addressing differing issues and from somewhat contrasting perspectives, share a number of common themes which are critical here. All the authors relate their writings to practice or new possibilities for practice. Each of these books is positioned in 'the realm of the real' and in differing ways, all are addressing issues of authorship in the postmodern present.

1. MEANING AND CONTEMPORARY ARCHITECTURE: A TOPOGRAPHY

The relationship between meaning and architecture has become a growing preoccupation for architects and critics. It has been important to architecture culture for hundreds of years, but recently seems to have taken on a new currency. Why is this so? What is the nature of meaning in relation to architecture? What role do architects have in communicating meaning and what guides their intention? What are some of the prevalent emphases on meaning in current architectural production by practicing architects? These are some of the questions I intend to examine in order to substantiate an 'intention' or strategy for making meaningful architecture.

1.1 WHY IS MEANING A PRE-OCCUPATION?

Not only is God dead but the vacuum of his absence has created an inescapable whirlpool which has swallowed up collective commitment and moral reasoning, undermining architectural attempts to re-establish essential gestures, concern with human dwelling, and attention to the deeper meaning of the place. Monuments for memory are archeological ones, disconnected fragments, only partially excavated; filled more with questionings and doubt than with comfortable presences. ²

1.1.1. END OF MONISTIC SYSTEM

The post WWII rise of perfervid individualism that led, in the 1960s, to a radical critique of the 'project of modernity', in particular the commodified North American version largely lacking a social component, has resulted in a period

of doubt and pluralism in which 'anything goes'. This phenomenon marked the demise of a supposedly universal consensus and the end of a 'grand narrative'.³ No generally accepted system of values or political principles on the basis which architecture can be judged has since emerged, however.

Authors of present day works of architecture promulgate many sorts of intentions, but overall within a limited number of projects; critics support certain camps and oppose others. Contemporary architecture is plural, multiform and complex.

1.1.2. FASHION AND COMMODITY

As Gail Faurschou notes in *Obsolescence and Desire: Fashion and Commodity Form*, commodity lies at the heart of capitalist society. She goes on to argue that "fashion with its ephemeral volatile existence is an exemplary site for exploring the dominant tendencies and contradictions of our elevated late capital postmodern consumer society."⁴ Faurschou proclaims fashion as the propelling momentum, "the dominant mode of consumption itself, the infinite and indefinite extension of its modalities."⁵

Fashion increasingly represents the dominant expression and "widening extension of the logic of the commodity form."⁶ She asserts that by virtue of its indifference to the material content of social life, fashion intensifies the obsolescence of certain values. The natural, moral or utilitarian reasons for production exist only as a few possibilities in "the infinite variety of signs that will wait to succeed each other in the order fashion sees fit".⁷

Fashion, as a manifestation of the late capitalist period, is readily apparent in architecture. Indeed, it seems that 'fashion' is the dominant system for most commercial architecture. A basic generic type that evolves largely by commercial success, is pasted with an aesthetic 'icing' in such a manner that its removal and replacement with the next icing is expedient and easily accommodated. This is especially prevalent in strip mall and 'big box' typologies. In this system the aesthetics are not intrinsically linked to the structure but flexible and ephemeral.

Economic recession and political conservatism, tied explicitly to the late capitalist condition, have played a role in the architect's largely unprotected acceptance of this system. Indeed, many architects have responded by becoming large and international, capitalizing economically on 'fashion and commodity'.

Marxist theorist Fredric Jameson's uneasiness with late capitalism is related to this notion of fashion. His objection stems from a questioning of whether pluralism and difference aren't in some way tied to a deeper internal dynamic.⁸ He speculates about multi-national corporations utilizing vernacular dressing on generic frames to sell architecture as a responsible, locally sensitive practice.

The reality of 'fashion and commodity' poses a fundamental challenge to beliefs and attitudes held by many architects and raises numerous questions surrounding meaning and architecture; in short, how can architecture, a practice once rooted in the value of 'firmitas', among others, continue to be meaningful within this context? Are its values distanced from reality?

1.1.3. THEORY / PRACTICE SCHISM

CRITICISM: sole task is to make measurements and determine levels of the state of things as we find them.

CRITIC: set criteria of quality, affirm certain works over others, usher new art into public sphere.⁹

Ignasi de Sola-Morales, in discussing meaning and what guides an architect's intentions, identifies the diminished role of the critic as a factor behind a perceptible theory / practice schism. As he notes, the modern movement began with the critic and architect in close alliance. Critics articulated a series of new concepts in order to legitimate the new architecture. Critics such as Behne, Gideon and Zevi worked to further the projects that the architects of the avant-garde put into practice, serving to communicate the intentions and necessity of this new architecture to a broad public. Practice and theory were relatively allied in a shared vision. This period of optimism and economic growth allowed for a 'grand narrative' of modern architecture.

The fervent rise of individualism after WW II, the period of radical doubt in the 1960s and resulting postmodern plurality led to a split between practice and criticism. The search for meaning in this period of change, instability and distance from the critic has led to a search for meaning from extrinsic sources such as literary criticism, structural theory, etc..

The changing role of the critic over the past several decades has resulted in the diminished role of criticism. Presently, architectural criticism often takes on a passive role. Criticism is frequently about project documentation with little regard for issues in the preceding definitions. Roemer Van Toorn and Ole

Bouman refer to this type of criticism as little more than "a travel guide for the omnivorous cultural tourist."¹⁰ In Canada, the national newspaper daily, the *GLOBE and MAIL* is one of the few outlets for writing about architecture; a passive role is mostly taken.

A renewed relationship between practice and theory is re-emerging with certain architects, however, this new generation of architects and critics is recognizing the necessity of theory and the importance of criticism that raises the quality of the level of work produced.

Together, the end of monism, the prevalence of fashion and commodification, and the increasing schism between theory and practice point toward a 'crisis of meaning' in architecture.

1.2. CONSTRUCTING A TOPOGRAPHY

When one speaks of differences within the discourse of architecture, one should acknowledge a radical impurity. Every camp or group has open doors and windows which communicate with the other. Also, these openings are not only in the discipline of architecture but also permeable by art, philosophy, cinema, etc..

A mapping or examination of the contemporary architectural landscape and some salient issues tied to it is not a question of 'logos', universal ideas, but of

'graphie', writings. These writings are the differences in beliefs, conditions and emphases that guide architectural production and discourse. Philosopher and filmmaker Trinh T. Minh-ha refers to a 'toing and froing' between sameness and difference as a way of deciphering a constructed reality; the concept of topography, not topology.

Neither human subjects nor the conceptual or material objects among which they live are any longer thinkable in their distinctness or separation from the dynamic, correlated, multipart systems within which they arise. Every thing and every individual emerges, evolves and passes away by incorporating and being incorporated into, other emerging, evolving or disintegrating structures that surround and suffuse it. Indeed, incorporation may well be the name of the new primary logic of creation and innovation in our late modern world. ¹¹

Other disciplines affect our lives and experiences as architects, guide our own understanding and hence influence the architecture we make and perceive. However, it is not before the issues inherent in architecture itself are resolved that enrichment, through 'external forces', can occur.

1.2.2. CRITERIA FOR MEANING AND ARCHITECTURE

How might one experience, perceive, understand and author architecture? In the present situation, there are no fixed criteria from which to approach works of architecture.

MEANING: that which is intended, aim purpose; that which is signified; ways of knowing, understanding.

UNDERSTAND: to know meaning, import of; comprehend character, qualities, nature.

AUTHOR: to be the author of; write.¹²

When discussing meaning and architecture, it is necessary to present the players: a subject, an object, and an author or architect. Through the elaboration of their roles and some mechanisms which exist to relate them, the relationship between meaning and architecture is revealed.

A subject understands, comprehends and experiences architecture on many levels: mind / body reception; intellectually; aesthetically; humourously; decoratively; politically; philosophically; grammatically; emotionally; spiritually; optically, the realm of purely visible; experientially; abstractly; historically; typologically; functionally; tectonically; contextually; metaphorically; rhetorically; and conceptually. The meaning or understanding exists in the subject. A subject can be both individual and collective. There are different modes of experiencing and interpreting an intention or significance by a subject.

Immanuel Kant's 'Critique of Judgement' of 1790, Ignasi de Sola-Morales asserts is a subjective thread which weaves through even the most objective modernist points. Kant believed that experience was fundamental to our knowledge of objects in the world around us, "they could not be described in purely objective, non-experiential terms." ¹³ In Kant's conception the subject moves between instinct and desire, and moral imperatives; the subject's suspension between phenomenal and noumenal realms.

While meaning is personal and complex there is some commonality in understanding. The fact that the subject is part of a society and culture, no matter how little consensus exists within that society or culture, allows for shared meanings or understandings through certain codes, conventions, language, and symbols.

Architecture can be a monument in the etymological sense of that word, a work that refers to, recalls something outside of itself, such as an event, a moment in history, the community, its origins, or certain moral or civic values. This meaning is connected to memory and related memory associations.

Architecture itself has an intended meaning which is implanted by the process of its creation: architect intention; conception; and production. An intended meaning is communicated by the architect . The subject receives an architecture's intention and non-intention ¹⁴ not only by visual means but also through other senses. A subject understands the communication or knows by living and experiencing and also by just being a human, for example: hot; cold.

The 'death of the author' is a prevalent notion in contemporary discussions regarding meaning and art. It has been defined by Foucault, Baudrillard and others. However, "to question the role of the author does not mean its literary death or the banishment of meaning in art." ¹⁵ Meaning is just more difficult to ascertain. Meaning being imbedded in the work itself or in the symbolic-formal intentions of the author is brought into question. Walter Benjamin, in *The Work of Art in the Age of Mechanical Reproduction* recognized the need for a new method to deal with authorship and art.

POSSIBILITIES

Different ways of perceiving a building are not mutually exclusive, nor are there a series of successive steps which lead to comprehension. They are concurrent, alternate possibilities of the object. One can say that an object is the ways in which we perceive [desire] it. ¹⁶

Meaning and understanding are not quantifiable, complete, static, absolute; but mutable. Society, personal psychology and many other understanding systems are not static thus neither is meaning or understanding.

Reality no longer has the time to take on the appearance of reality. It no longer even surpasses fiction.¹⁷

In a society where symbols often refer to other symbols, communication becomes somewhat, although not entirely, arbitrary.

In discussing the relation between meaning and architecture, the postmodern condition provides us with a plethora of theoretical paradigms or ideological frameworks. Architects and critics adopt these frameworks in explaining the mechanisms of the meaning. Some of the most prevalent systems are phenomenology, aesthetics of the sublime, linguistics, Marxism, and feminism.¹⁸ These are discussed in an addendum to this thesis and they are the primary basis on which architects construct their intention in relation to meaning.

Contemporary society is split, diversified, and subject to absence more than presence. In this context with no fixed criteria from which to approach architecture, meaning is contingent and complex.

The focus of this paper will place a greater emphasis on the author or architect and the architectural object.

1.3. WHAT GUIDES INTENTION TO MEANING?

As Michael Benedickt asserts, "Arguments against architecture as communication are inevitable. What something is, is distinct from what it communicates." ¹⁹ Architecture should always be thought of in reference to how it is perceived; that is in relation to a subject.

Architects, whose intention it is to build, play a fundamental role in the process of constructing an architectural object. While they have no certainty over how that object will be understood, experienced and felt by a subject, there is a role to play in the communication of meaning.

An intended meaning is communicated by the architecture itself, client, culture, social constructs, economy and the words of the architect. Meaning cannot be imposed or denied. Some form of consensus is necessary between the architect and client.

1.3.1. THE PRESENT CONDITION

The present architectural condition, as described by Ignasi de Sola-Morales, Scott Gartner, Kevin Alter, Wilfried Wang, Michael Benedickt and others, can be characterized by an emphasis on semanticization and excessive conceptualization with regard to meaning in architecture.

Current cultural productions appear more and more to be nothing but representations. ²⁰

Once the arbitrary relation between image and meaning, between signifier and signified was discovered, the way was open for total manipulation and fictionalization of the image. ²¹

One example of semanticization is so called postmodern historicism, which emerged in the late 1970s and continues today. It sought to recover a lost inventory of architectural expression, to establish a connection to the public by utilizing familiar systems of signs, symbols and representation. In our late capitalist consumer society, this system was inevitably subject to commodification. The dominance of the architectural image has led to an architecture of scenography. A radical disjuncture appears between form and construction.

The architect's search for meaning in a period of change, instability and distance from the critic has led to architectural meaning increasingly being sought from extrinsic sources. Frequently architecture is explained by way of literary theory, philosophical doctrines, computational algorithms or sculptural expression. The danger in this is the tendency to employ literalism and the disjunction of meaning from the actual architectural object and the architectural problem itself. In an increasingly complex and plural world it has become seemingly necessary to have architecture validated by disciplines external to it. It must be remembered, however, that the fundamental thing that architects do is to guide the construction of the architectural object.

Despite the emphasis on semantics in meaning, however, alternative strategies are emerging. Graham Owen in an essay accompanying the 1994 *RAIC Governor General's Awards for Architecture* attempts to frame and link meaning in the premiated work. The title 'The Meaning of Construction, The Construction

of Meaning' suggests an important relationship between construction and meaning. Much of the work included, by architects such as Brigitte Shim and Howard Sutcliffe, Atelier Big City, John and Patricia Patkau, and Dan S. Hanganu, are for the greater part very small isolated examples, but the architects share an attitude of criticality and a distancing from predominant influences which is counter to semanticization and overconceptualization. For these architects, meaning resides primarily within the very architectural object itself, not in some outside referent.

