ANTI - MUSEUM
An Architectural Ecology

by

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Siavash Vazirnezami

To my family

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Abstract:

Anti-museum is a thesis about the relations between nature and architecture. The critique offered here is one that is focused on architecture's over investment in its commodity and function; parameters that are often neutral to and independent from the spatiotemporal context in which architecture takes place. By contrast this thesis project explores different theories of "nature" as that which binds architecture in its context and hence provides an antithesis to commodification of space.

The design project strives to demonstrate an architecture that documents its own produced, modern nature. In doing so, the project foregrounds and privileges the effects of the forces of nature (through weathering), as well as aura and specificity of place over the function and commodity oriented values of space. The overarching aim is to create a social space that enhances the experience of life in the city and also perhaps leads to a different vision in the process of space making at large.

Introduction:

Anti-museum is an intervention in the abandoned silos of Canada Malting. This intervention is not one that boasts of a spectacular image. Rather, it is a space that is about its place and it is offered as a “situation” in the produced “space” of the city.

The emphasis of the Anti-museum project is on a critique of the relations between architecture and nature. A backward look at the history of nature in architectural thinking reveals to us that Romanticist artists and intellectuals of the 19th century were awed by the grandeur and sublimity of the ancient ruins since they mingled the “natural” and the “man-made” in a unique instant of time and space. This reciprocal consummation of nature and architecture sits in contrast with the idealized image of buildings as everlasting monument, frozen in a pristine state. The Romantic Movement, for the first time since the Renaissance, offered a new conception of nature as that which in its own “nature” complements, as opposed to deteriorates.

The Anti-museum project takes these ideas of nature and seeks to (re)introduce them to the architecture of the present time in an attempt to make possible the design and creation of built environments that belong to their spatial and temporal context; in this instance the industrial silos of the Canadian Malting Company (CMC). The abandoned silos of Canada Malting Company (CMC) were chosen as the site based primarily on their significance to Toronto’s Harbourfront area, the challenges and opportunities it offers and its realness of context as they are currently being considered as part of Bathurst Quay Neighborhood Plan. The thesis argues that present and past spatiotemporal contexts of silos should be considered as part of the “nature” of the site, and that this “nature” should be integrated into the design process and considered as part of the present and future of the building.

As the theoretical and conceptual embodiment of the project, this thesis begins by offering a brief history of the evolution of conceptual definitions central to the project. It then proceeds by discussion of relations between nature and architecture, as viewed and analyzed through three main lenses:

1-The social (Production of nature); which observes the transformation of the natural condition of societies to that which is designed and made internally, therefore the process of production of space –in its general and specific sense of the term- in urban environments could be broadly conceived of as creation of an ecology. The emphasis is on the role of social and public spaces in cities and their participation in the process of social production of life and vitality. 2-The material (Sub-nature); the focus is on the effects of natural elements on architecture, and how this interaction between the natural and the manmade can be conceived of as a constituent element of a building’s history in the making. Moreover, this process of documentation of the natural context by architecture plays a fundamental role in turning the architectural space into a place. 3-The experiential (Dematerialized nature); this section expands the view of nature beyond that of the still and green backdrop for the production of space and highlights the role of natural elements in shaping the authentic spatial experience of a place. The commonality between these points of views is a critique of an architecture that is overly invested in its commodity and function; parameters that are generally neutral to and independent from its natural context.

Chapter two, builds on chapter one through a discussion of the production of space and more specifically, through an analysis of a series of corresponding inspirational projects, in order to explain their architectural (and urban) implications for this project and more broadly.

In the third and last chapter, the methodology and research process for the design of Anti-museum is presented by a series of conceptual models that narrate the process through a juxtaposition of the various ideas that shaped the theoretical discourse of the project.

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Chapter 1: IDEOLOGIES OF NATURE

- PRELUDE

As an acknowledgement of the foundational and influential work of Neil Smith, “uneven development”, the title of this chapter gestures towards an exploration of conceptions of nature. Prior to discussing nature from an architectural perspective, perhaps it is necessary to attempt, however briefly, to shed some light on the broad and significant roots of the term “nature” and to excerpt some of the more nuanced reflections on that. We will start with a more etymological analysis and subsequently proceed to five different examples of how the concept of nature is interpreted in different cultures around the world, which will serve as a prelude to the more in-depth review in following sections.

In *Keywords: A vocabulary of culture and society*, Raymond Williams (1976: 219-224), reviewed the etymology and evolution of fundamental terms in literary history. Nature, he suggested, is one of the most complicated and contested words in the English language. According to Franklin Ginn and David Demeritt (2008) Williams identified three major traditional meanings for nature that are broad and often interconnected:

- 1- Intrinsic nature, or the essential characteristics of a thing
- 2- External nature, or the external and unmediated material world, and
- 3- Universal nature, or the all-encompassing force controlling things in the world

Also the Latin and old French roots of “Nature” (L; Natura and oF; Naturc) refer to a quality and a process of birth and coming into existence, which according to Williams, is synonymous with intrinsic nature (first meaning), Williams also juxtaposed this procession of meaning of nature with that of culture, where the agricultural metaphor is used to describe the evolution of a concept. Further he discussed the emergence of the other two meanings at greater length. These categories of conceptions of nature are crucial in shaping a discipline or profession’s fundamental definition of and approach to nature as well as the ways in which knowledge with respect to nature is produced.

Before proceeding to a more modern and theoretical analysis perhaps it is appropriate to explore how concepts of nature have developed in different societies and how boundaries between nature, perception and culture might become indistinguishable from one another.

- CULTURAL CONCEPTS OF NATURE

This section provides a brief overview of some of the folk concepts of nature from different cultures: North American, Japanese, Persian and Scandinavian. It should be mentioned that these concepts are important from two particular points of views, first their historical significance which speaks to the gradual and long duration of their developments and the fact that they are mostly based on pre-modern relations and interactions between people and the natural world and, second their social significance which narrates their development in tandem with evolutions of societies.

- Garrison Mentality

In *Survival: A Thematic Guide to Canadian Literature*, Margaret Atwood (1972) argues that the theme of Garrison mentality is a dominant theme in Canadian literature and culture. The concept of Garrison Mentality was first articulated by Northrop Frye as a metaphor for the European settler's response to the natural landscapes of Canada. More specifically it refers to a sense of fear in the face of the enormity and the apparent endlessness of the "empty" landscapes (and perhaps harsh climate) and what or who might be hiding in or beyond that emptiness. Frye traces this to communities and lifestyles of early settlers in camps or garrisons and also observes the emergence of the fighter and the deserter as two social paradigms that could also be identified in the literature. According to Atwood, Garrison Mentality is the story of survival through the building of walls, both in physical and psychological sense between wildernesses or "unruly nature" and society or "the orderly nature" (Atwood, 1972). In garrison mentality we see how nuanced reconstructions of nature mingle with that of culture.

- Frontier landscapes

The following passage was written by Alexis de Tocqueville to describe the American frontier approach to nature after visiting Michigan in 1831:

"In Europe people talk a great deal of the wilds of America, but the Americans themselves never think about them; they are insensible to the wonders of inanimate nature and they maybe said not to perceive the mighty forests that surround them till they fall beneath the hatchet. Their eyes are fixed upon another sight: the American people views its own march across these wilds, draining swamps, turning the course of rivers, peopling solitudes, and subduing nature. This magnificent image of themselves does not meet the gaze of the Americans at intervals only; it may be said to haunt every one of them in his least as well as his most important actions and to be always flitting before his mind." (De Tocqueville, 2000: 78).

However after the expansion of urbanity, the external nature appeared to be less a threat or challenge. Instead it grew to become a site of interest and study to artists and scientists alike. "These specialized studies of natural objects in turn contributed to a broader social movement every bit as influential as the

wilderness experience” (Smith, 1984: 21). Thus it led to movements such as “back to nature” and in arts and literature to the American version of romanticism. Here again we see the internalization of perception of an externality that participates in the formation of cultural constructions of nature.

- **Wabi Sabi**

Wabi Sabi is not just an aesthetic thesis but it has more of worldview status in Japanese culture (and design as part of that), it could be traced back in Buddhist ideologies and it roughly translates as embracing the imperfection that is seen as a characteristic of natural world (Wabi) and also the aging, withering and patina that occurs naturally and over time on objects. Its application could be seen in Japanese gardening and architecture but also in a more emphatic fashion in the tradition of gilding the cracks and scratches of old worn out objects. Wabi and Sabi could be seen as respectively spatial and temporal aspects of natural world. In this sense, Wabi Sabi stands in contrast to the idea of perfection in ancient Greek aesthetics. Similarities could also be identified between Wabi Sabi and romanticism’s fascination with ruins (next section provides more details). Imperfection and transience here is a signifier of natural world versus the perfected makings of human beings and in this case celebrated.

- **Paradise**

Paradise is the central theme of Persian gardening, and particularly in that of central and southern Iranian plateau where climate is not completely optimized for gardening at least in its verdant image. Its origins could be sought in Zoroastrian and pre-historic Indo-Iranian ideologies and later in Abrahamic religions, where human nature like the natural world was conceived of as inherently benign. But this initial unity attached the idea of Paradise with an abstract image that was ought to be reconstructed and in less favorable climates we see this distinction in its fullest manifestation. Etymologically Paradise is an evolution of the term “Paridayda” roughly translates from Old Iranian as “walled enclosure”. Aside from other geometric implications Paradise’s walls indicate a dualism of nature; its image (inside) and its concrete form (outside).

- **Friluftsliv**

Roughly translated as “open air life”, Friluftsliv is the Norwegian cultural orientation towards the nature and it consists in an encouragement of and passion for exploring wild and untouched nature. Friluftsliv is based on the belief that spending time in open air and uncontrolled landscapes is beneficial to both the physical and mental health of human beings. Comparisons can be made between Friluftsliv and the

eagerness of Vikings for exploration and discovery of the unchartered territories of natural landscapes. However the term itself does not date to the Viking era, but was coined relatively recently in 1859. The extent to which Friluftsliv has entered into culture and the thinking of people is evidenced in the fact that it is protected by law. “Allemannstrett”, which means “all man’s right” is the Norwegian law that encourages Friluftslive and constitutes passage into uncultivated land in the countryside as a right for all human beings regardless of who owns the land. In Friluftslive, we see an acknowledgement of a unity of two sides of nature; human nature and the wild nature beyond the touch of human rationalization.

Upon reviewing these historical cultural conceptions of nature, one theme presents itself as the most persistent; the separation and distinction, of all of the things understood to be “natural”. Moreover this separation is always both a physical and conceptual separation. While physical separation can be seen as an immediate and material act, conceptual distinction between various strata of nature should be viewed in much broader and more historical context. As will later be discussed in greater detail below, the conceptual mode of separation is central, and constitutes the first element in the critique of architecture presented in this thesis project; the commodification of nature, and as a result, architecture. Thus in the next section we trace a brief history of the evolution of the most significant conceptions of nature in society, relative to an analysis of current modes of thinking and designing.

- GENEALOGY OF AN EVOLUTION

This section provides a more in-depth historical review of the evolution of conceptions of nature.

Emil Durkheim, in *Elementary Forms of Religious Life* observed the interpretations of nature and natural phenomena in primitive religions as naturalistically or totemistically divine powers; According to Durkheim, periods of abundance were seen as a sign of God's grace and periods of draught and famine were seen as his wrath and anger at man's sinfulness and misdeeds. He also identified a continuity of this interpretation between Eastern and Western ideologies (Durkheim, 1965: 418).

Scientific revolution as a historical process that initiated during the renaissance marks the start of a shift to take place (in the cognitive powers of human beings). However it was not until late enlightenment that new ways of conceiving world and nature became dominant. The emergence of scientific method in early modern period, provided man with a new vision: that of analyzer and that of inventor. Michel Foucault in *The Order of Things* wrote; "...the archaeology of our thought, easily shows that man is an invention of recent date, and perhaps one that is nearing its end...as the ground of classical thought did at the end of eighteenth century, then one can certainly wager that man would be erased like a face drawn in the sand at the edge of the sea" (Foucault, 1971: 344). Humanism could be seen as concomitant to this. The more sophisticated the knowledge became the more nature (including human nature) distanced from the pre-modern unity that encompassed nature, human, society and all man made phenomena. During the Enlightenment, the re-envisioning of nature as inert matter governed by a set of universal and mechanical laws which should be mastered through scientific rigour is perhaps best manifested in Francis Bacon's quote; "...the secrets of nature reveal themselves better through the harassments applied by arts (techniques) than when they go in their own way" (cited in Jardine, 2000: 81). This process led to a removal of the mysterious properties of natural world, or in Max Weber's words, "...it is the fate of our age, with the rationalization, intellectualization and, in particular, the disenchantment of the world, characteristic of it, that precisely the ultimate and most sublime values have faded from public life, entering either into the obscure realm of mystical life or the fraternal feelings of direct relationship among individuals" (cited in Dreijmanis, 2008: 35), or more interestingly by Hegel, "...the intellect will cognize what is intuited as a mere thing, reducing the sacred grove to mere timber" (Hegel, 1977: 57).

Romanticism could be seen as a response and reaction to the condition of alienation between human and nature. Romantic artists and writers correctly saw the historical unity of nature and society and its disappearance increasingly due to the pursuit of rationalization. It appeared to them as a tragic and lamentable loss and it was well manifested in and framed by their works. The idea of "noble savage" became a central theme and the "outside" nature was embraced, this time with immense emotion. The movement was at its peak during the 19th century and particularly the first half of that century. Perhaps the very primitive seeds of regionalism and a passionate revisiting of the local wilderness should best be sought during this period, although romanticism later became attached to many nationalist movements. Across many societies –particularly in Europe- the grandeur of the sublimity of nature was being looked at, this time, through a reconciliatory perspective and the notion of beauty was expanded beyond that of

classic definitions. Sublime and its definition relative to “beautiful” became even a subject of interest to thinkers and philosophers such as Immanuel Kant, Edmund Burke and Arthur Schopenhauer. Schopenhauer for example defined stages and classification from beauty in its classical sense to the “fullest feeling of sublime”, that were the characteristics of natural phenomena that are not only outside of human rational powers but could potentially be hazardous and threatening in nature or humiliating in scale (Schopenhauer, 2012). The powers of wilderness were celebrated for their potency and in paintings of ruins we see the development of emotional relations between subject and the object of art. Painters such as Casper Fredrick illustrated a new perception of nature, a powerful and destructive nature, which stood in contrast to the conventions of the time where the subject matter of paintings consisted mostly in dusks and sunsets and picturesque depictions of nature.

Romanticism lost its momentum during the 19th century and into the 20th century, although it did persist against the rise of industrialism, in a few key places. For example Charles Baudelaire’s critique of the disappearance of Flaneur and with that the active exploration of urban environments; movements such as “Fin-de-siècle”, “Symbolism”, and Walter Benjamin’s subsequent rereading of Baudelaire in critique of consumer society of the 20th century where the attraction of commodity preceded that of space.

For industrialism, nature was a source of wealth, of raw material. Alfred Marshal, a British economist wrote in *Economics of Industry*: “The agents of production are then nature’s forces and man’s forces, man’s forces being generally most efficient when it is so applied as to control and direct nature’s forces, rather than to counteract them. And the wealth of a country depends upon the manner in which nature’s forces and man’s forces work together in the production of wealth” (cited in Sun, 2005). Industrialist nature, like that of Enlightenment, was essentially an external (and to be external) entity. Yet with one crucial difference: for former it signified wealth and exploitation and for later knowledge and rationalization. Romanticism’s critique of alienation occurring in both of these periods was accurate, however for romanticism too, nature was separate, an outsider, but one that ought to be embraced and internalized.