1.3.2 CRITICAL ARCHITECTURE

Architecture autre: of high practical, aesthetic and intellectual quality.²²

In discussing culture in relation to architecture, K. Michael Hays notes,

a conceptual unity comprising, on the one hand, those theoretical and practical systems which authorize, promote, or constrain the production and use of ideas and objects and by which a society or a place differentiates itself and maintains its hegemony; and on the other hand, the artifacts and environments which endure as resourceful physical precedents or exemplars of systems of production and become transmitters of culture. Thus it is in the purview of culture that the production of architecture is overseen from above by a dominant system of values saturating downward, and generated or validated at its base by normative standards of practice and methodologies which may themselves become cultural agents.²³

As an activity and knowledge architecture is a cultural enterprise. The nature of the relationship between culture and architectural form is a fundamental issue. Hays posits critical architecture as "one resistant to the self-confirming, conciliatory operations of a dominant culture and yet irreducible to a purely

formal structure disengaged from the contingencies of place and time." ²⁴ The notion of consideration is not identified but implied.

Architecture is an event, resulting from the intersection of forces capable of situating an object that is partially signifying, contingent. ²⁵

INSTRUMENT OF CULTURE

This is the study of objects and environments as signs, symbols and instruments of cultural values; a reification of collective volition. "An act to reconfirm hegemony of culture and help to assure continuity." "Starting from the documents, recorded actions, and artifacts which are the base material of the historical world, understanding is seen as essentially a self-transposition or imaginative projection backward in time.[temporal convention of interpretation is retrospective.]" ²⁶

AUTONOMOUS FORM

The antithesis of status quo. This architecture exists as pure idea. The temporal convention of interpretation is of an ideal moment in conceptualized space. Autonomous form is a dogmatic, reproducible, formal system; idealized and outside of culture and society.

'Critical architecture' exists somewhere between the status quo, efficient representation of pre-existing cultural values, and autonomous form.

Ignasi de Sola-Morales concurs with Hays asserting that "only by means of a critical attitude toward reality is it possible for contemporary architecture to maintain a rigorous and non conformist position. An attitude capable of

distinguishing itself from trivial culture, perverse operations of market forces, towards which the only valid response is resistance." ²⁷

Critical architecture is a locus where individual artistic creativity is intertwined with cultural, social and economic processes, and all other aspects of the everyday.

2. INTENTION : A SHIFT FROM THINGS AS MEANING TO THINGS AS EXPERIENCE

The philosophical alienation of the body from the mind has resulted in the absence of embodied experience from almost all contemporary theories of meaning in architecture. The overemphasis on signification and reference in architectural theory has led to a construal of meaning as an entirely conceptual phenomenon. Experience, as it relates to understanding seems reduced to a matter of the visual registration of coded messages- a function of the eye which might well rely on the printed page and dispense with the physical presence altogether. The body, if it figures into architectural theory at all, is often reduced to an aggregate of needs and constraints which are to be accommodated by methods of design grounded in behaviour and ergonomic analysis. Within this framework of thought, the body and its experience do not participate in the constitution and realization of architectural meaning. ²⁸

Everybody experiences far more than he understands. Yet it is experience, rather than understanding, that influences behaviour. ²⁹

As Ortega y Gasset , Merleau-Ponty and the existentialists and phenomenologists of this century have pointed out, just being a man or a woman and alive is enough to guarantee the world's meaningfulness. ³⁰

The fundamental impetus of this school of thought is to produce an architecture which can be understood by experience; an architecture where the body and its senses participate in the constitution and realization of architectural meaning.

The intention is to make an architecture whose meaning resides primarily in relation to the architectural object.

"Reality will always be more potent than thought " ³¹ Reality, however, cannot be conceived without conceptualizations. There are degrees of conceptualization of reality. A critical attitude does not mean the absence of conceptualization, but the approximation to a limit.

Classical thought distanced the soul from matter and separated the essence of the subject from the cogs of the body. Marxists later set up an opposition between subjective superstructures and infrastructural relations of production. How then ought we to talk about the production of subjectivity today? Clearly, the contents of subjectivity have become increasingly dependent on a multitude of machinistic systems. No area of opinion, thought, images, affects or spectacle has eluded the invasive grip of 'computer assisted' operations. This leads one to wonder whether the very essence of the subject is not threatened by contemporary subjectivity's new 'machine addiction.' ...

My wish is for all those who remain attached to the idea of social progress - for those who social has not become an illusion or simulacrum - look seriously into these questions of subjectivity production. ...

Subjectivity today remains under massive control of apparatuses of power and knowledge., thus consigning technical, scientific and artistic innovations to the service of the most reactionary and retrograde figures of sociality. In spite of that, other modalities of subjective production - processual and singularizing ones - are conceivable. These alternate forms of existential reappropriation and self-valorization may in the future become the reason for living for human collectivities and individuals who refuse to give into the death like entropy characterizing the period we are passing through. ³²

This shift to an architecture of experience is posited here as an alternative strategy in relation to meaning. It is intended to articulate meaning in response to the present condition, which appears to be underemphasized in contemporary architectural thought .

2.1 INTENTION / AUTHOR

In a condition of over referencing, meaning is difficult to ascertain. The emphasis here is to strive towards a 'degree zero' ³³, not empty representation. The experiential dimension takes precedence in a clear, direct, and materially rich manner.

George Kubler in *The Shape of Time* points out human perception is best suited to slow modifications of routine behaviour. The inbound traffic at the gate of reception can be increased by widening the gate or by the purist reduction of knowledge.

A primary reliance on semantics relies on values that are extrinsic to architecture and the architectural object. Martin Steinmann refers to a preoccupation with symbols - their theory, semiology - as leading "ever deeper into a hall of mirrors in which things dissolve in their mirrored images."³⁴ Conversely, meaning in relation to a non-semantic, material directness posits values that are intrinsic to architecture.

The INTENTION is to strive toward an architecture of material directness and nonsemantic representation, to prevent the work of architecture from becoming a vehicle for some other signification or expression of some other content, while at the same time acknowledging the impossibility of reaching nonsemanticism and the recognition that architecture is itself intrinsic to the world at large.

The approach will be to deal with thingness and reinvolve the subject without referring to classical humanism. It is to give architecture, its materials and way of assembly, a strength of its own. This strength is to be grasped easily; to strike peoples' elemental sensibilities, and to stimulate sensorial experience through impressions of warm, cold, soft, hard, etc.. In order to begin, the meanings of things must first be transferred to how they are made, a dialectic between construction and INTENTION. This change can be named 'desemantisation'.³⁵

THINGS

Experience becomes meaning in the sense of being relayed through convention. It stands before meaning. A building stands on its own without a script. Jean Baudrillard refers to the infection of things through images, which then become the object of our desire, in place of the things themselves. Architecture which strives to make things themselves once more the object of desire cannot construct things as empty symbols.

Architecture, like any artifact, cannot be understood without thinking about it in the context of a repertoire. This is necessary in order to appreciate why a building has been designed in a particular way. This INTENTION proposes to emphasize sensory or physical experience without diminishing the intellectual dimension. The intellectual dimension is thereby redirected toward what is intrinsic to architecture.

To say that architects are searching for an architecture without symbolic or metaphorical allusions is not to imply that there is no meaning at all anymore. Just that the tendency of postmodernists and deconstructivists to look for hidden meaning everywhere has become largely superfluous for the simple reason that, more often than not, there is no hidden meaning...

The disappearance of the compulsive tendency to construe everything in symbolic terms has not only freed the designer from an onerous duty to keep on producing 'meaningful' architecture, but has also made it possible for architects, critics and historians to view architecture differently in that things are now accepted phenomenologically for which they are. The moralism and dogmatism implicit in postmodernism have made way for realism.³⁶

NONSEMANTIC

Rafael Moneo in discussing the work of architects Herzog and DeMeuron refers to a striving toward the nonsemantic:

Herzog and DeMeuron carefully avoid reaching a point at which the evidence of a well defined image would lead to a type. they fear 'imagery' even more; I would be inclined to say that their work results from a painstaking effort to efface all traces of known images. Representing and represented are for them equal terms and coincide, fused in the act of construction; without the appearance of a prevailing image. ³⁷

2.1.1. BELIEFS / ATTITUDES RELEVANT TO THE INTENTION

Some beliefs and attitudes of our recent past will here inform the 'groundwork' in order to clarify and support the stated INTENTION and notion of authorship.

EXISTENTIALIST ATTITUDE

Existentialism is not so much a philosophy but an attitude of revolt ³⁸against traditional philosophy's superficialities, academicism, and remoteness from life. It is not a school of thought or necessarily reducible to strict tenets. Some believe it is about ardent individualism, but that is not the only thrust. Nor is it an individualism without a humanist leaning. Existentialism is not classical, biblical or romantic. The main impetus of the existentialist attitude is to bring philosophy down to earth. It deals with questions that arise from life. To be serious, existentialists believe, philosophy has to be lived.

Existentialism posits ethical will over reason. It is an attitude that supports authorship in our current climate.

A creator who isn't seized at the throat by a set of impossibilities is no creator. A creator is someone who creates his own impossibilities, and

thereby creates possibilities. It's by banging your head against the wall that you find an answer. You have to work on the wall, because without a set of impossibilities, you won't have the line of flight, the exit that is creation, the power of falsity that is truth.³⁹

Kaufman, in 'Existentialism From Dostoevsky To Sartre', identifies Dostoevsky's short story, 'Notes From The Underground', as the best overture for existentialism ever written. In his short story, individuality is not retouched, idealized or holy; it is wretched and revolting and, as Kaufman states " for all its misery, the highest good." ⁴⁰

If this attitude is relevant to the INTENTION in relation to meaning and authorship as stated, how has it and how can it relate to architecture?

Existentialism as a cultural climate attitude, brings a reassessment and reordering of ethical and aesthetic viewpoints. "In post world War II, existentialism caused a profound change in cultural objects resulting from an alternative conception of individual and society", ⁴¹ a profound shift in values.

Ignasi de Sola-Morales identifies the influence of existentialism on revisionist architectural thinking in the 1950s. He points to its contributions to debates in CIAM and Team Ten made by Aldo Van Eyck and Jose Antonio Coderch. "the change that existentialism introduced into European and American architecture in the 1950s was far more radical than was then realized." ⁴² He argues that the breakdown in the relationship between critics and architects in the 1950s was related to the emergence of the " individualistic, decentered thought of existentialism." ⁴³ This, he speculates, was a pretext for the 'radical critique' of the late 1960s. The shift that began with revisionist thinking from within CIAM in

the late 1940s was carried on by such radical groups as the Situationiste Internationale in the 1950s and 60s.

ETHICAL HUMANISM

Ignasi de Sola-Morales describes the grounding for the dominant system of values in the new architectural climate of the 50's by the term 'humanism'. While humanism is part of a longer tradition, he notes a renewal of its synthesizing capacity in favour of the actual human subject: "taking into account his or her actual experience, angst, and lived knowledge of specific space and time." ⁴⁴

ORGANICISTS referred to metaphors of the heart, embraced an appeal to the human dimension and displayed an increasing interest in anthropology.

MECHANISTIC proponents were objective rationalists who strongly favoured functionalism and new technology.

Prevalent during this time was the identification and discussion, by Lewis Mumford, Richard Neutra and Bruno Zevi, of the opposition between these two models as morphosymbolic. Sola-Morales identifies the relationship between organicism and humanism. Aalto or Neutra, he surmises, could have made the statement, 'organicism is a humanism'.

Architects with an allegiance to existentialist realism, in the 1950s, looked for sources of humanism in the vernacular, outside of technological contamination.

NEW AESTHETICS

The post World War II period saw not only a crisis of values but also a rejection of aesthetic systems based on the earlier, 19th century search for beauty.

The purely visual was supplanted by "total, synesthetic [or secondary sensations], productive perception." "General tenets of aesthetics based on imitations of a model were replaced with a subjective production of elementary perceptual experiences, capable of generating signification through emotion."⁴⁵ Rudolph Arnheim took the phenomenology of perception as a starting point and discussed colours, textures, lights, forms, spaces of existentialist phenomenology.

INDIVIDUAL TO SOCIETY

The influence of Marxism on Sartre and Merleau-Ponty led to a critique of phenomenological individualism. This allowed for a social critique of architecture, which the Situationists practiced most radically in the 1960s.

An existential attitude or ethical will is currently re-emerging in certain isolated instances within architecture. It comes primarily from a group of practitioners born during the radical period of critique in the 1960s. This emerging group have lived through postmodernism and deconstruction and have sought some inspiration in a certain 'existential modernism' of the 1950s. This group also has lived through a period of economic recession, political conservatism and the dominance of large, strictly commercial architecture practices. This lived experience and distaste for the status quo as it exists, coupled with a will and passion for an ethical architecture exists within these certain individuals and small groupings. Some of these practitioners include John and Patricia Patkau, Brigitte Shim and Howard Sutcliffe, Acton / Johnson, and Shnier and Kohn. One could argue that these architects are developing a 'new aesthetic' based on a certain humanist attitude.

PHENOMENOLOGICAL ATTITUDE

There is no such thing as phenomenology, but there are indeed phenomenological problems. ⁴⁶

Certain aspects of this philosophy resonate in light of a discussion of the production and reception of a cultural artifact.

While some fundamental beliefs are shared, there exist many differences amongst authors and practitioners. The central beliefs that guide the stated INTENTION are: the possibility of visceral sensations as part of the reception of architecture; an active engagement with things in themselves; the aesthetic as having value; and a method grounded in the description of intentionalities with no claims to objectivity.

Against the dogmatism of those who construct systems, and equally against the nihilism of those who believe the only possible activity is to undo the entire constitution of reality, phenomenology first of all represented phenomenology as such, and then as hermeneutics, the need to analyze and simultaneously interpret discourse: two functions of a single intellectual process. ⁴⁷

Intentionality of consciousness: there is no system of objects governed by formal laws that might guarantee aesthetic efficacy. What exists is the subject's willingness to establish relations with a world that is constructed through the mediation of the body. The work of art is a gesture that emanates from the body. ⁴⁸

DELEUZE

"Deleuze is the great theoretician of form and believer in the real." ⁴⁹

The late philosopher Gilles Deleuze, along with his collaborator Felix Guattari, have made a profound contribution to contemporary architectural theory. Their contributions have largely had to do with the status of the subject in contemporary society, processual operations, and meaning in cultural production from a poststructuralist point of view.

In Deleuze, as in the phenomenological tradition, one finds the reading or description of reality as something that must be built, designed, as a process from the subject, as work to be done, drafted ... ⁵⁰

Deleuze provides a "flexible model for the contemporary subject, but one that does not entirely abandon a notion of ethical, societal life in favour of wanton, selfish individuality." ⁵¹

Do not demand of politics that it restore the rights of the individual, as philosophy has defined them. The individual is the product of power. What is needed is to 'de-individualize' by means of multiplication and displacement, diverse combinations. The group must not be the organic bond uniting hierarchized individuals, but a constant generator of deindividualization. ⁵²

Deleuze and Guattari articulate a model that allows for a certain independent subjectivity, but within the context of a world that still affects the subject in predictable as well as spontaneous ways: a model that allows for mutual and everchanging interaction between subject and object. ⁵³

Alongside this faith in pockets of ethical, social life there is a belief in the idea of social progress. There is also an acknowledgement that subjective production even though "subjectivity today remains under massive control of apparatuses of power and knowledge" ⁵⁴, is possible, if only in limited processual and singularizing projects.

Deleuze advances another image of what abstraction means in philosophy, more 'empiricist', more 'immanentist', more 'experiential'; at the same time he sketches another view of what abstraction means in art, more chaotic or formless, no longer defined in opposition to figure or image. ... In both cases, we find a departure from the view of abstraction as a process of extracting pure or essential Forms, emptying a space of its concrete contents, toward another kind of abstraction and another sense of 'abstract': an abstraction that consists in an impure mixing and mixing up, prior to Forms, a reassemblage that moves toward an outside rather than a purification that turns up essential Ideas or in toward the constitutive 'forms' of a medium. ⁵⁵

Deleuze and Guattari propose that our relationship with architecture and art is immediate. In their 1991 book 'Qu'est-ce que la philosophie?' They describe the work of modern art as a block of sensations, "a compound of perceptions and effects, such sensations do not act as metaphors, transferring us to other objects or images serving as points of reference." Sola-Morales characterizes Mies's architecture, using this conception, " a consolidated permanent block for the production of sensations." ⁵⁶

MINIMALISM

Minimalism is a critical model in cultural production and theory. It is derived in part from Roland Barthes' 1953 book, *Writing Degree Zero*, referring to a minimum of aesthetic signification. It is primarily a movement in art [Donald Judd, Dan Flavin, Richard Serra], but also film [Michelangelo Antonioni], music [John Cage, Joy Division], theatre [Robert Wilson], and dance [Yvonne Rainer]. Minimalism as an investigation has recently received a number of re-examinations.

Martin Steinmann refers to the belated recognition that minimal art has received and how it relates to specific contemporary works of architecture by practitioners such as Herzog and De Meuron, Zumthor, and Diener and Diener.

Hal Foster in *The Return of the Real*, identifies how minimalism was dismissed in the 1960s as irrelevant, reductive, infantile and inexpressive. He goes on to refute these claims as petty and political. Criticism came mostly from proponents of other movements such as abstract expressionists.

Minimalism is more contingent than ideal, redefined by our perception of objects in time, and refutes the siteless realm.

With minimalism, sculpture no longer stands apart; on a pedestal or as pure art, but is repositioned among objects and redefined in terms of place. In this transformation the viewer, refused the safe, sovereign space of formal art, is cast back on the here and now; and rather than scan the surface of a work for a topographical mapping of the properties of its medium, he or she is prompted to explore the perceptual consequences of a particular intervention in a given site.⁵⁷

"Far from idealist, minimalist work complicates the purity of conception with the contingency of perception, of the body in particular space and time."⁵⁸

Judd asserts, work is "not based on systems built beforehand, a priori systems"

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The stake of minimalism is the nature of meaning and the status of the subject, both of which are held to be public, not private, produced in a physical interface with the actual world, not in a mental space of idealist conception.⁶⁰

According to Rosalind Krauss, the minimalist art vision is phenomenological, not metaphysical. Largely, producers proceed from experience and not from an idea. There are no permanent typologies. It is about the provisional instant.

Minimalist authors stress the temporality of perception and the birth of the viewer; reality includes the perceiver.

Minimal art rejects any reference to things outside themselves. As Steinmann notes, this limitation aims at perception of what is actually there. "What you see is all that there is to see", said Judd expressing that minimal art objects refer to themselves, or more precisely to the experience of the observer confronted with those works of art; "it is an experience whose object is the experience itself. In this way they display their presence, which records the works in their materiality."⁶¹ Architects Herzog and De Meuron concur with this but further elaborate, "Material is there in order to define a building., but equally, a building is there in order to show the material from which it is made. It is not enough that the material exists but one must give it a form which elucidates its existence. We push the material we use to an extreme, to show it dismantled from any other functions than 'being'".⁶²

Minimalism is a grounding based on the elementary data of experience. It relies on elementary and synesthetic experiences.

LOGIC OF LIMIT

This approach is linked very strongly to minimalism. "Forged in the tension generated from the subject between the impossible and the necessary, another and different poetics develops itself: that which the philosopher Eugenio Trias has described as the logic of the limit." ⁶³

Ignasi de Sola-Morales identifies the architectures of Herzog and de Meuron, Eduardo Souta de Moura and Juan Navarro Baldeweg among others as defining themselves by their proximity to the limit, striving toward a 'degree zero'. In discussing what establishes signification in their work he discounts references which produce a predictable response or typological or figurative responses to historical architectures in favour of immediacy, directness, "perceptible by means of the synesthetic experimentation of those that contemplate it." ⁶⁴

In the same way that a piece by [minimal artists] Dan Flavin or Donald Judd is lacking in references, at least in the sense of a process through which to produce the signification, these architectures also make themselves present, in the first instance, through the strict materiality of their volumes and materials. Further signification derives from the tension present in these material structures, in which some vibration is always inscribed, some slight gesture, an almost casual distortion, the fracturing of some geometry. In short, by the experience that the form cannot be reduced to a zero point and that signification, not existing in the void, instead becomes intense at the moment when it is granted only a liminal space, a minimal appearance. ⁶⁵

"The journey to the shifting approximations of the limit, dissolves the moment it is made commercial or widespread."⁶⁶ Sola-Morales describes the architecture

of the limit as both a fragile and sure path that leads to "an encounter with a profound aesthetic experience, the technics and poetics of architecture." ⁶⁷

2.1.2. SUMMARY

The INTENTION of emphasizing: material directness; nonsemantic representation; and the experiential dimension of the reception of architecture might be best described as advancing minimalism as a preferred approach in relation to meaning and architecture. Dismissed in both the 60s and 80s by the majority of critics and theorists, minimalism, in our present context of hypersimulation, semanticization and ideative architecture, seems even more salient as an alternative vector. However, minimalism alone does not support this INTENTION.

Fundamental to this INTENTION is an evaluation of the subject, author and object in the contemporary realm, and their relation to experience and meaning. These relationships require a redefinition, and this strives to discuss one possible writing. Faith in one's capacity for visceral sensations as a part of the reception of architecture allows the subject, individual and collective, to be affected by poetic intentions in architecture. While subjectivity today remains under massive control of apparatuses of power and knowledge, processual and singularizing modalities of subjective production are conceivable.

Existentialism drives the desire to develop this INTENTION; a new aesthetic based primarily on minimalism.

Deleuze's thoughts are critical to the development of this INTENTION, they are in some ways the glue that allows this conception to be in the realm of the real: to be contingent, non idealist; and to refute the siteless realm. It is the ability to engage in things in themselves and at the same time reinvoke the subject without referring to classical humanism; to acknowledge the birth of the viewer. This fit between post structuralism and phenomenology, while somewhat unorthodox, is essential.

The preceding writings form the base of attitudes and beliefs that support this intention.

2.1.3. LIMITS / TRAPS

With any writing that strives to articulate a position or attitude, it is necessary to identify its limits and traps.

NOSTALGIA :critical collusion and **NIHILISM**: radical critique. ⁶⁸

There is no such thing as timeless values. Time is a reality. ⁶⁹

"The task to be accomplished is not the conservation of the past, but the redemption of hopes of the past." ⁷⁰ ; the redemption of optimism in the face of contemporary pessimism.

The aim is to deal with the present in a critical way intersecting architectural, societal, cultural, historical, ethical, and political forces. Ole Bouman and

Roemer van Toorn in *The Invisible in Architecture* in assessing the strategy
Archaism note: "The main philosophical problem that besets archaism is that
the return to roots and to mythical consciousness involves forgetting all that has
taken place between then and now. The past is romanticised." ⁷¹

ETHICAL RESPONSIBILITY WITHIN SOCIAL CONSTRUCT

In general, ethical responsibility is diminished in our contemporary society as
radical selfishness becomes dominant . Ethical responsibility becomes more
critical to constructions such as this intention and can lead to indulgent
individualism.

AUTOBIOGRAPHICAL: 'NAVEL GAZING'

With author always a part of the context, distancing becomes a necessity. The
intention is informed by experience and practice but is not about the author or
solely for the author.

NUMBNESS BY OVER SIMULATION

This specific intention involves a certain leap of faith, a belief that society and
individuals in a constant state of simulation, that leads to a condition of
numbness, are able to respond to sensorial experience. With a longing that

exists for a sensorial experience, an unease and discomfort is also present in the challenge of a somewhat unfamiliar experience.

'SMALL STORY' ⁷²

This proposal is not intended as the solution to architecture's 'present predicament'. It is one among countless other vectors and strategies: an approach toward meaning that can be intersected with other small stories.

2.2. INTENTION / CONSTRUCTION: A 'SMALL STORY'

Construction, a process through which architecture enters the real, is one intersection where an elaboration of ways of making and understanding architecture, based on the INTENTION articulated in the previous section, can be investigated.

The meaning of architecture is nothing more than building itself -the materials and techniques of construction, sensuous and unadorned, brought to limpid perfection. ⁷³

In so far as they [architectural productions] are after all symbols, then their reference is the work which created them. The form is the result of a process of creation, with materials and ways of using them; constituting a language. ⁷⁴

"A grammar of materials gradually developed in place of a grammar of symbols". ⁷⁵

If the INTENTION is to build an object that can be experienced viscerally, nonsemantically, self-evidently, one must acknowledge the fundamental role of materials and their assembly in the process by which architecture is produced: construction as an essential aspect of the conceptual process. The proposition is that issues of construction should be engaged in an oscillating relationship with conceptual ideas to generate architectural form.

EQUAL IMPORTANCE FOR PROGRAM, SPACE, URBAN PLANNING, CONSTRUCTION, MATERIALS

Contributions of space, program and urban planning to this INTENTION are acknowledged however, for the purpose of this framework, they will remain silent, but not excluded.

LIMITED CONCEPT: IDEOLOGY VS. IDEA

Each individual project presents itself with its own set of conditions and requirements. Architect Steven Holl in *Anchoring* proposes the notion of the 'limited concept' versus pluralism which he says leads to an empirical architecture and general theories which he claims are exclusionary; "time, culture, programmatic circumstance, and site are specific factors from which an organizing idea can be formed." ⁷⁶ While each circumstance is new, certain intentions and conceptions can remain not as fixed constants, but as guiding attitudes.

"[There is] no continuous thread in the orderly succession of time." ⁷⁷

Design should not search for a linear rationality which postulates an equally linear design method. It should pursue an attitude; an approach that questions morality and accepted truths in the differentiating search for moments of insight into the transgressive [and scandalous] clarity and values of the everyday. ⁷⁸

What if the architectonic in Kant were not an overarching system but something that has itself to be constructed anew, in each case, in relation to fresh problems - something looser, more flexible, less complete, more irregular, a free plan in which things hang together without being held in place. ⁷⁹

After identifying this dialectic between conception and construction, it is necessary to develop a contemporary conception of construction, noting limits and potentials. It is also essential to identify and discuss issues related to construction and materials and how they might be approached in order to strive for the desired INTENTION.

2.3. CONSTRUCTION: ISSUES RELATED TO INTENTION

IMAGE OF CONSTRUCTION

"a symbol disguised as a thing" ⁸⁰

Martin Steinmann asserts that the greatest importance is not the truth of construction but the image of construction. It is not important that an assembly does something but that it shows that it does it. Steinmann suggests that this is

the concept of tectonics. For him, 'tectonic' does not refer to the construction but to the image of the construction or the 'feelings awoken by the image'.

In this way cladding is readable as such, loadbearing members are seen to bear loads, roofs have projections to drain rainwater and so on.

POOR FRACTURE

Although Donald Judd does not not strive for perfection in his art, he insists that the pieces be well made by the people he employs, so that 'poor fracture' does not detract by adding extraneous meaning.⁸¹

Things should be presented and dealt with as clearly and openly as the physical facts and current knowledge permit.⁸²

By accepting the limits of quality in the design process, one can acknowledge the potential implications of poor fracture on the perceivers' ability for direct experience.

REASON FOR FORM: 'grund der form'⁸³

The languages of form and construction are not to be found in a causal relationship⁸⁴

Construction is a fundamental consideration as a reason for form, along with program, space, and context. Form is rooted in the construction. It is the result of a process of creation, materials and ways to use them. The form potential of structures can be investigated, structures which can be used for a particular purpose or program, rather than being forced upon the construction. The issue

is the effect produced by construction, not an explanation of it. If necessary for effect, construction can also be suppressed.

SOCIAL CONTRACTS

The production of architecture requires the development of a series of social contracts. These contracts are not exclusive to construction, but are necessary in relation to the fulfillment of a project's intention.

SOCIAL CONTRACT: the theory of Hobbes, Locke, Rousseau, etc. that society evolved from associations of individuals for their mutual protection, and that the surrender of their individual sovereignty was made not through force but by mutual consent.⁸⁵

These informal contracts involve informed dialogue. These relationships can occur between author, client, consultants, workers, and neighbours.

It is through these mutual associations that critical work can be made. A willingness to accept knowledge and advice from others, a reciprocity, fosters a potency in problem solving, level of quality and so on.

2.4. MATERIALS: ISSUES RELATED TO INTENTION.

Material is there to define a building, but equally, a building is there in order to show the material from which it is made.⁸⁶

If the INTENTION is to heighten architecture's sensorial dimension, then a critical attitude toward materials is fundamental to achieve this.