The 20th century could be viewed as a cradle for multifarious theses and visions with regards to the relation between man and nature. Many of these conceptions can be understood essentially as variants for their predecessors of the 18th and 19th centuries, updated to fit the exigencies of their age, although epistemologically the same. However, a different conception of nature, born during second half of 19th century, consolidated in the 20th. This conception can be considered specific to 20th century, in that in it, nature was no longer seen as external or even internal to society, but as part of an all-encompassing unity whereby conceptions of nature are understood as constructed notions based on values and mechanics that form inside the human society. The following three sections present three points of view of this family of “natures” which as far as this thesis project is concerned, have insights for how nature and architecture interface, as well as the general process of the production of space at large scale in the natural world; production of nature, sub-nature and dematerialized nature. There are commonalities as well as contradictions amongst the three and more importantly, it should be mentioned that they are different in their scale and scope, but on a thematic basis they seem useful if not absolutely necessary in constructing a clear understanding of how the notion of nature is addressed in the project. Of course, the selected topics presented here are not the only current topics regarding the theorization of human and

nature relations. The many “others” that are not presented are either too distant from the discourse of architecture or simply refurbished versions of older conceptions of nature, including various shades of eco movements.

Their commonality of the three conceptions here presented lies in the acknowledgment, or call for acknowledgment, of a unity of nature as the spatiotemporal vessel in which the metabolism of natural world/manmade world, human nature/biological nature and society and material world takes place. It is also precisely that which distinguishes them from older theories (including romanticism) wherein, as discussed above, nature is ultimately an externality. Romanticism (correctly) went as far as detecting the alienation between human nature and natural world, however it ceased to remain a practically critical antithesis to alienation in modern industrial society primarily due to the immensity and extent of the processes of urbanization and industrialization or, as will be reviewed in next section, “production of nature” at global scale. A continuation of efforts in addressing the alienation in modern society requires a broader and deeper analysis and inquiry into the nature of the issue and that is the goal of next section.

- PRODUCTION OF NATURE

This section is mainly a re-reading of the idea of production of nature and the analysis by Neil Smith (himself borrowing from many parallel and similar discourses) as proposed in his seminal work “Uneven Development” (Smith, 1984).

Smith begins from a fundamentally important paradox: “...The idea of production of nature is indeed paradoxical, to the point of sounding absurd, if judged by the superficial appearance of nature... nature is generally seen as that which cannot be produced; it is the antithesis of human productive activity. In its most immediate appearance the natural landscape presents itself to us as the material substratum of daily life the realm of use values rather than exchange values.” (Smith, 1984: 49). He also observes that in modern industrial society this material substratum is being increasingly transformed –at a global scale- into a “product of social production”. This societal perspective through which nature is viewed is particularly the most interesting in the idea of production of nature. Further, on another level, this social dimension, is essential to constituting -even on an intellectual level- the unity between human and nature, without which the claim for or pursuit of unity would be merely an image or a superficial representation. Smith’s mode of analysis is materialist and in expounding this, the lineage starts from concrete reality (existing material conditions) to abstract (theory of production of nature) and back to concrete (the proposition). The place to start would be a look into production in general. All acts of production including the building of buildings, are the most basic material relation between human and nature in that it is the process through which a common element is extracted from nature by human subject. This common element in a natural and balanced state is the use value, or the function of nature as a context for subsistence. However as modes of production evolve and change so does this common element, to the point that it no longer represents a commonality but more a symptom of alienation. As Smith writes “...So completely do human societies now produce nature, that a cessation of productive labour would render

enormous changes in nature, including the extinction of human nature [as was shaped in the process of production of nature]” (Smith, 1984: 53). The process of production of nature, through labour, is where both the human, as a natural being, and natural forces participate in and humans by their industry alter the form of nature to provide for themselves with the conditions and means of subsistence and their needs, “These needs and their mode of satisfaction are at the most general level the determinants of human nature”. One can therefore correctly conclude that consciousness itself is a natural product of human productive activity and for that matter the relations into which humans enter in order to perform this activity. Or as notable feminist scholar Donna Haraway has put it: “Humankind is self-made in the most literal sense. Our bodies are the product of tool using adaptations which predates the genus Homo. We actively determined our design through tools that mediate the human exchange with nature” (Haraway, 1978: 38).

Based on the above arguments, the idea of the unity – or inseparability – of nature and the human, both as an individual and as a social being, should by now be established, and on this basis we can discuss the transformation of nature through different modes of production. A direct and naturally inevitable corollary to the process of production in general is the emergence of two realms: the first, the realm of use value and the second that of exchange value. The overcoming of each of these over the other would precisely mark the turning point and therefore transformation of the nature of nature. The idea of two natures could be traced back to antiquity, and used as terminology for first time by Cicero in *De Natura Deorum*: “one may say that we seek with our human hands to create a second nature in the natural world”. Though this second nature was distinguished merely through observations of agricultural society’s activities and the subsequent transformation of landscape, it was in 18th century with Count Buffon where other significant dimensions such as law, politics and economics entered the discussion. In second nature an increase in the significance and importance of exchange value over the use value started to become clear and this could be understood as a different mode of production: in the words of Smith, production for exchange. The possibility of surplus production, beyond that of use value, adds another dimension: that of control and ownership. By this stage gradually the exchange value gives its place to another rationale as the driver of the process which could be called accumulation. With this gradual change, a shift also takes place in relations between human, society and nature, wherein the production of nature becomes less of a social process rooted in concrete reality of natural relations but more based on abstract principles that are derived from, and during, the process itself. In short this is called “accumulation for accumulation’s sake”. Viewed in a historical context, this pattern naturally leads to a control crisis; however a distinction here can be made between two levels of “mastery” over nature. In the historical sense, maximal exploitation and domination was sought over an external inanimate nature, but in a modern society where nature (including human nature) is already a product of social production this pursuit of control leads to a radically different phenomenon which is the capitalist mode of production of nature. Under such circumstances nature (in its broadest sense) is not only exploited but also reproduced – this time on a global scale – based on completely different terms, as a commodity, far removed from its function as material substratum of socialized human activities.

Commodification of nature is an extremely broad topic, one that cannot be summarized within the scope of this thesis project. However it is worth mentioning a few of the major aspects through which it could be

identified. These aspects were fundamental in acting as a reference or guideline for the architectural design of the anti-museum project. William Scott Prudham in “Commodification” has enumerated these aspects as follows: privatization, alienability, individuation, abstraction, valuation and displacement (Castree, 2009: 124-143).

In conclusion, a review of the idea of production of nature in the context of the Anti-museum should provide the necessary linkage between the arguments in this chapter and the theoretical grounds of the project. With Smith’s comprehensive analysis of the relations between human and nature as a basis, the process of urbanization, particularly large scale complex structures of megalopolis, can now be understood as a human made ecology which represents a colossal network of relations between its various components. This most complex creation of humanity however, clearly operates on a set of abstractions that are far beyond natural metabolism principles. A brief look into the ecological footprint of cities would best reveal this reality. For example the city of Toronto’s ecological footprint is 7.7 hectares per capita while global benchmark for this index is 1.7. In other words this footprint equals 126.427 km² which is slightly larger than the size of a country like South Africa, far larger than Toronto which measures approximately 630 km². A similar situation, in many cases more bewildering, stands in almost all other such metropolitan areas. More importantly, add to this Smith’s social analysis which is less presentable in numbers but certainly more profound in reality, and one cannot but admit that unless the issue of human and nature should be viewed as a social problem, no amount of recycling or eco-conservation rhetoric or any other piecemeal attempt would suffice in (re)establishing the unity or natural state in human and nature relations. The alternative is “truly human, social control over the production of nature” (Smith, 1984: 91). Its implications for architecture and urban design are profound since the mode of production would no longer be based in accumulation logics and that of control. Some of these implications are discussed in more detail in chapter 2, but one could simply imagine the radical changes the face of cities, as a result of a process of accretion of individual buildings, would undergo. There would be different skylines, a disappearance or a cessation of certain building types such as skyscrapers that are merely a replication of land in vertical axis without any real access to nature. Other immediate changes that come to mind would include ratios of open to enclosed space and public to private space ratios. More important than ecological load adjustments and physical transformations of the nature; the urban environments that humans dwell in would perhaps be the changes in human nature itself. Social space and socially produced space at the most fundamental level embody the function of space as a context for activities of humans as social beings. Under the capitalist mode of production of nature, space and what it contains are commodities since they are primarily produced, not only based on exchange values but for the accumulation of that value which is the foundation for uneven development – or the “capital seesaw” – on a global scale (Smith, 1984). Arguments in this section inform the most important part of the critique of the Anti-museum project as it strives to create a social space that enhances the experience of life in the city and also perhaps lead to a different vision in the process of space making at large.

SUB-NATURE

This section views the issue of relations between human and nature from a different and more specific perspective. Whether conceived of as a provocative interpretation of nature or an inclusive and realistic vision, these arguments reveal to us a side of nature that not only is scarcely taken as a potential territory for architectural thought and consideration but also virtually absent from most normative theories of environments and literature on the topic of nature. Like the previous section the title is chosen to acknowledge the most influential scholarly work that has informed this aspect of the theoretical basis of anti-museum project. David Gissen introduces “subnature” as “those forms of nature deemed primitive, filthy, fearsome or uncontrollable” (Gissen, 2009: 26). Sub-nature is therefore in contrast with more known and desirable aspects of natural world such as the sun, trees, clouds, and so forth. Here one can immediately draw parallels between sub-nature and historical perception of nature under romanticism. Although Gissen (2009) prioritizes the critical approach in sub-natural nature, by, for instance, differentiating between the sub-natural and the contemporary weathering theories, both sub-nature and weathering could be seen as equally important to the development of this project in two key ways. First in that they challenge modern architecture’s resistance towards elements in natural environments through its impossible pursuit of agelessness and pristineness, thus offering new insights on how architecture might consider temporality and the effects of time on material existence of architecture as a serious aspect of the design process. Second, and more importantly, weathering, patina, decay and also exposure to uncontrollable aspects of environment, such as weeds, moss, and so forth, can be understood as a documentation process wherein architecture through its physical existence both absorbs and gets absorbed into its surroundings, creating an “aura” of authenticity and specificity to its “place”. Walter Benjamin in his seminal essay has defined the notion of aura as the uniqueness of an object (particularly a piece of art) in relation to its time and space. For Benjamin the, aura is the prime constituent of authenticity and is central in his critique of manipulation of art through reproduction or simulation under capitalist tendency for reproduction. In addition to physical reproduction he particularly specifies reproduction of images in media as a simulation of authentic experience (of the object of art) detached from its auratic context. It is through such immediate reproductions that an object of art loses its aura and could potentially become a manifestation of economic and political power or trends.

Architecture as an art, and space as the object of that art, could also be viewed in terms of an aura, a set of connections and attachments to its spatiotemporal context that makes it unreproducible. The spatiotemporal context of an architectural object is, in almost in all respects, synonymous with the nature in which architecture takes place. Not every reproducible object could be considered a commodity, but often every commodity has to be reproducible, otherwise it runs counter to the fundamental logics of production for exchange. With discussions of the previous chapter as a background, one could conclude that the more an object or a space or a building is detached from its natural context, in its broadest sense, the closer it gets to the status of commodity. Chapter 3 discusses this problematic in architecture at greater length.

We can now view nature as an agent of de-commodification, one that “authenticates” architecture. Further, in this view sub-nature, weathering and decay can be conceived of as a “present history” of this process. When put in historical context, the aesthetic value of these phenomena enters into the design

process of architecture from two notable directions: conceptual and visual. From the conceptual point of view, the uncontrolled treatment of surfaces and the dynamic interaction between architecture and its natural environment establishes an aesthetic regime different than that of abstract human conception. The pleasant state of coexistence between human-made architecture and plants and organic life-forms taking them over that inspired awe and romanticism in many painters and poets speaks not only to the fallibility and incompleteness of limited human a priori vision but also, most importantly, documents the nature it dwells in. One aspect of modern architecture, which could be identified with various movements in 20th century and still present to some extent today, is a euphoric positivism rooted in hopes for technology to finally resolve the previously unintelligible realities and paradoxes of architecture, technologies that were inherently based on mechanic philosophy of humanist scientific cosmology. The pursuit of a pristine and everlasting perfection in buildings failed since it regarded nature as a picturesque view framed in the openings of surfaces that were intended to separate inside and outside rather than bind them. This is perhaps best manifested in a critique of the Farnsworth house project by Mies van der Rohe where, aside from issues of style and form, it failed the test of time – by its modernist principles – to successfully address the interaction with the natural environment in which it is situated. Instead it is constantly in need of repair and maintenance. These ideas of ideas of fusion between architecture and its environment will be discussed in greater detail in the following chapter. But suffice it to say that the visual aspects of an architecture that is “freely” in an interaction with nature, provides the physical body of architecture with a sense of dynamism that it was born with it at its inception in sketch. In the same way that flaws, mistakes and unintended scratches of a pen enrich the surface of a paper on which an architect is primitively experiencing the space, random formations of rust, patina, moss, cracks, leakages and puddles also take the spatial experience to another level. This is quite observable in the works of Giambattista Piranesi where he, contrary to the more desirable images of nature, envisioned it as a dominant, and often ruinous, force, a perpetual stain on the perfection of architecture. But in reality Piranesi’s subnatural nature is anything but denigrating. It is exactly that which demonstrates the real and authentic connections between the human, through its creation, and nature, through its forces. In the next section, we explore the ideas of unity between human and nature from a similar but slightly different perspective, as they relate to the formation of spatial experience.

- DE-MATERIALIZED NATURE

The term “dematerialization” in its general meaning refers to reduction of the material intensity of a process. Its implications are broad and current in various spheres of knowledge: economics, industry, the law, and so forth. In the architectural world, similar to the idea of dematerialization, Buckminster Fuller’s discussions around the topic of “ephemeralization”, envisioned the possibilities of “being able to do more with less”. However Fuller’s point of view is more technological than architectural. De-materialization as it is referred to in this section observes the process of reducing the material intensity of space and form, and therefore highlighting the role of unconstructed elements such as light, shadows, sound, and water as they shape the spatial experience. Since these elements are part of the natural context of architecture, the acknowledgement of their role in shaping the experience of space could be yet another way of creating the unique experience of a place.

Juhani Pallasmaa in *The Eyes of the Skin* writes:

I confront the city with my body; my legs measure the length of the arcade and the width of the square; my gaze unconsciously projects my body onto the facade of the cathedral, where it roams over the mouldings and contours, sensing the size of recesses and projections; my body weight meets the mass of the cathedral door, and my hand grasps the door pull as I enter the dark void behind. I experience myself in the city, and the city exists through my embodied experience. The city and my body supplement and define each other. I dwell in the city and the city dwells in me (2005: 144).

Or in another passage:

Every touching experience of architecture is multi-sensory, qualities of space, matter and scale are measured equally by the eye, ear, nose and skin, tongue, skeleton and muscle. Architecture strengthens the existential experience, one’s sense of being in the world, and this is essentially a strengthened experience of self (2005: 41)

For Pallasmaa the experience of space and interaction with it is more a process where understanding and knowledge of space is acquired less through a conscious analysis of form but through an unconscious feeling and interaction with it. In the theoretical and practical works of many other architects we also see this tendency towards the primacy of experiential perception, but perhaps before this phenomenological approach became an architectural thesis, Maurice Merleau Ponty saw it as generally a pre-intellectual experience of the “outside” world:

“Nothing determines me from outside, not because nothing acts upon me, but on the contrary, because I am from the start outside myself and open to the world.... The thing can never be separated from someone who perceives it; nor can it ever actually be in itself because its articulations are the very ones of our existence, and because it is posited at the end of a gaze or at the conclusion of a sensory exploration that invests it with humanity” (2013: 530)

Merleau Ponty's works in many ways advocate the priority of the "real" world in contrast to the world as seen and therefore, according to him, value and meaningfulness could be "instituted" in simply anything that exists in a natural world. The dematerialized conception of nature, observes the extension of human into environment, and vice versa, as a mediation, and the extension of the material pallet of architecture to the natural elements such as water, vapor, heat, dust, plants, animals and such.