Architect David Chipperfield identifies the standardization of the construction industry and the proliferation of building products, as opposed to materials, as a contributing factor to a materially neutralized architecture.⁸⁷ While it is difficult to refute this claim, it is necessary to acknowledge the existence of standardization, products and components, and to utilize this reality in a critical manner to support intentions and conceptualizations.

To identify and discuss the issues involving materials related to INTENTION becomes important so as to utilize materials not in a speculative or observative manner, but to deal with "the privilege to be able to work with the physical world."⁸⁸

Poets, painters and politicians should be jealous of the architect's advantage.⁸⁹

PERCEPTION OF MATERIALS

What you see is all there is to see.⁹⁰

Minimal art objects refer to themselves, or more specifically to the experience of the observer confronted with those works of art; it is an experience whose object is the experience itself. In this way they display their presence, 'which records the works in their materiality'. On the other hand this materiality ensures their presence.⁹¹

It is not enough that material exists; one must give it form which elucidates this existence. "We push the material we use to an extreme; to show it dismantled from any other function than being."⁹²

Herzog and de Meuron refuse the dual classification of noble materials [granite, marble, copper] and secondary ones [concrete, asbestos, plywood]. Therefore after doing an exhaustive survey of all materials, they use them discriminately and at their own convenience. ⁹³

Materials hold a number of differing connotations to the subject or perceiver. Materials can be thought of or experienced: high and low socially and culturally; in relation to memory; as elemental meanings; in relation to economic and political structures and as variants of authentic and simulated. One experiences materials both contextually and culturally.

One must acknowledge the sense of sight above all others. Even the sense of touch is a promise of sight. ⁹⁴

While a subject perceives materials and the architectural object at the same time, one experiences individual materials, assemblages of materials as form, juxtapositions, and adjacencies. Perception primarily occurs through the domain of visual senses of the material, in its relation to light, but also in the haptic realm.

MATERIALS AND THE HAPTIC REALM

One sees the hardness and brittleness on glass and when, with a tinkling sound, it breaks, this sound is conveyed by the visible glass. One sees the springiness of steel, the ductility of red-hot steel, the hardness of a plane blade, the softness of shavings. ⁹⁵

"The sign of a truly felt architectural work is that in plan it lacks effect." ⁹⁶

By the words 'truly felt', Loos meant a perception of space involving not only the sense of sight [human sight, two eyes], but also the rest of the senses. In Loos' view the only criterion by which space can be considered architectural. Of all the senses, Loos privileged the sense of touch, and perhaps it is no accident that this is the one domain which - even today, when in Japan they are photographing smells - has not yet been the object of reproduction. Touching is not yet a mental act.⁹⁷

Steven Holl writes extensively about the 'haptic realm' which plays a vital role in his architecture. He states that the haptic realm opens up when the materiality of the details forming an architectural space become evident. He comments, not unlike Chipperfield, on how today's commercial industrial methods dull or cancel the sense of touch.

Materials may be altered or considered in a multiplicity of manners that enhance the haptic realm:

Paint can be selected and or applied flat, semigloss, gloss, transparent, translucent, opaque, thick, thin, brushed, rolled, sprayed, slow curing and so on;

Glass can be transparent, translucent, opaque, reflective, dull, rolled, pressed, cast, mutable and so on.

AUTHENTICITY, INAUTHENTICITY AND SIMULATION

Lodoli, Loos, and Chipperfield among others discuss materials in relation to authenticity and inauthenticity, and their appropriate employment. Loos categorizes practitioners who break the laws of material use that he sets out as "imitators and surrogate architects".⁹⁸

What is 'real' is for the subject to decide. The proof of what a subject or author considers real or authentic lies in their own understanding. It is suffice to reject a fixed purity toward authenticity and inauthenticity of materials; defer to the clarity of intention; no rules, only attitudes and beliefs.

MATERIAL AND FORM

"Every material possesses its own language of forms, and none may lay claim for itself to the forms of another material." ⁹⁹ Loos proposes the absurdity of St. Stephan's Tower in Vienna built from concrete.

Material selection becomes an important reason for form in conjunction with programmatic, space, context, and construction considerations.

EXPERIMENTAL INTEREST

Steven Holl notes the need for architects to remain experimental and open to new ideas and aspirations in light of the tremendous conservative push towards the already proven, built, and thought. He asserts that architects must explore the 'not-yet felt'.

Herzog de Meuron are one of the most experimental practices in relation to materials: utilizing biological substances on glass; creating a stone which looks like coal, has its warmth, is black outside and also makes a good insulator; and employing rock gabions as a cladding in the design for a California winery.

MUTANT MATERIALS

Designers once worked with a fixed number of materials - wood, stone, brick, steel, glass, cotton, wool, etc. No longer: today we can design the materials ourselves. In the age of the bioengineered square tomato, ceramic can be as strong as metal, wood as soft as upholstery, and plastics as clear as glass or sharp as stone. Scientists have developed materials capable of killing bacteria and other materials with 'memory'.¹⁰⁰

OXIDATION VS FIRMITAS

We want material to be alive and consequently for it to undergo changes. However, oxidation means the decay of the material itself and lashes with the idea of stability.¹⁰¹

Confronted with the brief to design a signature building but faced also with an inadequate budget, Eisenman chose to deliver a powerful image with a flimsy structure. If it is weighty enough to become a campus landmark, the owners will feel like trustees of a cultural endowment and will dutifully repair, replaster and repaint."¹⁰²

Durability becomes an ethical responsibility for the architect, both in terms of ensuring a material stability and limit to maintenance, and also in relation to the experiencing of an active or living building that weathers and changes with time. David Leatherbarrow has written extensively on weathering and architecture from a phenomenological viewpoint.

Economic forces affect issues of durability. For example, at the end of a mortgage period, architecture can have a limited capital value for the owner who can no longer depreciate capital value. An owner in this case, doesn't require the building to outlast the mortgage by many years. This is tied to notions of commodity and disposability. In another instance, grossly escalated property values in relation to the value of the actual construction, render the value of some architecture comparatively minuscule. Examples of this are

prevalent in cities such as Tokyo, Hong Kong, and New York. In these places, the lifespan of a building can be very short.

Fernandez-Galiano, citing examples of Mies's Barcelona pavilion and the Seagram building, discusses the notion of the artistic durability in relation to a material durability.

ELEMENTAL MEANING IN MATERIALS

From artists such as Richard Serra, James Turrell, Josef Beuys, Donald Judd and others, there is a multitude of things that can be learned in relation to architecture and materials, in particular, the notion of elementary meanings.

The role of Beuys in the discovery of elementary meanings of materials reach beyond man's long experience of working with them to incorporate meanings which derive from the essence of the materials themselves.¹⁰³

Steinmann discusses how architect Peter Zumthor falls back on childhood experiences in his search for form, "in the first experiences the social meanings of things seem to be the most natural meanings: they seem to represent the actual meanings of the things themselves. This gives them the power which they, as 'images', hold for him."¹⁰⁴

INTELLECTUAL RELATIONSHIP TO MATERIALS

Because architects are not trained craftsmen, Steinmann asserts that the intellectual approach to material is the only one open to them. To the craftsman construction is one complete whole, made up of materials, actions and forms. The architect has to break it up into its constituent parts to create a new whole.

An example of an intellectual approach might be the idea of material as absence, the capacity of glass as a building material to achieve both apparent and actual dematerialization.

MATERIAL AND DRAWING: THE UNREPRESENTABLE

We must encourage an architecture that does not look like built drawings. ¹⁰⁵

Mies located materiality very precisely in the realm of building, and never made the conceptual mistake of confusing materiality of the drawing with the very specific capacities and potentials of building itself. ¹⁰⁶

Stanley Allen asserts the need for a new method of representation for both materials and architectural drawings. While architects are increasingly detached from actual construction, it is primarily graphic methods that communicate their ideas and intentions. The work of an architect is neither a performance nor an individual creative act.

A new notation, develops from an understanding of materials and their relationships followed by a critical attitude toward architectural representation to

best support and communicate intentions. Mies created abstract montages to communicate material assemblages in relation to space and context, while OMA utilize material overlays on constructed perspectives.

CRITICAL ATTITUDE TOWARD MATERIALS

"Today the difference between a good architect and a poor architect is that the poor architect succumbs to every temptation and the good one resists it" Ludwig Wittgenstein

Fundamental to this framework relating INTENTION and construction is a critical position on materials: a knowledge of material qualities and how they affect the reception of architecture and a dismissal of fixed notions favouring one material over another based on existing hierarchies.

3. CONSTRUCTION: REMYTHIFYING A CONCEPTION

"How will time or science bring order into this thoroughly confused state of affairs?" ¹⁰⁷

An investigation of construction is essential in order to discuss the process of making architecture. Revolutionary changes have taken place in building over the past century which have allowed architects to conceive and build virtually anything. This plurality and diminishing limit necessitates a more rigorous consideration of construction in the conceptual process. In a highly technoscientific secular world, it is necessary to structure an understanding of construction in an ethical, rational, and 'real' manner.

DIMINISHED CONTROL: THE POLITICS OF CONSTRUCTION

When considering the process that leads to the eventual construction of a building, it is fundamental to note that the architect is only one of those participating. The architect no longer has the only position of authority over the process of construction. Architects can only exercise influence if they accept the realities of the construction context. The architect is no longer a magician of sorts.

SECULARIZATION

The crisis of thought of the classical age, as Michel Foucault called it, is a crisis produced by a loss of ground, together with the loss, in the field of arts, of an artistic project, produced on the basis of a desire to represent. In *Les Mots et Les Choses*, Foucault sets out to explain in painstaking detail how the system of representation belongs to the episteme of the classical age: mimesis presents a certain manner of

articulating the world of the visual, and thus the world of architecture; in short, it effectively represents a vision of a closed and complete universe as a finished totality. ¹⁰⁸

Historically, architecture's technical and material stability allowed the architect to operate as a medium, as a magician capable of formulating general hypotheses and essential formal decisions with the confidence that their materialization could be undertaken without the least difficulty. The degree of integration of the various technical procedures of building made these mere steps in an immediate relationship between the person who formulated the original idea and the final result. ¹⁰⁹

In order to construct a conception of construction in the contemporary context , it is necessary to begin with an investigation of the secularization of construction in writings about architecture. The thrust here is to examine a breaking down of notions of 'logos' or definitive universality in construction. Construction is included in most theories of architecture. The theme of construction, however, does not occupy a formative position in most contemporary architectural discussions. In considering construction in our present context, it is imperative to conceive of it as a secular activity: 'God is dead' ; classical humanism has little or no relevance to today's world; and the world as we know it is not a closed, complete totality.

At the end of the 'grand narrative', some architectural writings addressing construction favour a return to the metaphysical, mystical or need to be understood in relation to a cultural philosophy which is no longer plausible in today's context. Such positions might be explained as: a sense of nostalgia for a time before the mechanization of production; a nihilism of technology; or a denial of the social division of labour.

Construction is the act of locating an architectural thing in the vastness of our living conditions. ¹¹⁰

In order to come to a contemporary secular understanding of conception of construction, it is necessary to examine where the classical conception was broken down and to articulate the activity of construction based on these subsequent definitions. This requires a demythification of construction as it is described in architectural theory.

TERMS PERTAINING TO CONSTRUCTION: The following glossary of terms is presented in order to proceed with an examination of construction.

TECTONIC: THE IN BETWEEN OF CONSTRUCTION AND SIGNIFICATION.

The notion of tectonic goes beyond construction to denote the making of architectonic elements: wall, column, beam roof by 'figurative objectification'. Construction is a response to gravity putting together architectural elements with the help of mathematics and mechanics. In the tectonic, these architectonic elements surpass their structural rationality and take on meaning. The tectonic responds to gravity by analogy rather than efficiency or adequacy.

Detail or the seam where these elements go together is the tectonic, "the void which molds architectural knowledge." ¹¹¹ In classical architecture, ornament concealed this seam. Ornament was integrated with structural rules; a unity.

TECHNE, a Greek term for technology from Homer, describes the art of making grounded in the system of aesthetic values and technical norms

discussed in humanist discourse. *Techné* is framed in a metaphysical context where there is a bond between art and science, style and construction.

Martin Heidegger defines *techné* as both 'poetic and revealing'; designating tools and fabrication and signifying their place in the world of values.

Alberto Perez-Gomez notes that after Homer the meaning of *techné* gradually shifted toward that of instrumentalized technique.

TECHNIQUE replaced *techné*, in its classical sense. Technique, the way in which an artist or artisan uses the technical elements of an art or craft, came about in the late eighteenth century with the advent of mechanization. Gevork Hartoonian notes that in its later usage, technique "provided solutions for problems"¹¹², while being removed from the eventual object and historical values.

TECHNOLOGY is the means by which buildings are produced; industry and manufacturing. Technology takes nothing into account except the process of production. The emergence of the concept of technology, mass production and industry posed a strongly perceived threat to architects and resulted initially in a resistance and finally in modernism being embraced outright.

Hartoonian proposes the notion of **TYPE TECTONIC**, neither abstract and new nor classical. The issue here is the restatement of tradition by new means and materials.

Type: a constructional form that endures and remains permanent through the ebb and flow of custom and use. Type is a formal structure in which the knowledge of making an object meets the object itself. This general form attains a particular figuration through technical potentialities and tactile sensibilities of a material. ¹¹³

3.1. DEMYTHIFYING / REMYTHIFYING

ROLE OF MYTH

Myth: 'Making sense of a senseless world.' Rollo May

To demythify requires the necessity to remythify or to create a new myth. Philosopher Gianni Vattimo¹¹⁴ suggests some possible attitudes toward demythifying:

A. ARCHAISM

Archaism proposes a return to origins and to mythic knowledge [pre-historical], without asking what happened between today's world and its beginnings. Archaism proposes a possible way out of the errors and contradictions of current scientific and technological civilization.

B. CULTURAL RELATIVITY

Cultural relativism speaks of separate and autonomous cultural universes, but does not state which of these universes is the domain of relativistic theory. Cultural relativism ignores the impossibility of isolating one cultural world from another.