In the process of this mediation we see a transition from an architectural material pallet that comprises of only inert matter, forming space through its formal and visual qualities, to that which includes a broader spectrum of sensation. In other words we see the acknowledgement of a non-verbal architectural communication. The idea of dematerialization could, on the one hand, be read as a thesis for designing architecture. On the other hand, it is as a way of seeing and communicating with the built environment. The latter idea of dematerialization is perhaps best represented in Gaston Bachelard's *Poetics of Space*, where he notes the significance of the more ephemeral elements of space as they communicate with human beings and partake in the process of forming individual and collective memories:

It is better to live in a state of impermanence than in one of finality.... We comfort ourselves by reliving memories of protection. Something closed must retain our memories, while leaving them their original value as images. Memories of the outside world will never have the same tonality as those of home and, by recalling these memories, we add to our store of dreams; we are never real historians, but always near poets, and our emotion is perhaps nothing but an expression of a poetry that was lost (1994: 37).

From a more architectural design perspective idea of dematerialization can be seen through the written and built works of Peter Zumthor or Steven Holl as well. In an interesting juxtaposition of subjective and objective knowledge acquiring process from the natural world, immersive installations at the Danish pavilion at Venice Biennale 2014, titled *Empowerment of Aesthetics*, also demonstrated the qualities of interstices of architecture and nature as a redefinition of aesthetics, as a dialog between human subject and nature. A second part of the pavilion was dedicated to showcasing nature as it was seen and explored through the lens of a biologist's scientific approach.

- CONCLUSION

The arguments in this chapter were aimed primarily at unfolding different historical conceptions of nature and critically approaching these different natures as they relate to and partake in different modes of production of nature. It has paid particular attention to critical perspectives on the commoditization of nature, broadly understood, of which architecture, as the act of space-making, is an essential part.

Under the "production of nature", the issue is viewed from a broad and social perspective wherein the natural dichotomies that have been historically contested by various intellectual, artistic and architectural

schools and movements are presented with an antithesis. This antithesis holds that relations of human and nature are primarily social discourses and therefore the roots of this problematic should be sought in social relations of production in general, and architecture and urbanism in particular. Sub-nature approached the issue on a more specific level through the ways in which images of nature and their subsequent actualizations in architecture might be directed in a way that establishes a sense of authenticity, uniqueness, and realness in architecture's connection to nature. The last section expanded on these ideas and offered another angle on how spatial qualities of architecture could, both practically and culturally, be aligned with visions conducive to a state of unity between alienated human and nature.

The implications of these discussions for architecture could be summarized as, but not reduced to, the need for access to nature in urban environments and, more importantly, publicly accessible and socially productive spaces whether including verdant nature or otherwise. Secondly the architecture that is catering for such "right" and access should best be a documentation of nature, in contrast to mimicking or framing it. Last but not least the role of technology in general and in architecture, can be seen as a mediator or facilitator towards "nature" as the unity of human, society and natural world. In the discussed framework architecture is no longer an act of producing spatial commodity, and the Anti-museum project strives to be a manifestation of that.

Chapter 2: DIALECTICS OF SPACE

- PRELUDE

Space is as equally complex and contested a term as nature, but, delving deep into the ontological definitions of the term does not significantly serve the discourse of this thesis project. However it is necessary that the notion of space, and space-making as the essence of architecture, space should be viewed as a nuanced object of discussion and not reduced to mere Cartesian coordinates. The intention here is to present those particular interpretations of space that relate to discussions in the previous chapter in order to properly connect them. This provides the foundation for a specifically architectural vision to be given shape through a series of case studies of architectural projects under last section of this chapter.

- SPACE(S)

As mentioned above, space as merely spatial coordinates or the emptiness in between matter, is a rather neutral term and therefore its usage inconsequential for architecture. This excursion into broader and more nuanced aspects of spatiality is not to be viewed as a purely philosophical attempt to present a semantic exploration that ends in itself. Rather it is intended to reveal the implications and reflections of the discussions in chapter one as it partakes in the process of concretizing the architectural ideas of the Anti-museum.

- Space in general

To begin with, two issues should be assumed. First, that architecture is the act of appropriating space for human activities in the broad context of nature, and second that it is not a singular isolated instance of creation but one which acquires other dimensions through a process of accretion in which it becomes a part in the whole of the city. Smith in *Uneven Development* wrote: "Unless space is conceptualized as a quite separate reality from nature, the production of space is a direct corollary of production of nature" (1984: 92). He continues by demonstrating two notable spatial paradigms: absolute space and relative space. These spaces are in the first place coined and defined by Newton: "Absolute space in its own nature, without relation to anything external, remains always similar and immovable. Relative space is some movable dimension or measurement of the absolute spaces; which our senses determine by its position to bodies". However not unlike Newton's definition, these spaces are not physical representations of spatial mechanics per se, as they have had implications for many other disciplines as well: geography, sociology, architecture and urban studies to name a few.

Understanding this spatial vision is particularly important since it does away with the banal and commonplace conceptualization of space that holds that space, like time, is a container and vessel in which all reality takes place. The reason for avoiding this false assumption is that it fundamentally prevents any practice of spatial design, at any scale, from entering the realm of interconnectivities and interdependence between the object of their design and the rest of nature. In other words: "This view of space appears so self-evident that, despite its vagueness and the ambiguity that results from continually being pressed into service as a metaphor, in every day usage we are almost wholly uncritical of it. Space is simply a given universal existence" (Smith, 1984: 95).

From an architectural perspective this is particularly ineffective, if not detrimental, since it portrays architecture as that which is only responsible for designing an isolated assemblage of matter. This could be seen as a first, or perhaps a last, step in a gradual process of an intellectual abstraction. There are at least two other noticeable steps as well: abstraction of space from matter (nature) and abstraction of space from time (history). This is best narrated by Robert Sack in his description of the contrast between "primitive" absolute space from "civilized" relative space: "In the primitive view, land is not a thing that can be cut into pieces and sold as parcels. Land is not a piece of space within a larger spatial system. On the contrary, it is seen in terms of social relations.... To belong to a territory or place is a social concept that requires first and foremost belonging to a societal unit.... Moreover it (land) is alive with the spirits and the history of people and places on it are sacred" (cited in Renholdt, 2004: 22). Ernst Cassirer also refers to this from a specifically cognitive point of view: "Ethnology shows us that primitive tribes usually are gifted with a sharp perception of space. A native of these tribes has an eye for all the nicest details of his environment... when rowing or sailing he follows with greatest all the turns of the river that he goes up and down...but if you ask him to give a general description, a delineation of the course of the river he is not able to do so. If you wish him to draw a map of the river and its various turns he seems not even to understand your question... the native is perfectly acquainted with the course of the river, but this acquaintance is very far from what we may call knowledge in an abstract, a theoretical sense" (1944: 45).

This process of abstraction is fundamental to the capitalist mode of production of space wherein space becomes commodity and measurement and value are universalized and thus exchangeable. Further, this exchangeability precedes its usefulness. House typology is the best, but not the only, place to compare and analyze the duality of use value and exchange value as they relate to architecture where the notion of value is inherently a spatial relation. The use value of a house is not only based on its dimensions but also on its interior design, functionality and proximity to services and transportation. In this regard, similar to a house but with typological specificities in mind, it is worth giving the concept of "social space" a more inquisitive attention. Social space as an independent category can therefore be primarily seen as a product of the abstraction of absolute space – the state of unity between nature, space and society – where social relations take place on a natural basis. However it is most beneficial to regard social space not "just" as a publicly accessible space with varying degrees of the presence of nature, but also as a means of producing social value within in the broader environment in which it occurs. This is to say, in an architectural language, that in order for a social space to fully participate in the process of reproduction of social relations of production, which are relations of space in this case, its function becomes prior to, and more important than, its dimensions, accessibility and image. With the term image mentioned and to conclude

this section it is necessary to briefly introduce a different (but also similar) classification of conceptions of space, as offered by Nigel Thrift. Thrift (2005) enumerates four categories: Empirical space, Unblocking space, Image space and Place space. The first two categories respectively refer to space as viewed through its dimensional characteristics (particularly on a geographic scale) and to global patterns of economics and politics (very broadly conceived as globalization). The last two categories are particularly important to the discourse of this project and architecture in general. Image space is the non-physical space that is created by physical objects. For instance image space could be defined as architecture's image value and is not to be confused with the visual as such. The image value of a building exists more on a perceptive level than in the physical world and participates at large in the construction of the culture in a society. Place space refers to space as it interacts on a human level with people and is more "real" than space per se. The conflict between image space and place space is to be regarded as the authentic substance of architecture and is discussed in more detail in next section.