C. LIMITED RATIONALITY

Limited rationality describes the entire grouping of cultural attitudes that treats mythic knowledge, understood as a narrative, as a more adequate form of thought for certain fields of experience.

Limited rationality "does not have an explicit theory about the possibility of distinguishing fields reserved for mythic knowledge from fields reserved for scientific rationality." ¹¹⁵

Vattimo criticizes each of these attitudes for discounting too quickly the problem of their own historical contextualization. "They fail to state where they stand as theoretical positions." ¹¹⁶

Vattimo asserts that demythifying is not about restoring the privileges of myth. "When even demythification is unmasked as myth, myth itself recovers its legitimacy, but only within the framework of a generalized, weakened experience of truth." ¹¹⁷

The historical context of the demythification of construction can be traced through examining the thoughts of Vitruvius, Lodoli, Semper, Loos of the premodern era and Gropius, Le Corbusier and Mies of the modern.

3.1.1. CLASSICISM: the totality of the cosmos where classical art constructed meaning, order, type, proportions and ideal perspective. a previously established law or convention to be imitated or reproduced. technical and material stability allowed for more general hypotheses magic.

Techne is the poetics of classical wisdom. It signifies the 'logos' of making; a concept of fabrication in which technique is congenial with the image of the final product; not a means, but a unity of means and end.

VITRUVIUS

Vitruvius speaks of rituals, of the names of kings and localities as the mythopoetic dimension of the Greek orders.

Vitruvius' trinity is not a theoretical abstraction on the aesthetic function of architecture; Venustas, Utilitas, Firmitas [delight: beauty or ideal form; commodity: utility or accommodation; and firmness: durability] are rather formative themes in which style is integrated with the rules of gravity and the property of materials. ¹¹⁸

The total unity of architecture was secured when nothing could be added or taken away from it, meaning that the 3 part compositional norm present in every classical artifact is not only a pure aesthetic category but a way of seeing and constructing. ¹¹⁹

PRETEXT

Hartoonian¹²⁰ identifies three points that assist in dissolving the classical understanding of the relationship between style and construction:

A. The absence of structural utility as a theme in the architectural discourse of classicism

Losing metaphorical significance: the column, beam and wall were reduced to the level of structural techniques serving expressive intentions.

B. Galileo's observations and Cartesian doubt

The period of Galileo and the widening availability of the telescope fostered an interest in logic and an analytical approach to nature and cultural phenomena.

Concurrently, nature began to be seen as measurable and quantifiable.

Hierarchies which previously existed in an understanding of nature gradually began to disappear. Like the components of a machine, all phenomena increasingly were assigned more equitable values.

C. Concept of fabrication in which processes of building become determinant of cultural values, of the final product and the temporal relationship between architecture and its epoch.

A shift from what, or the object, to how, or the process. Technology or the process of production gradually replaced *techne* or the unity of work and its meaning.

SEPARATION OF DESIGN FROM CONSTRUCTION

The replacement in 1756 of *Corps des Ponts et Chaussees* with *Ecole des Ponts et Chaussees* was a significant step to a contemporary understanding of the separation of design from construction activity. This separation of the disciplines of engineering and architecture signalled a breakdown of the classical totality, where the architect was the prime authority.

This confirmed what Filippo Brunelleschi had already discovered in his work on the dome of Santa Maria del Fiore, when he conceived a project that lay beyond the scope of existing skills and techniques. This marked a "sharp differentiation between ideative techniques - activities of thinking and translation into precise projects - and the work of execution, whose sole task was to put such plans into effect was so determined." ¹²¹

3.1.2. BREAKDOWN: LODOLI, SEMPER, LOOS

The writings of Lodoli, Semper and Loos are exemplary discourses of architects on architecture. The value of their work lies in their explicit reflection of experience; responding to an increasingly secular world; the availability of a

greater diversity of materials; the development of technology; and a social division of labour. Their commitment, above all, was in practice.

LODOLI

In *Architecture and the Crisis of Modern Science*, Alberto Perez-Gomez discusses 1780s architect and theoretician, Carlos Lodoli. Lodoli, referred to as the Venetian 'Socrates of architecture', was extremely critical of Vitruvian authority of the classical orders. While his writings did not survive, his thoughts were recorded by his students.

In response to the frequent failure of buildings due to structural unsoundness, Lodoli was responsible for introducing the idea of structural utility in relation to architecture. He had the courage to doubt Vitruvius and the 'logos' of architecture and recognized a diversity of existing ideas. His arguments were based on the notion that architecture should be consistent with the nature of materials in use. He surmised that nothing could be more absurd than using a certain material to represent another. Lodoli thought that architectural form should be compatible with the individual qualities of their materials, their rigidity, flexibility, and resisting strengths. He argued that the diversity of materials available for use made it impossible to establish definitive and absolute rules of proportion, ornament and so on. Lodoli put forward an early form of hermeneutic criticism as the most appropriate method for architectural theory. He rejected the use of the classical orders because he felt they were unsuited to masonry construction. Architecture as building, he believed, had to respond to the poetic potential of the materials.

SEMPER

Hartoonian notes that the English Pre-Raphaelite and Arts and Crafts intellectuals of the mid-19th century were among the first to react against the erosion of tradition and faith under the impact of the industrial revolution. However, it was architect Gottfried Semper who was able to make sense of the technological transformation on architecture. He articulated the new relationship between technology and architecture in *Science, Industry and Art*; *Four Elements of Architecture*; and *General Theory of Tectonic Culture*.

Hartoonian argues that "Semper's ideas on the tectonic "suggest a breach between meaning and construction." "Semper radicalized the question concerning the origin of architecture to the point that the anthropocentric narrative was replaced by a discourse whose formative themes rest in four separate industries." This was an important step "to break down the coherent totality and linear progression of humanist discourse." ¹²²

Semper's discourse suggests that the tectonic evolves through the structural needs of a building and its clothing or cladding.

Two significant points can be identified in Semper's definition of the tectonic:

1. In opposition to the traditional classification of architecture with the representational arts, Semper considered the tectonic to be a cosmic art, analogous to music and dance. For him, what is essential to them and what is excessive is almost impossible to differentiate.
2. In critical response to the historicism and aestheticism of his time, Semper associated the tectonic with other constructive artifacts, primarily with four industries: ceramics, carpentry, masonry, and textiles.

From this point of view architectural production became enmeshed with the lived aspects of life. The act of making a place evolved out of techniques developed in other industries. "How to change old forms, consecrated by necessity and tradition, according to our new means of fabrication".¹²³

His anthropological interest in preindustrial civilization manifested itself in his exhibition of a Caribbean hut in the great exhibition of 1851.¹²⁴ According to Frampton, Semper's interest in the archaic, distanced from the bourgeois world, has taken on a number of different guises in different hands : Wright, Loos, Le Corbusier, and Mies.

The archaic components of earthwork, hearth, roofwork and screenwall comprise Semper's 'Four Elements of Architecture'. Semper differentiated between two kinds of walls, the load bearing, heavy masonry wall or 'mauer' and the lighter more screen-like wall. The load bearing wall was connected to earth, while the screen light wall was connected to the sky. In this sense, the building connected to earth and sky.

Semper referred to the screen wall as cladding or clothing; woven and non-load bearing. This led Semper to relate it back to nomadic culture. He referred to textile production and ultimately arrived at identifying the knot as the "primordial joint upon which the cosmological tectonic art of construction must be based," or "the structural-symbolic essence of tectonics."¹²⁵

LOOS

Adolf Loos, the architect and writer made many contributions to 20th century architectural discourse, and an investigation of his work proves valuable in this and many other contemporary contexts. His built projects are always discussed in relation to his writings. Many of his writings and projects were manifested as a reaction against late 19th century Vienna, a time of excess Secessionist bourgeois society and also a time when modern technology was threatening architectural traditions.

While Loos is most widely known for his 'ornament and crime' essay, his discussions on canon and critical conventionalism,¹²⁶ and planning in a sectional mode or 'raumplan' are equally noted. His 'principle of cladding' and 'regarding economy' essays contribute most to a revised concept of construction and materialism. He "proposed an ethical nihilism on the already schizophrenic, mechanized metropolis where things would be dressed or undressed according to the required pathos of their action setting."¹²⁷

Hartoonian differentiates Loos from his contemporaries in their discussions about technology by raising the notion of OBJECT TYPE. Unlike the prevalent early modern break with tradition and historical context, Loos' artifacts do not change because of technical imperatives or the process of production. Object type represents a profound basic understanding in the domain of memory;

Where a six foot long by three foot wide mound formed into a pyramid shaped by a shovel incites us, and something inside us says, someone lies buried here.. That is architecture.¹²⁸

Distanced from both historicism and avant-gardism, and fixated on the need to respond to new productive means, Loos attempted to sustain tradition while embracing the unstoppable push of technology. Frampton, in discussing Wright in the period 1893 to 1910, identifies the distinguishing aspect of his work as his attempt to restate tradition by new means and materials. Loos might be framed in a similar way. In contrast to architects from the Arts and Crafts movement, Loos never yearned for the cottage. The house for Loos would be clad within and unclad without. His reservations of the interiors for tradition manifested in a delicate parody of Richardsonian domestic manner, with false Tudor beams and wainscotting, which according to Frampton "preserved tradition by undermining its content."¹²⁹ These interiors are simultaneously reassuring and subversive. The reinterpretation of tradition and hence 'recollection'.¹³⁰

From Semper's articulation of cladding, Loos derived a Law of cladding.

We must work in such a way that a confusion of the material clad with its cladding is impossible. That means, for example, that wood may be painted any colour except one - the colour of wood. ... Applied to stuccowork, the principle of cladding can take any ornament with just one exception - rough brickwork.'

But no, you imitators and surrogate architects, you are mistaken! The human soul is too lofty and sublime for you to be able to dupe it with your tactics and tricks.¹³¹

Nowadays one nails the structure to the facade with aplomb and hangs the 'keystone' under the main molding with artistic authority.¹³²

Loos brings a scepticism to his discussions of architecture and construction.

His statement that architecture would be relegated to the tomb and the monument, anticipated to a certain extent, the 'death of architecture'.

3.1.3. TECHNOLOGY REPLACES TECHNE

After a sustained period of resistance to technology, from the likes of Ruskin and the Arts and Crafts movement, technology came to transcend all cultural values in the discourse of early modernism. It signified a means for securing rational objective activity. Technology defined not only the process of making but also, as Hartoonian notes, "the destination of the building itself, changing the metaphorical province of the subject." ¹³³

GROPIUS, LE CORBUSIER and MODERNISM : THE IMPERATIVE OF TECHNOLOGY

Modern architectural theories predominantly supported grand narratives, speculating on the redemptive forces of technology. Positions proceeded from a 'tabula rasa': a clean slate. This break with the past led to a new positivistic canon and to the development of models for duplication.

Gropius envisioned a direct correlation between technological developments and architectonic transformation. He believed that "art and technology, formed a new unity".¹³⁴ A utopian faith in industry was concretized with mechanical metaphors and led to the "domination of technology over humanity".¹³⁵

Hartoonian notes that, "absent in Gropius's and Le Corbusier's discourse on objectivity is the 'real' use of an object type: the usefulness of a thing, not in terms of its mere functionality, but in terms of its response to the culture of building." ¹³⁶

SPIRIT OF TIME AND NEW OBJECTIVITY

"In the early twentieth century, a positivistic canon of the New Objectivity ended with a body of architectural theories that dispensed with history and type. Muthesius's persistence to integrate old types with new social and technical demands were dismissed. Gropius and Le Corbusier optimized the relationship between technology and architecture by reference either to the imperatives of the production line or to the purity of machine products. In both cases architectural discourse became laden with themes and notions drawn from technology. Technological Positivity manipulated the figurative aspects of architecture. The result was reflected in the idea of object-type, a model or prototype whose repeatability is a dimension of mass production and whose peculiarity is a function of building types." ¹³⁷

Modernism suppressed the subject in favour of democratization and equalization of objectivity. In the end, its ideals were subverted by commodification. The end of the 'grand narrative' no longer allows for this generalizing conception.

LUDWIG MIES VAN DER ROHE:

The primary thrust in Mies's work was an attempt to reconstruct the architectonic elements of traditional architecture. "To work toward order as a 'definition of meaning and measure of being,' Mies integrated the universal precision of technology into the domain of culture, and architecture in particular." ¹³⁸ Mies believed that the Zeitgeist, as a force in history, was linked to technology which would surpass its practical dimension to become "something that has meaning and powerful form." ¹³⁹ Mies rethought architecture in terms of its constructive elements, devoid of any imposed aesthetic or stylistic intentions from outside. One manifestation of his reconstructing resulted in the elimination of the wall in

much of his later work and having the column to act as the governing tectonic element.

Mies elevated construction to become the primary issue in relation to architecture. He thought that, architecture should exclusively be about building: 'bauen'.

Mies opened up the domain of cultural signification to technology. Hartoonian asserts that, "the limits of his architecture are drawn skillfully within the dilemma of modern artistic production - that is, the liquidation of the language of art by technique." ¹⁴⁰ Adorno asserts that, "while technique is the epitome of the language of art, it also liquidates that language." ¹⁴¹ Hartoonian argues that the process of liquidation is at work in Mies.

Sola-Morales disputes the classical references that many authors make in relation to Mies's attempts to rethink the tectonic. He also states that Mies was not the author of a series of architectural readymades. Mies could be considered to be a challenge to modernism's objectivity from within. ¹⁴² In 1930, Mies warned of extreme objectivism; "Whether we build high or low, with steel and glass, tells us nothing about the value of the building ... For the meaning and right of every age, including our own, consists solely in providing the spirit with the necessary prerequisites for its existence." ¹⁴³ Mies called for value and spirituality to be restored to building.

Further, Sola-Morales argues that Mies's work developed not out of images, but out of materials. "This matter from which buildings are built is abstract, general, geometrically cut, smooth and polished, but also substantial and tangible." ¹⁴⁴

This emphasis on materialism correlates with his rethinking of the tectonic without external aesthetic intentions.

The Postmodern present lies in gaps and contradictions. Hartoonian notes two vectors of our present scenario: the failure of the project of the historical avant-garde and an essential change in technology.

3.1.4. CONSTRUCTION CONCEPTION

Beginning with Lodoli and continuing with Semper and Loos, the conception of construction based on humanist classical ideas was broken down. By identifying different industries and processes that contribute to the construction process, Semper was able to pinpoint the loss of control by the architect; all the processes were no longer specifically a part of the whole. Mechanization of production made it impossible to transfer tradition including the craft of architecture.

Essentially, an understanding of the social division of labour and contributions of industries, not specifically intended for architecture, make up construction as it exists today.

Construction comprised of separate industries, processes, and trades, no longer allow for thinking and understanding architecture as a whole. The Cartesian vision of making based on hierarchy, which is a sense of

directionality from the lowest to the highest level and symmetry, is not plausible in the present. The whole can no longer be represented in the same way. Construction as it exists today is a juxtaposition of fragmented processes. The illusion of the unity of thinking and doing is shattered.

CONSTRUCTION: assembling materials, systems, technology to produce an object based on the social division of labour;
the application of new and existing mechanical possibilities;
not finite or finished but continually modified and adapted, executed by multiple industries, trades, workers.

An architect in conjunction with engineers and various other consultants is responsible for the precise determination of technical characteristics, dimensions, materials, and processes.

ARCHITECTURE and CONSTRUCTION

What is construction, building and architecture? Construction is the process by which materials, systems and technologies are assembled to form a building. That building can be considered architecture if the poetic considerations and intentions of an architect guide that building's construction.

JOINT / SEAM

Traditionally the function of the joint, surface or point where different materials or elements meet, was to cover the anomalies of construction and to create the illusion of aesthetic unity.

According to Marco Frascari, it is through detail that one can see "the process of signification; that is, the attaching of meanings to man-produced objects. The details are the loci where knowledge is of an order in which the mind finds its own working, that is, logos." ¹⁴⁵

The process of architecture's production is a fragmented one. Hartoonian proposes the term 'disjoint' "a weak form that distances sign from signifier" ¹⁴⁶ to describe the joint. The 'disjoint' he surmises, integrates material and detailing in such a way that the final form does not completely hide the nature of its production: fragmentedness.

SUMMARY

The preceding development of a conception of construction, with attention to historical contextualization, acknowledges the separate and fragmented nature of the construction process, and the diminished role of architect. How, then, could this conception of construction operate in reality, in a way which allows conceptions and intentions a possibility of success: a 'winning of reality.'?¹⁴⁷

4. MONTAGE: A PROCESSUAL STRATEGY

This strategy for making architecture, INTENTION and construction, requires linkage, enabling these components to be utilized in practice. Montage is selected as the processual strategy to relate INTENTION and construction with conception, and the other participants that contribute to architectural production. Montage is a method that responds to the fragmented nature of construction, architecture and thought in our postmodern present.

MONTAGE: from French *monter*: to mount
[the process of making] a mixture, blend, or medley of various elements;
a pastiche; a sequence, miscellany.
941. B. Schulberg. WHAT MAKES SAMMY RUN? iii 45. It [a nightclub]
was a montage of hot music, drunken laughter, loud wisecracks and
hostesses like lollipops in red, green and yellow wrappers. *ibid.* ix 172. It
was flashing through my mind like a montage nightmare. ¹⁴⁸

4.1. BACKGROUND: NEED FOR A METHOD

Walter Benjamin recognized the need for a new method to deal with authorship and art, and the reception of the art in the 'age of mechanical reproduction'. In *The Work of Art in the Age of Mechanical Reproduction*, Benjamin refers to montage in reference to film direction. In response to Russian film, in particular to filmmaker Sergei Eisenstein, he described this method as a potential for authorship and potency; effectively a method to command control; hence authorship. He acknowledged the multiple components, fragments and contributions by several individuals in the production of film and the need for their assemblage under the direction of an author or director.

Eisenstein refers to montage as a principle of building and construction, originating from American filmmaker Griffith. He asserts that Griffith arrived at montage through the method of 'parallel action', and that he was led to this idea by writer Charles Dickens. Eisenstein identifies in both Griffiths' and Dickens' creative work the creation of a plasticity where parallel story lines are assembled and juxtaposed invoking a tension.

Making a composition through fragments, creating differences to evoke tension; contrasts as the source of compositional coherence. ¹⁴⁹

The main thrust in philosopher Gianni Vattimo's work is the necessity to construct the present reality with a regard for history. For Vattimo, 'recollection' is the product of the process of assembling different fragments, and processes, with the notion of incompleteness: no certainty. He shares the notion of montage in his use of the word 'recollection'.

Deleuze's aesthetic : "A work, an oeuvre, is always a montage, a composition, an agencement. [assemblages] Everywhere it is always a question of construction, of architecture: a pragmatic, empiricist question always yet before us in art, in politics as in thought. That is why Deleuze thinks that architecture is first of the arts." ¹⁵⁰

The strategy, montage, is crucial to this thesis both as a proposed employment in a framework for making architecture and also as a means of presenting thoughts and conceptions.

4.1.1. CONSTRUCTIONS OF IDEAS

Gilles Deleuze is the contemporary philosopher who makes the most of [this] idea of construction; 'deconstruction' is not a word in his idiom. He makes construction the secret of empiricism, the originality of pragmatism. ¹⁵¹

The logic of [its] constructions then starts to work with informal plans built rather as montage as in [filmmaker] Godard, where one starts from 'zones' in between those drawn by habit or law, drawing things together in a free virtual whole. We are presented with a new constructivism, a new empiricism, a new conception of what a work is. ¹⁵²

A new sense of 'construction' neither purist nor transgressive nor utopian. ¹⁵³

The process of montage was utilized in constructing each of the chapters of this thesis. Montage allows the editing of existing thoughts, conceptions, the addition of new ideas and their assemblage in a new form. The result acknowledges a 'radical impurity' and the inclusion of multiple voices.

4.1.2. ARCHITECTURE: THEORY AND PRACTICE

As a strategy, montage integrates both theory and practice in the production of architecture. It has a capacity to accommodate a number of parallel thoughts, beliefs, actions and a diversity of participants. The architect can simultaneously consider conception, INTENTION, and issues related to construction and material. Through the process of montage the architect can edit, guide and assemble the considerations, decisions and actions necessary to make authored architecture. These elements can be assembled, reassessed, and reassembled continuously throughout the process. Montage responds to the complex and fragmented nature of construction and all other participants that contribute to making architecture. These participants include clients, construction workers, consultants, and society.

The contemporary architect is responsible not only for certain formal and technical decisions but also for putting a process in motion: one that is complex, articulated, and involves numerous operators who act directly on specific parts of the architectonic object. ... If the social division of architectural work tends to be performed out of the hands of the architect, it simultaneously makes him or her responsible for the mediation, that is to say, the multiple, uncoordinated, technical maneuvers, each with its discontinuous logic and each carried out by specialists who have no grasp of their overall integration. ... The idea, or the diagnosis is worth nothing if the architectural project does not engage in its every detail these multiple fragments. The social division of work has broken the one-time practical unity of architecture from project through to completed object.¹⁵⁴

In the project of montage and assembly, the architect is not personally responsible for any of the multiple aspects that come together in the material production of the architectonic object. ... Only the montage, the skilled, painstaking, and conflicting bringing together of all the elements is decisive.¹⁵⁵

TECTONIC

After exploring the secularization of construction, Hartoonian proposes montage as "a technique which deprives the metaphysical content of the duality between construction and representation." " Montage is not only a mode of making, shared by the production process of various cultural artifacts; it also embodies the contemporary experience of fragmentation." ¹⁵⁶ Montage reveals its tectonic form in the 'disjoint', the distancing of the signifier, the object from the signified, the meaning.

4.1.3. INCORPORATIONS

Montage as a strategy is an inclusive process. This particular writing focuses on an INTENTION, construction and their relationship to both conception and

actual building. However, other dynamic, correlated, and multipart systems (ie. politics, capitalism) can be incorporated by means of this processual strategy.

Neither human subjects nor the conceptual or material objects among which they live are any longer thinkable in their distinctness. ... Indeed, incorporation may well be the name of the new primary logic of creation and innovation in our late modern world. ¹⁵⁷

Montage is a method that can provide for projections and open-endedness.

4.2. THE LIBERATING POTENTIAL OF ARCHITECTURE

How can theory, these theoretical writings in particular, make a better building?

These theoretical writings are intrinsically linked to practice and the architectural object. The proposal is not a resistance but an alternative to the prevalent emphases regarding meaning and a strategy for making architecture.

Minimalism is an approach offering perhaps the greatest latitude for reintegrating theory and the everyday practice of constructing and experiencing architecture. ¹⁵⁸

Identifying montage as a method and advancing minimalism as a preferred approach to aesthetic intent, allow for the liberating potential of this architecture. Both method and approach are grounded in the complex, plural, secular reality; redefining authorship.

The stake of minimalism is the nature of meaning and the status of the subject, both of which are held to be public, not private, produced in a physical interface with the actual world, not in the mental space of idealist conception. ¹⁵⁹

An absence of hierarchy in matters of design and construction suggest democratization. By offering a kind of 'degree zero', difference can be expressed. Favours experiential over semantic or conceptual emphasizes broadens the potential for reception. These aspects of montage and minimalism claim the liberating potential of this architecture.

The acknowledgement that architecture is designed and built for a subject(s) and that their involvement throughout the process is privileged, recognizes the birth of the viewer. Refuting the siteless realm displays a respect for contextual neighbours. Montage with its inclusive and open-ended nature, allows for the incorporation of many voices denoting a greater empowerment in multiple subjects.

ADDENDUM

THEORETICAL PARADIGMS: A LITERATURE REVIEW

The postmodern condition provides us with a number of theoretical paradigms that relate between meaning and architecture. Some of the most prevalent systems are phenomenology, aesthetics of the sublime, linguistics, Marxism, and feminism.¹⁶⁰ These are the primary basis on which architects construct their intention in relation to meaning.

PHENOMENOLOGY: Phenomenology relates to how an object might be tailored or formed to influence or reach the individual subject or perceiver. The path is generally through collective 'windows' which lead to the individual side of the subject. In this context, identifying these 'windows' becomes important. Memory, psychic apprehension, synesthetic experience and elemental sensations are some prevalent ones.

In relation to architecture, phenomenology underlies attitudes toward site, place, landscape, and making. It emphasizes the visceral part of the reception of architecture focussing on visual, olfactory, tactile and oral sensations. The belief is that architecture is a medium recognized by its 'thingness' or three dimensional presence.

The understanding of architecture requires a spiritual or metaphysical dimension. "This dimension reveals the presence of being, the presence of the invisible within the world of the everyday." ¹⁶¹

Phenomenology is the central nervous system's brave gamble that it exists. ¹⁶²

Starting with Hegel and Husserl's critique of scientific logic, Martin Heidegger, Gaston Bachelard, Maurice Merleau-Ponty and others continued developing phenomenology as an interdisciplinary philosophical thread. Most contemporary proponents employ writings by these three as a base to develop their own variants. Within the phenomenology camp there are several differences, here are some:

Christian Norberg-Schultz: He is widely recognized as the principal proponent of a phenomenology of architecture. His primary concern is with the "concretization of existential space through making of places".¹⁶³ He interprets Heidegger's concept of dwelling as being at peace in a protected place.

Alberto Perez-Gomez: "Existential orientation, cultural identification, a connection with history"¹⁶⁴, describe Perez-Gomez's phenomenology. He proposes quite prescriptive, representational, symbolic means to achieve it. For Perez-Gomez, the poetic act of making serves to generate meaning. ¹⁶⁵

For the modern architect, personal making is the ritual, making as a form of self-knowledge. He seems to have no other option if his intention is to gather in his work authentic, intersubjective meanings... He can learn much from his mythical predecessor as a craftsman, maker of objects that shine with mysterious light, that seeming alive convey awe and wonder on the spectator. ¹⁶⁶

Juhani Pallasmaa: He is concerned with architecture's loss of communicative power. He contends that meaning in architecture depends on its ability to symbolize human existence or presence. Forms can transmit meaning via

images enriched by association. Pallasmaa asserts that the richest interpretation comes from the simplest archetypal forms such as column, gable, dome, tower. His own sensuous, abstract 'architecture of silence' dispels any indication of a nostalgic, stylistic, agenda. Pallasmaa addresses the psychic apprehension of architecture by privileging synesthetic experience, dreams, forgotten memories and imagination.

Kenneth Frampton: Guided by Heidegger and the Frankfurt school, he relies most directly on the text: *building, dwelling, thinking: 'Bauen, Wohnen, Denken'*. Frampton calls for a new vernacularism, return to traditional values, and resonant reappropriation of place, light, tectonic and tactile over purely visual - understanding. He recognizes that a single system is no longer possible and replaces the system with a polycentric strategy. However, Frampton refers to certain tectonic categories as viable which are only possible within the order of the classical age, a culture where building dwelling thinking constituted a unity. For Frampton, thoughtful making is meaning, addressing itself directly to the senses. ¹⁶⁷

AESTHETICS OF THE SUBLIME: In contrast to phenomenology, the aesthetics of the sublime aim to reach or affect the individual subject directly. Proponents strive to reach the individual side of the subject by erasing or eliminating the known or collective side of the subject. This is based primarily on a binary way of thinking.

This framework deals with the psyche and uncovering architecture's repressed aspects. Proponents such as Eisenman and Vidler emphasize the uncanny and

grotesque over beauty and recognize the presence of absence; displacement of humanist ideals like beauty; disciplinary deconstruction and complexity.

Purveyors emphasize a continuous dialogue between the sublime and the beautiful. Vidler and Eisenman emphasize the spatial experience of the human subject as a challenge to a formalist and nonexperiential reception of architecture.