- Space in architecture

As discussed, the anachronistic concept of space as a spatiotemporal container for reality to take place does not lend itself to a critical analysis of space in cities. "By its action, society no longer accepts space as a container, but produces it; we do not live, act and work "in" the space so much as by living, acting and working we produce space" (Smith, 1984: 116). Henry Lefebvre observed this in "La Droit A la Ville", the foundational text of the right to the city movement, when he called for a transformed and renewed access to urban life.

In the words of David Harvey, the right to the city is: "far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights" (2008: 24).

Prior to the "right to the city" movement, Cassirer's comparison between "native" and "civilized" perception of space can be identified as a central tenet in post-war "Situationist" movement, where the critique centered on an expanded theory of social alienation and commodity fetishism. Situationists believed that in modern society and social relations were being increasingly expressed and mediated through objects and the image spaces that they accompanied. Unitary urbanism and the concept of "Psychogeography", were spatial antitheses of situationists against the objectification and consequently commodification of space in the urban environment. To them, the spontaneity and richness of the experience of space from a human perspective constituted a natural form of the development of cities as places and were to be embraced and prioritized over abstract and imaginal qualities of space. The name of the movement is derived from "construction of situations", which from a more architectural and urbanist perspective is defined by Joseph Hart as: "a whole toy box full of playful, inventive strategies for exploring cities...just about anything that takes pedestrians off their predictable paths and jolts them into a new awareness of the urban landscape" (2004). In *Stroll: Psychogeographic Walking Tours of Toronto*

Shawn Micallef has shown another perception of the city – with all of its richness and dynamics – than its image as presented on postcards or cartographic maps. Another interesting outcome of Situationist movement, and one that relates to this project, is the transformation of the notion of art from a centralized and mediated practice to that as something which is socially produced and socially productive. According to this idea, architecture not only participates in a large-scale process of construction of situations but also functions as a backdrop for artistic curation. The ways thorough which these considerations inform the architecture of Anti-museum will be discussed in more details in chapter three.

Anti-museum, as an intervention in the abandoned silos of Canada Malting, could therefore be seen as a “situation” in the produced “space” of the city. Not one that boasts a spectacular image but a space that is about its place. Previous discussions revealed to us the unity of space and matter in the broader context of nature, and not unlike the spontaneity of Anti-museum in its entirety as a situation or a place in relation to the city, materials could also be seen as bringing those qualities inside Anti-museum as well. Section two in chapter one discussed the potential for materials to be a documentation, as a reciprocal process of absorption, of nature and weathering that is integral to the organic process of producing place. The idea of celebrating imperfection in architecture, whether seen in form as “engineering aesthetics” as Wes Jones puts it, and which is dominant in an abandoned piece of infrastructure such as Canada Malting Silos, or on surface as “aesthetics of roughness” as discussed by David Leatherbarrow, it is an inversion of the process of abstraction of space from nature and from time, and a natural mechanism for the construction of temporal situations over time.

- INSPIRATIONAL PROJECTS

Chapter one was dedicated to presenting some of the modern conceptions of nature, their various facets, and ways through which they participate in the process of formation of space. The present section is dedicated to a brief review of some of the inspirational projects at the root of the Anti-museum, as well as a further exploration of how nature as a construct is treated in these projects. Here the approach is not based on the conceptual framework of the inspirational projects per se; rather they are treated in terms of the general architectural insights they offer, and those for Anti-museum project in particular. Selection criteria for these case studies is their alignment with three views of nature outlined in chapter one, although in many cases it is also true that these projects overlap with the Anti-museum project in terms of their content as well. The first of inspirational project, Social (re)construction, looks at projects in which nature is primarily a social (re)construction and architecture’s response is analyzed according to this view of nature. The second category, Nature’s underside, is based on different conceptions of nature as it is primarily embodied in material qualities of architecture. The third group of projects, Pre-intellectual experience, focus on the theory of dematerialization and how space is shaped and experienced through categories of elements other than those that are visual and formal.

- SOCIAL (RE)CONSTRUCTION

The projects in this section are selected to review the relations between architecture and nature based on some of the specific definitions of nature as they were discussed in previous chapter. According to the theory of production of nature, societies, and cities as their physical manifestation, create nature by establishing “ecological” relations that shape the habitat of human beings. These relations span over a broad spectrum of issues that do not necessarily take place in isolated moments in time. These include categories such as history(s), traditions, culture, socio-economic conventions, norms and relations. The driving force or conceptual framework of architecture is sometimes quite evidently tied to and engaged with these aspects.

- Pompiduo Centre

(Richard Rogers, Renzo Piano, Gianfranco Franchini)

Although Pompidou Centre (BeauBourg) is most commonly known for being a hallmark of the High-tech architecture movement, its significance is also due to the role it plays in urban scale. In *Taking Back the Street* Sarah Bonnemaison (2008: 275) discusses this issue at greater length in light of the events of 1968. At that time and prior to it, with the rapid processes of urbanization of Paris, came a sense of disenchantment with the everyday experience of space in the city that triggered protest against the lack of spatial context for public and social activity. Piano, Rogers and Franchini’s entry to the competition was distinguished from other entries in that half of the site was left unbuilt and as a stage for public life with the transparent backdrop of the BeauBourg. This simple “action of inaction” which left a significant portion of the site for “natural” participation in the process of social production of urban life and vitality is perhaps a more important contribution of Pompidou Centre to contemporary architecture and urbanism than its stylistic definition.

Figure 1: Pompidou Center

- Mound of Vendome

(David Gissen)

The Mound of Vendome is a proposal put forward by architectural historian and critic David Gissen. It includes a mound to be (re)constructed at foot of the Vendome Column in the middle of the namesake plaza in Paris. Aside from the radical and provocative nature of the proposal, it shows how aspects that are or might be influential in the formation of conditions humans inhabit, can be encased in materials, in this case hay, mud, and so forth, that shape the physical form of these conditions. It is therefore possible to argue that this potential for the inert matter to function beyond its physical characteristics and appearance, delivering a non-visual effect and meaning to the formation of space, should be considered and brought to bear in order to transform generic space to a place.

Figure 2: Mound of Vendome

- Highline

(Diller and Scofidio + Renfro / James Corner)

In the Highline project, the New York Central Railroad was transformed into a 2.33 km long elevated linear park that passes through the buildings and neighbourhoods of the New York. Similarities can be identified between Diller and Scofidio + Renfro's design for the Highline and the site of this thesis project as a treatment of an abandoned piece of urban infrastructure in and its interaction with the city. Of particular importance with regards to the design of the Highline is its new function. In many ways it is still infrastructural, and yet it has become one that partakes in a completely different type of production. In addition to being a complementary piece to developments in its proximity and what could be considered a visitors path for architectural pieces to be exhibited along, the Highline is also being appropriated as a venue for various forms of public art, which was not possible in its former state.