Eisenman likes to tell the story of Tolstoy dusting - or not dusting - a divan. One day the Russian could not remember whether he had cleaned the sofa, and he decided that even if he had, it was as if he hadn't, because he couldn't remember. Habit made him unconscious of doing it. He concluded that a whole life of such habits amounts to a life <as though it had never been>. For Eisenman, the media revolutions of the last decade have virtually displaced people from their own lives, first because action has passed to the screen and then, because watching the screen has become habitual: programs, movies, and tapes all blur.¹⁶⁸

LINGUISTICS: This framework emphasizes meaning as relayed through symbol: signified and signifier. Linguistics is a framework which can be related to both phenomenology and aesthetics of the sublime.

SEMIOTICS "approaches language scientifically, as a sign system with a dimension of structure or syntactic and one of meaning or semantic. Structural relationships bind the signs and their components, signifier/signified, together; syntactic relations are between signs. Semantic relationships have to do with meanings, that is, relations between signs and the objects they denote" ¹⁶⁹

Semiotician Umberto Eco asserts in 'Function and Sign: Semiotics of Architecture' that "architectural signs communicate possible functions through a system of conventions or codes. Literal use or programmatic function is

architecture's primary meaning. Signs thus denote primary functions and connote secondary functions." ¹⁷⁰

Eisenman: syntactically loaded work

Graves: semantically loaded work

STRUCTURALISM: is a study method that claims:"the true nature of things may be said to lie not in things themselves, but in the relationships which we construct and then perceive, between them." ¹⁷¹ Structuralism relies on codes, conventions and processes in order to understand a work. Jonathan Culler notes the emphasis in this method is in the conditions of signification not in thematic content. This method relies on the stability of components of the sign.

In **POST STRUCTURALISM**, critic and perceiver take an active role as the producer of meaning. Language is not viewed objectively, but subjectively, as discourse of a subject.

Poststructuralism notes an infinite chain of metaphors; meaning is indeterminate, elusive, bottomless. Signs are unreliably interpreted, easily construed in several ways simultaneously. In poststructuralism, determining a definitive meaning is impossible.

Deleuze: interpretive; monitor reality from multiple angles and perspectives. awareness of flows, energies and displacements.

DECONSTRUCTION is a poststructuralist manifestation that explores use of rhetorical operations, such as metaphor. Practitioners strive to ascertain what

the history of architecture may have concealed or excluded, and utilize repression to constitute identity. Negation is the path or method: 'nots'.

Proponents of deconstruction include philosopher Jacques Derrida and architects Peter Eisenman and Tschumi. In its simplest manifestation, our fragmented society / culture is represented in architecture as a fragmented form.

MARXISM: Nesbitt notes that this is an especially influential paradigm for examining cities and institutions. Marxism is a framework, which can be related to phenomenology.

Some differences include:

Manfredo Tafuri addresses issues of class struggle and architecture. For Tafuri, the crisis of modern architecture is a crisis of the ideological function of architecture; modernism failed an overhaul of social order because only a class critique is possible. Tafuri purports that revisions need to be made to language, method and structure.

Fredric Jameson examines the structure of political power. He proposes enclave theory where marginalized groups working on fringes of society can develop a position as critical enclave and initiate change, such as evidenced by May 1968.

The 'Frankfurt School' is a movement, which includes Horkheimer, Adorno, Benjamin and Marcuse, with the uniting idea of a need for critical Marxism. This

modified Marxist position involves the rejection of positivism, value freedom and crude materialism, while stressing the actual Hegelian and idealist side of Marx. Their approach fuses philosophy, history and psychology in an attempt to describe culture in the context of society and political economy.

FEMINISM: is a critique of the 'other' or marginalized. It gained broad support in the 1960s with grassroots activism which called attention to the disenfranchisement of various groups defined by gender, race and sexual orientation. Feminism arose from this critique and proponents use critical paradigms including post-structuralism, Marxism and psychoanalysis to understand the implications of gender on cultural productions such as architecture. Feminism is a framework which can be related to phenomenology.

Gender is a machine for thinking the meaning of sexual difference. ¹⁷²

The aim of the feminist critique of architecture is to place theory and practice in the contemporary socio-political reality. Diana Agrest claims that the system of architecture is defined both by what it includes and excludes. She gains strength from the situation of exclusion.

This outside is a place where one can take distance from the closed system of architecture and thus be in a position to examine [architecture's] mechanisms of closure, its ideological mechanisms of filtration, to blur the boundaries that separate architecture from other practices. ¹⁷³

ENDNOTES

¹Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge, Mass.: MIT Press.1996.: back cover.

²Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press.1997.: p.100.

³Lyotard, Jean-Francois. "The Sublime and the Avant-garde." *ArtForum* 20, no. 8 [April 1982]: p. 38.

⁴Faurschou, Gail. 'Obsolescence and Desire: Fashion and Commodity Form.' in Silverman, Hugh J., editor. *Postmodernism: Philosophy and the Arts*. New York: Routledge. 1990.: p.234.

⁵Faurschou, Gail. 'Obsolescence and Desire: Fashion and Commodity Form.' in Silverman, Hugh J., editor. *Postmodernism: Philosophy and the Arts*. New York: Routledge. 1990.: p.235.

⁶Faurschou, Gail. 'Obsolescence and Desire: Fashion and Commodity Form.' in Silverman, Hugh J., editor. *Postmodernism: Philosophy and the Arts*. New York: Routledge. 1990.: p.239.

⁷Faurschou, Gail. 'Obsolescence and Desire: Fashion and Commodity Form.' in Silverman, Hugh J., editor. *Postmodernism: Philosophy and the Arts*. New York: Routledge. 1990.: p.237.

⁸Jameson, Fredric. *The Seeds of Time*. New York: Columbia University Press. 1994.: p. 204.

⁹Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.100.

¹⁰Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.

¹¹Kwinter, Sanford and Crary, Jonathan. *INCORPORATIONS*. New York: Urzone. 1992.: p.15.

¹²Funk and Wagnalls Canadian College Dictionary. Markham: Fitzhenry and Whiteside. 1989.

¹³Whiting, Sarah. 'Subjectifying the Modern.' in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. xi.

¹⁴Boddy, Trevor. 'Plain Dwelling.'*Canadian Architect* volume 43, no. 7 [July, 1998]: p. 23.

¹⁵Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 94.

¹⁶Steinmann, Martin. 'The Presence of Things.' in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 23.

¹⁷Baudrillard, Jean. in Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 94.

¹⁸Nesbitt, Kate. *Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press. 1996.

¹⁹Benedickt, Michael. *For an Architecture of Reality*. New York: Lumen.1987.: p. 9.

²⁰Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Introduction. Rotterdam:

010 Publishers. 1995.

²¹Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Introduction. Rotterdam: 010 Publishers. 1995.

²²Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Introduction. Rotterdam: 010 Publishers. 1995.

²³Hays, K. Michael. "Critical Architecture: Between Culture and Form." *Perspecta* 21.

²⁴Hays, K. Michael. "Critical Architecture: Between Culture and Form." *Perspecta* 21.

²⁵Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.16.

²⁶Hays, K. Michael. "Critical Architecture: Between Culture and Form." *Perspecta* 21.

²⁷Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 63-4.

²⁸Gartner, Scott. in Frampton, Kenneth. *Studies in Tectonic Culture*. Cambridge: MIT Press, 1995.: p. 10-11.

²⁹McLuhan, Marshall. *EXPERIENCE. 1996. [ANONYMOUS ARTIST BOOK]*

³⁰Benedickt, Michael. *For an Architecture of Reality*. New York: Lumen, 1987.: p. 9.

³¹Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 11.

³²Guattari, Felix. 'Regimes Pathways, Subjects', in Kwinter, Sanford and Crary, Jonathan, editors *INCORPORATIONS*. New York: Urzone .1992.:pp. 16-37.

³³Barthes, Roland. *Writing Degree Zero*. New York: Hill and Wang.1953.

³⁴Steinmann, Martin. "The Presence of Things". in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 23.

³⁵Steinmann, Martin. "The Presence of Things". in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 23.

³⁶Ibelings, Hans. *Supermodernism: Architecture in the Age of Globalization*. Rotterdam: NAI Publishers. 1998.: p. 133.

³⁷Moneo, Rafael. *Herzog & de Meuron*. Cambridge, Mass.Harvard. 1990.

³⁸Kaufmann, Walter. *Existentialism From Dostoesvsky to Sartre*. New York: World Publishing. 1970.: p. 11.

³⁹Deleuze, Gilles. 'Mediators' in Kwinter, Sanford and Crary, Jonathan, editors *INCORPORATIONS*. New York: Urzone . 1992.:pp. 16-37.

⁴⁰Kaufmann, Walter. *Existentialism From Dostoesvsky to Sartre*. New York: World Publishing. 1970.: p. 12.

-
- ⁴¹Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.42.
- ⁴²Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 42.
- ⁴³Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.14.
- ⁴⁴Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 48.
- ⁴⁵Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 53-4.
- ⁴⁶Wittgenstein, Ludwig.
- ⁴⁷Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 9-10.
- ⁴⁸Deleuze, Gilles and Guattari, Felix. *What is Philosophy?*. trans. Tomlinson, Hugh and Burchell, Graham. New York: Columbia University Press. 1994.
- ⁴⁹Vanstiphout, Wouter. *Harvard Design Magazine*. Summer 1998. p. 70.
- ⁵⁰Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. ix.
- ⁵¹Whiting, Sarah. "Subjectifying the Modern." in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. xiv.
- ⁵²Whiting, Sarah. "Subjectifying the Modern." in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. xiv.
- ⁵³Whiting, Sarah. "Subjectifying the Modern." in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. xv.
- ⁵⁴Guattari, Felix. 'Regimes Pathways, Subjects', in Kwinter, Sanford and Cray, Jonathan, editors *INCORPORATIONS*. New York: Urzone . 1992.:pp. 16-37.
- ⁵⁵Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.: p. 56.
- ⁵⁶Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 33.
- ⁵⁷Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge, Mass.: MIT Press. 1996.: p. 38.
- ⁵⁸Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge, Mass.: MIT Press. 1996.: p. 40.
- ⁵⁹Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge,

Mass.: MIT Press. 1996.: p. 40.

⁶⁰Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge, Mass.: MIT Press. 1996.: p. 40.

⁶¹Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 23.

⁶²Herzog, Pierre and de Meuron, Pierre. in Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 23.

⁶³Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 112.

⁶⁴Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 114.

⁶⁵Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 114-5.

⁶⁶Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 115.

⁶⁷Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 115.

⁶⁸Whiting, Sarah. 'Subjectifying the Modern' in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. xi.

⁶⁹Herzog, Pierre and de Meuron, Pierre. in Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 23.

⁷⁰Whiting, Sarah. 'Subjectifying the Modern' in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. xi.

⁷¹Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.: Introduction.

⁷²Lyotard, Jean-Francois. "The Sublime and the Avant-garde," *ArtForum* 20, no. 8 [April 1982]: p. 38.

⁷³Loos, Adolf. "On Adolf Loos and Josef Hoffman: Architecture in the age of Mechanical Reproduction". *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p. 138.

⁷⁴Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 12-3.

⁷⁵Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 13.

⁷⁶Holl, Steven. *Anchoring*. New York: Princeton Architectural Press. 1991.: p. 12.

⁷⁷Deleuze, Gilles and Guattari, Felix. *A Thousand Plateaus*. Minneapolis: University of Minnesota

Press. 1987.

⁷⁸Chipperfield, David. *Theoretical Practice*. London: Artemis. 1994.: p.19.

⁷⁹Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.: p. 1.

⁸⁰Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.19.

⁸¹SMITH, Bryden. "Donald Judd" catalogue, June 4, 1978, VAG

⁸²Judd, Donald. in SMITH, Bryden. "Donald Judd" catalogue, June 4, 1978, VAG

⁸³Loos, Adolf. in Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.8.

⁸⁴Sumi, Christian. in Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 14.

⁸⁵*Funk and Wagnalls Canadian College Dictionary*. Markham: Fitzhenry and Whiteside. 1989.

⁸⁶Herzog, Jacques and de Meuron, Pierre. in Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p. 11

⁸⁷Chipperfield, David. *Theoretical Practice*. London: Artemis. 1994.: p.39.

⁸⁸Chipperfield, David. *Theoretical Practice*. London: Artemis. 1994.: p.33.

⁸⁹Chipperfield, David. *Theoretical Practice*. London: Artemis. 1994.: p.33.

⁹⁰Judd, Donald in Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.10.

⁹¹Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.10

⁹²Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.11.

⁹³SOUTO de MOURA, Eduardo. "Notes to a Synthesis of a Text", in *Architectures of Herzog and de Meuron*. New York: Peter Blum Edition, 1995.: p. 17.

⁹⁴Rykwert, Joseph. in Chipperfield, David. *Theoretical Practice*. London: Artemis. 1994.: p.15.

⁹⁵Merleau-Ponty, Maurice. *Phenomenologie de la Perception*. Paris: Gallimard. 1945.

⁹⁶Loos, Adolf. "On Adolf Loos and Josef Hoffman: Architecture in the age of Mechanical Reproduction". *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p. 72.

⁹⁷Colomina, Beatriz. "On Adolf Loos and Josef Hoffman: Architecture in the age of Mechanical Reproduction". *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p. 72.

-
- ⁹⁸Loos, Adolf. "The Principle of Cladding", *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p.136.
- ⁹⁹Loos, Adolf. "The Principle of Cladding", *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p.135.
- ¹⁰⁰Antonelli, Paola. "Mutant Materials: on Plastics and Other Artifacts of Material Culture", Harvard Design Magazine, Summer 1998
- ¹⁰¹Herzog, Jacques. "On Materials", *Domus* 765. November 1994.: p. 77.
- ¹⁰²Fernandez-Galiano, Luis. "It's the Economy, Stupid! , Architecture and the Symbolic Economy" Harvard Design Magazine, Fall 1997.: p. 45.
- ¹⁰³Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.17-8.
- ¹⁰⁴Steinmann, Martin. 'The Presence of Things'. in Alter, Kevin and Gilbert, Mark. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.: p.18.
- ¹⁰⁵Allen, Stanley. "Mapping the Post-Modern City: Two Arguments for Notation." ACSA Conference Proceedings, *Technology and Architecture*. 1995.: p.33.
- ¹⁰⁶Allen, Stanley. "Mapping the Post-Modern City: Two Arguments for Notation" ACSA Conference Proceedings, *Technology and Architecture*. 1995.: p.33.
- ¹⁰⁷Semper, Gottfried. in Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. xi.
- ¹⁰⁸Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p. 58.
- ¹⁰⁹Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.135.
- ¹¹⁰Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 86.
- ¹¹¹Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 40.
- ¹¹²Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 29.
- ¹¹³Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 41.
- ¹¹⁴Vattimo, Gianni. "Myth and Fate of Secularization" in Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.: p. 244-53.
- ¹¹⁵Vattimo, Gianni. "Myth and Fate of Secularization" in Bouman, Ole and van Toorn, Roemer. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.: p. 251.
- ¹¹⁶Vattimo, Gianni. "Myth and Fate of Secularization" in Bouman, Ole and van Toorn, Roemer. *The*

Invisible in Architecture. Rotterdam: 010 Publishers. 1995.: p. 251.

¹¹⁷Vattimo, Gianni. "Myth and Fate of Secularization" in Bouman, Ole and van Toom, Roemer. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.: p. 253.

¹¹⁸Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 7.

¹¹⁹Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 2.

¹²⁰Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: pp. 5-12.

¹²¹Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 5.

¹²²Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 1

¹²³Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 86.

¹²⁴this supports Gianni Vattimo's 'weak thought'; see Sola-Morales, Hartoonian.

¹²⁵Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 24.

¹²⁶Anderson, Stanford. "Critical Conventionalism in Architecture" *Assemblage* v. 1.

¹²⁷Frampton, Kenneth. in Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. xiii.

¹²⁸Loos, Adolf. "On Adolf Loos and Josef Hoffman: Architecture in the age of Mechanical Reproduction". *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p. 74.

¹²⁹Frampton, Kenneth. in Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. xiii.

¹³⁰Vattimo, Gianni. "Myth and Fate of Secularization" in Bouman, Ole and van Toom, Roemer. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.: p. 253.

¹³¹Loos, Adolf. "The Principle of Cladding". *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p. 136-7.

¹³²Loos, Adolf. "The Principle of Cladding". *Raumplan Versus Plan Libre*. New York: Rizzoli. 1991.: p. 135.

¹³³Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.16.

¹³⁴Gropius, Walter. in Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.36.

-
- ¹³⁵Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.41.
- ¹³⁶Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.38.
- ¹³⁷Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.41.
- ¹³⁸Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.69.
- ¹³⁹Conrads, Ulrich. *Programs and Manifestos on Twentieth Century Architecture*. Cambridge, Mass.: MIT Press. 1975.: p.154.
- ¹⁴⁰Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p.76.
- ¹⁴¹Adorno, Theodor. *Aesthetic Theory*. New York: Routledge & Kegan Paul. 1984. p.310.
- ¹⁴²Whiting, Sarah. "Subjectifying the Modern" in Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.xi.
- ¹⁴³Mies van der Rohe, Ludwig. "The New Era", in *Programs and Manifestoes on Twentieth Century Architecture*, ed. Conrads, Ulrich, Cambridge, Mass. MIT Press, 1984 p.123.
- ¹⁴⁴Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.32.
- ¹⁴⁵Frasconi, Marco. "The Tell-the-Tale Detail, *VIA* no. 7, Pennsylvania 1984.
- ¹⁴⁶Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 27.
- ¹⁴⁷Anderson, Stanford. "A Presentness of Interpretation and of Artifacts: Toward a History in, of, and for Architecture," John E. Hancock, ed. Cincinnati: University of Cincinnati 1981.
- ¹⁴⁸*Compact Oxford English Dictionary*, Oxford: Clarendon Press. 1991.
- ¹⁴⁹Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p..
- ¹⁵⁰Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.: p. 4.
- ¹⁵¹Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.: p.2-3
- ¹⁵²Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.: p.6-7
- ¹⁵³Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.: p.8.
- ¹⁵⁴Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.: p.135.
- ¹⁵⁵Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*.

Cambridge: The MIT Press. 1997.: p. 136-7.

¹⁵⁶Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.: p. 3.

¹⁵⁷Kwinter, Sanford and Crary, Jonathan. *INCORPORATIONS*. New York: Urzone . 1992.: p. 15.

¹⁵⁸Frohwerk, Ron. in conversation August 15, 1998

¹⁵⁹Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge, Mass.: MIT Press. 1996.: p. 40.

¹⁶⁰Nesbitt, Kate. *Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press. 1996.

¹⁶¹Perez-Gomez, Alberto. in Nesbitt, Kate, editor. *Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press. 1996.:p 30.

¹⁶²Ballard, J. G.. 'Project for a Glossary of the Twentieth Century.' in Kwinter, Sanford and Crary, Jonathan, editors. *INCORPORATIONS*. New York: Urzone . 1992.:p. 271.

¹⁶³Norberg- Schulz, Christian. 'The Phenomenon of Place.' *Architectural Association Quarterly* 8, no. 4 [1976]: p.6.

¹⁶⁴Perez-Gomez, Alberto. "Architectural Representation in the Age of Simulacra." *Skala* 20 [1990]: p. 42.

¹⁶⁵Owen, Graham. "The Meaning of Construction, the Construction of Meaning." in *Architecture Canada: the Governor General's awards for Architecture*. 1994. Ottawa: RAIC. 1994.: p. 38.

¹⁶⁶Perez-Gomez, Alberto. "Director's Introduction." *Carleton Folio*. Ottawa: Carleton University School of Architecture. 1985.: n. page.

¹⁶⁷Owen, Graham. "The Meaning of Construction, the Construction of Meaning." in *Architecture Canada: the Governor General's awards for architecture*, 1994. Ottawa: RAIC. 1994.: p. 38.

¹⁶⁸Giovannini, Josef. "Greater Convention Center, Columbus, Ohio" *DOMUS* 750 [June 1993] p. 30.

¹⁶⁹Nesbitt, Kate. *Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press. 1996.:p.33.

¹⁷⁰Eco, Umberto. "Function and Sign: Semiotics of Architecture." in Broadbent, Bunt, Jencks, editors. *Signs, Symbols and Architecture*. New York: John Wiley. 1980.:11-70.

¹⁷¹Hawkes, Terence. *Structuralism and Semiotics*. Berkeley: University of California Press. 1977.: p. 17.

¹⁷²Bergren, Ann. "Architecture Gender Philosophy." in *Strategies in Architectural Thinking*. Cambridge: MIT Press. 1992.: p. 12.

¹⁷³Agrest, Diana. *Architecture from Without: Theoretical Framings for a Critical Practice*. Cambridge: MIT Press, 1993. : p. 3.

BIBLIOGRAPHY

Allen, Stanley. "Mapping the Post-Modern City: Two Arguments for Notation" ACSA Conference Proceedings, *Technology and Architecture*. 1995.

Alter, Kevin and Gilbert, Mark editors. *Construction, Intention, Detail: Five Projects from Five Swiss Architects*. Zurich: Artemis, 1994.

Anderson, Stanford. "Critical Conventionalism in Architecture" *Assemblage* vol. 1.

Barthes, Roland. *Writing Degree Zero*. New York: Hill and Wang. 1953.

Bouman, Ole and van Toorn, Roemer editors. *The Invisible in Architecture*. Rotterdam: 010 Publishers. 1995.

Chipperfield, David. *Theoretical Practice*. London: Artemis. 1994.

Crary, Jonathan and Kwinter, Sanford editors. *INCORPORATIONS*. New York: Urzone. 1992.

Deleuze, Gilles and Guattari, Felix. *What is Philosophy?*. trans. Tomlinson, Hugh and Burchell, Graham. New York: Columbia University Press. 1994.

Deleuze, Gilles and Guattari, Felix. *A Thousand Plateaus*. Minneapolis: University of Minnesota Press. 1987.

Faurschou, Gail. 'Obsolescence and Desire: Fashion and Commodity Form.' *Postmodernism: Philosophy and the Arts*. Silverman, Hugh J. editor. New York: Routledge. 1990.

Foster, Hal. *The Return of the Real: The Avant-Garde at the End of the Century*. Cambridge, Mass.: MIT Press. 1996.

Frampton, Kenneth. *Studies in Tectonic Culture*. Cambridge: MIT Press, 1995.

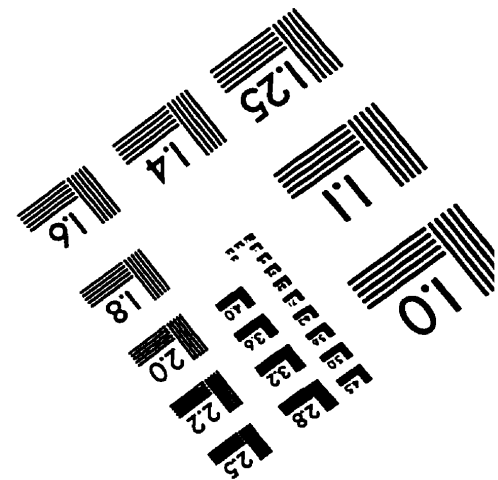
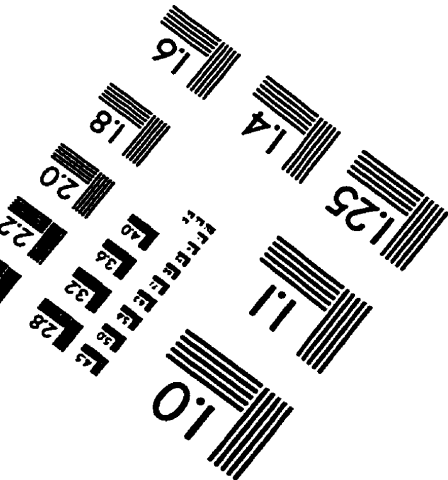
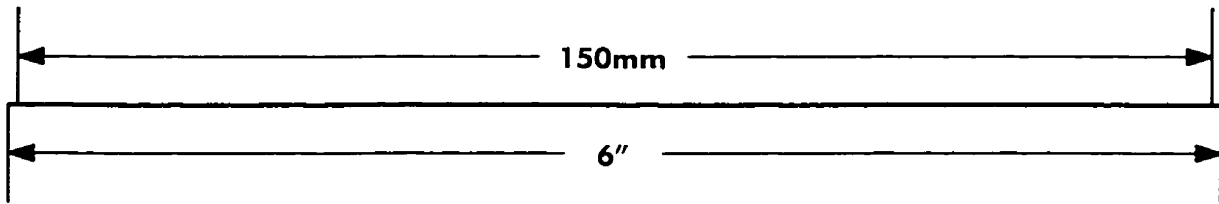
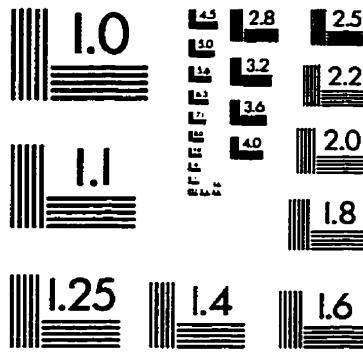
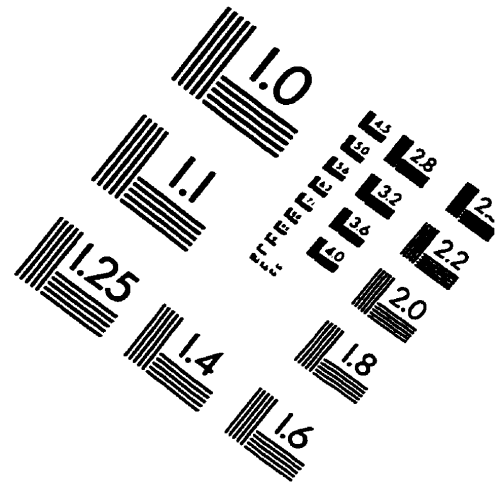
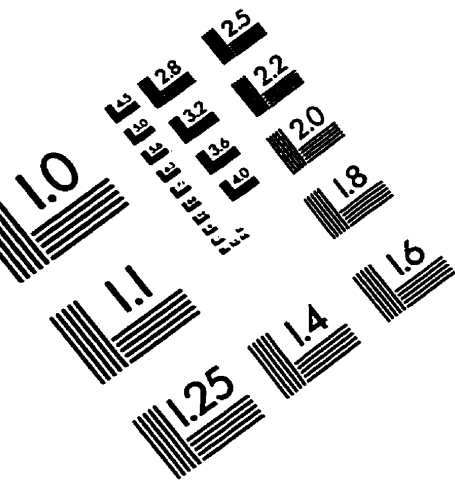
Hays, K. Michael. "Critical Architecture: Between Culture and Form." *Perspecta* 21.

Hartoonian, Gevork. *Ontology of Construction, On Nihilism of Technology in Theories of Modern Architecture*. Cambridge: Cambridge University Press. 1994.

Herzog, Jacques. "On Materials", *Domus* 765. November 1994.

- Holl, Steven. *Anchoring*. New York: Princeton Architectural Press. 1991.
- Kaufmann, Walter. *Existentialism From Dostoesvsky to Sartre*. New York: World Publishing. 1970.
- Kenny, Anthony editor. *The Wittgenstein Reader*. Oxford: Blackwell. 1996.
- Moneo, Rafael. *Herzog & de Meuron*. Cambridge, Mass: Harvard University Press. 1990.
- Nesbitt, Kate. *Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press. 1996.
- Owen, Graham. "The Meaning of Construction, the Construction of Meaning." in *Architecture Canada: the Governor General's awards for architecture, 1994*. Ottawa: RAIC. 1994.
- Rajchman, John. *Constructions*. Cambridge, Mass.: MIT Press. 1998.
- Risselada, Max editor. *Raumplan Versus Plan Libre: Adolf Loos and Le Corbusier, 1919 - 1930*. New York: Rizzoli. 1991.
- Sola-Morales Rubio, Ignasi. *Differences: Topographies of Contemporary Architecture*. Cambridge: The MIT Press. 1997.
- Souto de Moura, Eduardo. "Notes to a Synthesis of a Text", in *Architectures of Herzog and de Meuron*. New York: Peter Blum Edition, 1995.

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