Figure 3: The Highline

Figure 4: Public art projects along the Highline

- **Evergreen Brickworks**

(Diamond Schmitt Architects / DTAH Architects)

The old Don Valley Brickworks site was restored to the Evergreen Brickworks urban park, a site which includes open public activity spaces, naturalized ponds and community buildings that house environmental stewardship related educational and community uses. As a local inspirational source for the present project, Evergreen Brickworks is particularly important from the point of view of spatial organization. In the Brickworks, we can see how the new life of the site is organized between existing structures that have been maintained and refurbished for a different use. Also, from another point of view, the material strategies used in this project were important to the development of Anti-museum since they are geared towards a merger of the natural elements and manmade structures. This comfortable acceptance of nature's mark promises that architecture and its aesthetic relation to nature can become even richer with the passage of time.

Figure 5: The Evergreen Brickworks

- NATURE'S UNDERSIDE

Projects in this section reflect a different view of nature, one that is focused on material qualities that are often considered unwanted and detrimental to buildings. However this less considered side of nature, or Sub-nature, is also a signifier of the interaction and integration of any built object with its context, one that from the point of view of this thesis project should be celebrated materially and incorporated as a design principle.

- Ethics of dust

(Jorge Otero-Pailos)

The “Ethics of dust” project is a series of installations by Jorge-Otero Pailos that are based on the idea and the hypothesis that pollution, grime and dust is part of the cultural heritage. As provocative and unorthodox as this concept may sound, it is interesting when it is understood in the evolution of the ideas of preservation. The name of the project is almost identical to John Ruskin’s 1865 book *The Ethics of The Dust* as is the content. Ruskin believed that there is value in the dust and the dirt that accumulates on buildings and encouraged the Venetian conservators to preserve the buildings in their dark and rusted state. Working with this unconsidered phenomenon, which provokes the question of what exactly “nature”, is what Pailos believes makes the discipline of conservation, as he sees it, to be more an aesthetical and artistic practice.

Figure 6: The Ethics of Dust

- **Double negative**

(Michael Heizer)

Double negative is 475m long piece of land art that consists of two straight trenches cut on either sides of a natural canyon. Double negative therefore refers to the absence of material that has created the negative spaces of the canyon and the trench. The 15m deep trenches reveal the substance of the earth in a different view and texture quality which, along with the scale, are the only constituents of this negative space. Heizer believed that museums and galleries should not exhibit photographic or other documents of the Double Negative as it would not help in understanding the work. He believed that the sublime qualities and the scale of the work could only be understood in a personal experience. He also prevented any restoration and maintenance to take place with regards these trenches as he believed the natural erosion is a part of the process of formation of the Double Negative and the space should be left to be taken over by nature over time.

Figure 7: The Double Negative

- Riverbed

(Olafur Eliassen)

The Riverbed is a large scale installation or an indoor work of land art by Olafur Eliasson that was exhibited at the Louisiana Museum of Modern Art in Denmark. Riverbed is one part of a three-part exhibition. Conceptually it narrates a conflict between different types of nature: the uncontrolled “outside” nature represented by the rocky landscape, and the “inside” cultured nature, which is represented by the museum itself. Riverbed does this both through the visual contrast of tonality and form as well as by interfering with and altering the normal circulation patterns inside the museum. Further, according to Eliasson, the experience of the space is more important than the verbalized understanding of the work.

Figure 8: The Riverbed

- PRE-INTELLECTUAL EXPERIENCE

The selection of projects in this section was based on the theory of dematerialized space and how space, and therefore architecture, is experienced through its non-material elements. These elements could be created and introduced to a space artificially, as in first two examples, or they could be a part of the specific context in which the project is situated, as in the case of the Anti-museum.

- Neon Spaces

(James Turrell)

Neon spaces is a series of immersive art pieces by artist James Turrell based on Ganzfeld effect wherein the viewer's depth perception is blurred and eliminated by artificially lighting spaces. According to Turrell these spaces are designed to immerse the viewer in a dream space.

Figure 9: Neon Spaces

- The Blur Project

(Diller and Scofidio + Renfro)

The Blur project by consists of an elevated platform at the base of Lake Neuchatel in Yverdon-les-Bains, Switzerland. The platform is equipped with 13000 fog nozzles that shoot a fine mist of lake water onto the platform creating an artificial cloud where visitor's vision is blurred to a significant extent. Prior to entering the cloud, visitors are given a "smart raincoat" that stores the information for every visitor based on a questionnaire that is already filled by them. Inside the cloud these raincoats illuminate in a specific color, matching visitors who approach each other based on the similarities of information in their questionnaire.

Figure 10: Blur Project

Chapter 3: Anti-museum

- BACKGROUND INFORMATION

The abandoned silos of Canada Malting Company (CMC) were chosen as the site based primarily on their significance to Toronto's Harbourfront area, the challenges and opportunities it offers and its realness of context as they are currently being considered as part of Bathurst Quay Neighborhood Plan.

With the growth of grain trade in North America in the late 19th century, a demand was created for larger more efficient and storage facilities. Grain elevators of the 19th century were constructed out of wood and brick, with wooden interior. These structures were highly prone to fire as well as to deterioration and structural damages, which were not only a threat to the structure itself but to the market and trade cycles as well. Life expectancy for these structures by the time was between 12 to 15 years (*Infiltration*). The accumulation of grain dust, an explosive gaseous substance, was one of the major hazards that had led to fires and collapses in the past. Therefore, the search for a more suitable building material with higher tensile strength and fire resistance began. In 1908 the last of these grain elevators was destroyed by fire, putting the grain trade in Toronto on hold for several years. With advances in construction technology and concrete structures in particular, reinforced concrete silos replaced their wooden predecessors. The completion of CMC's silos in 1928 marked the arrival of the first grain shipment to Toronto Harbourfront in nearly 20 years. These silos were considered a milestone in Canadian civil engineering technology and a monument of modernist architecture. By 1944 the CMC facilities were expanded to respond to the increase in demand for food and alcohol during the years of war. To prepare the ground conditions for the foundation of these silos, wooden piles were driven into the ground to transfer the load passed the layer, which had been filled with debris and rubble earlier as part of the Harbourfront extension project, and to the rocky layer that lies underneath.

Figure 11: Land Stabilization (1926)

The older set of silos contained 15 storage bins and a head house module on the top, which was 36 meters high, with elevators to the north. The expansion of the facility in 1944 included a new row of silos containing 14 storage bins and a head house 45 meters high with a marine leg to facilitate direct loading of cargo ships. A germination and kiln unit was built on the western section of the site. In the 1980's the facility was abandoned with CMC moving to another location. At this time the ownership was transferred to the City of Toronto and the site was designated as a heritage site, thereby cancelling the complete demolition plans. Thus, only the germination and kiln unit were removed in 2010, and the silos remain in place today. However with growing speculations about the future of these silos many ideas and plans have been proposed and multiple cycles of professional and community consultations have been held. Most recently, as of spring 2015, these silos and the surrounding area are being studied under the Bathurst Quay Neighbourhood Plan.

In addition to being designated as an industrial heritage of the city, the site also has other important urban and historical status and relations. Ireland Park to the south of the silos is dedicated to the memory of Irish immigrants who arrived in the city in 1847. Almost 40,000 men, women and children fled the Great Famine in Ireland and travelled to Toronto to start a new life, at a time when the city had around 20,000 inhabitants. Over a thousand of these immigrants passed away in the following years due to Typhus epidemic of 1847, and their names are inscribed on a monument that is made out of a giant piece of limestone that was brought from Ireland. Also five bronze sculptures, named Arrival, were designed and built by Irish artist Rowan Gillespie to commemorate this wave of early immigrants. However, the location and the accessibility of the Ireland Park in its existing situation does not completely allow for its integration as part of the walkable path along the waterfront.

The Billy Bishop airport and its traffic and expansion and related issues are another important factor in the site. The Waterfront school building to the north of the site houses educational as well as community uses, such as the Harbourfront community center.

The design of the Anti-museum project is therefore inevitably connected to these site conditions and the present design strives, however briefly, to offer visions and proposals about the potential future (re)development of the adjacent spaces, in a manner that best responds to the real challenges and opportunities that are part of both this site and the Bathurst Quay neighbourhood.

The above-mentioned conditions, according to the definitions that were presented and discussed in previous chapters, can be considered as part of the "nature" of the site. Therefore they should be integrated into the design process and considered as part of the present and future of the building. These considerations will be further discussed in following sections.

- CRITIQUE

The critical stance of the Anti-museum project is on how the relations between architecture and nature are addressed. Looking back at the history of nature in architectural thinking reveals to us that Romanticist artists and intellectuals of the 19th century were awed by the grandeur and sublimity of the ancient ruins since they mingled the “natural” and the “man-made” in a unique instant of time and space. This reciprocal consummation of nature and architecture sits in contrast with the idealized image of buildings as everlasting monument, frozen in a pristine state. The Romantic Movement, for the first time since the Renaissance, offered a new conception of nature as that which in its own “nature” complements, as opposed to detracts from a space.

The Anti-museum project takes these ideas of nature and seeks to (re)introduce them to the architecture of the present time in an attempt to make possible the design and creation of built environments that belong to their spatial and temporal context. This process of integrating the natural and the man-made is that which makes the difference between spaces (as a product of architecture) that are uniquely made for specific loci, actively in dialog and communication with their surroundings, and spaces that are devoid of these connections and relations. This detachment (of architecture from nature in its broad sense) is a fundamental characteristic of commodification of space; one that allows for reproduction of space without consideration for the natural context in which it takes place and also irrespective of its future. In order to make this integration possible, first, the notion of nature must be understood in its modern sense. The wilderness of 19th century is long since gone in today’s urban environments and has evolved into a broader and more diverse existence and most importantly it is internalized by modern society. The arguments in chapter one around the theory of “production of nature” unfolded the various dimensions of this transition. Hence nature is comprised of things such as identity, history, traditions, social relations, as they are encoded in material form, whether through the processed building materials that shape the familiar views of our everyday experiences or in the raw forms of trees, water, stones and so forth.

The theory of “sub-nature”, as discussed in chapter one, observes a different dimension of nature’s effect on architecture and design, one that is often conceived of as blemishing. In an urban environment, and particularly an industrial site, due to atmospheric qualities and eroding environmental elements, nature’s mark on architecture contains these urban hues. David Gissen enumerates “sub-natural” phenomena that are almost exclusive to cities. But perhaps more important than celebrating these phenomena – as an insight for architecture as a general project – is the acknowledgement and consideration of the particular qualities of weathering in urban environments as an essential factor in the life of buildings.

The unification and integration of nature and architecture can also be looked at from another perspective under the de-materialized conception of nature. The theory of dematerialization as discussed in chapter one, prioritizes the sensorial interaction with space and architecture and highlights the role of “non-materials” in shaping the experience of space. These non-material qualities can therefore be identified with elements such as light and shadow, temperature, smell and sound. Or, similar to the theory of “sub-nature” these non-material qualities can be associated with the unprocessed or unfinished conditions of existing material context of architecture. These ideas are important to the discourse of this thesis project, since as a substance for design, they exist in abundance in the selected site of the CMC silos, and as such

the design is geared towards incorporating them and accentuating their role in shaping the spatial experience of the Anti-museum. More importantly, on a theoretical level, the Anti-museum project is designed to embrace and work with the elements in the environment in their natural status. With regards to the de-commodification of architecture, the project therefore enacts a transition away from a more materially intense architecture, an architecture that is increasingly reliant on artificially made or processed materials and forms. This is an important step in reducing the generic and therefore commodifiable aspects of architecture, and instead imbuing it with an “aura” of non-reproducible authenticity.

As our view of nature grows beyond the still and green image that serves as a backdrop for the production of space to include a broader set of variables and dynamics, architecture could also consider the role of animal life as a natural element in the experience of space. Although the incorporation of these ideas into architectural projects might vary from project to project depending on the significance of animal life present in the project site, the idea of symbiosis is reviewed here mainly to cover another dimension of progressive conceptions of nature in architecture. In the Anti-museum project this is perhaps most visible in contrasting ideas of designed and controlled landscapes versus wetlands. A good example of this is the comparison between Toronto Music Garden and the Spadina Quay Wetlands, both of which lie to the east of the project site. Spadina Quay Wetlands, in contrast to the Music Garden has become a habitat for more diverse ecological life, including animal life.

The Anti-museum project strives to demonstrate an architecture that documents its produced modern nature and binds space in its context.

Etymology

The nomenclature of this project speaks to the critical stance of the thesis towards how nature and its temporal effects on architecture has been neglected, and proposes instead that aging and the elegant decay of buildings should be considered as an important part of the design.

On another level, “Anti-museum” also highlights the dialectical relation between the proposed Toronto Harbourfront Museum, as a conventional museum that hosts historical objects for display, and the proposed “Anti-museum”. Anti-museum reverses the typical object centered experience in a museum to that in which objects themselves curate the experience. For example, in Anti-museum the landfill soil that is composed of debris of old Toronto or old wooden piles that were driven into the landfill to reach the rocky layer curate the experience of the visitor.

The use of the term “ecology” also highlights an important aspect of the thesis. While on an ontological level “environment” speaks to the study of the surrounding conditions of a subject and is therefore subject-centered, “ecology” lends itself more to the relations between different entities, which is a core principle in the theoretical discussions of this project.

- METHODOLOGY AND DESIGN PROCESS

The design process of this project consisted in two main phases. Phase one engaged with the theoretical arguments that underlie the design in order to identify the problem (thesis) and the response (anti-thesis) first conceptually and subsequently in the design project.

An important difference between these two stages is the medium in which the problem is explored and responded to. Phase one, explorations, used physical models such as installations, bricolage, and compositions extensively as the main vehicle of both investigation and communication of ideas. Also due to the nature of the task in exploration phase, the approach was that of critical thinking and dialectical analysis, leading to the presence of multiple threads of ideas and discussion on different levels over the course of its evolution. This becomes evident in the resulting compositions. The image of architecture is perhaps the last and least important factor during the exploration phase, but became the more central goal in the second phase, the design. The next section is therefore dedicated to project documents, which are the result of the second, design stage.

Figure 12: Conceptual model #1

Figure 13: Conceptual model #1

Figure 14: Conceptual model #1

Figure 15: Conceptual model #1

Figure 16: Conceptual model #2

Figure 17: Conceptual model #2

Figure 18: Conceptual model #3

Figure 19: Conceptual model #3

Figure 20: Conceptual model #3

Figure 21: Conceptual model #3

Figure 22: Conceptual model #3

Figure 23: Conceptual model #4

Figure 24: Conceptual model #4

Figure 26: Site Plan, Axial Rotation and Circulation Organization

Figure 27: Wetlands and Water Cycles

Figure 28: Sectional Diagram: Continuity and the Extension of the “outside” into the “inside” – Extents of Anti-museum inside Toronto Harbourfront Museum

Figure 29: Spatial Concept Diagram

Figure 30: Cross Section 1 – Main Hall + Refractive Pond + Lookout + Roof Structure

Figure 31: Cross Section 2- The Path

Figure 32: Perspective view

Figure 33: Perspective View - Night

Figure 34: Perspective View – from airport island

Figure 35: Perspective View – from Queens Quay sidewalk (south side)

Figure 36: Main (Western) Entrance – daytime view

Figure 37: Main (Western) Entrance – Nighttime View

Figure 38: Main Hall

Figure 39: Main Hall – (Future)

Figure 40: The Path – The floor is covered with locally excavated landfill (debris of Old Toronto) – Wooden piles that were used for soil stabilization.

Figure 41: The Path

Figure 42: Media Gallery (s) – Located in Northern Silos

Figure 43: The look-out

Figure 44: Permanent Galleries – One of the spaces inside Toronto Harbourfront Museum

Figure 45: Reflective Pond

Figure 46: Physical Model

Figure 47: Physical Model

Figure 48: Physical Model

Figure 49: Physical Model

Figure 50: Physical Model

Figure 51: Physical Model

Figure 52: Physical Model

Figure 53: Preliminary Sketch

Figure 54: Preliminary Sketch

Figure 55: Preliminary Sketch

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