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Monstrous Architecture and the Architect's Monster : Discovering Meaning in Architecture Through Critical Engagement and Intellectual Discourse

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MONSTROUS ARCHITECTURE AND THE ARCHITECT'S MONSTER

**DISCOVERING MEANING IN ARCHITECTURE
THROUGH CRITICAL ENGAGEMENT
AND INTELLECTUAL DISCOURSE**

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Bachelor of Architectural Science, Ryerson University, 2008

A design thesis|project presented to Ryerson University
in partial fulfillment of the requirements for the degree of
Master of Architecture

Toronto, Ontario, Canada, 2010

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ABSTRACT

The purpose of this thesis is to engage architecture, explore it through an imaginative process, with inventive forms of realism, and use architecture as a vehicle to engage design in a critical process. It will open the opportunity for discourse on the subject of monsters. Not monsters under the bed or the ones hiding in the closet awaiting some unsuspecting child, but the breed that offers a discussion or commentary on a particular event, idea, or era. The monster is a way to demonstrate, “to show”, and at the same time be explicit in meaning and representation. The Latin roots of the word monster links *monstrum* with *monere*, “to remind or warn”, it is a “sign or an omen”. It is said, that monsters are great signifiers, and in doing so, portray protagonists out of the ordinary. Literature and film are two very strong ways to employ the idea of monster as a narrative, and this thesis will reveal this tactic in architecture.

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FOUNDATION

DESIGN PROCESS

The architectural design process is never a continuous linear sequence of work completed by the architect, rather the architect utilizes a cyclical process that involves many variations or iterations to achieve the goal of solving the issue at hand. This cyclical process undergoes stages of transformation and may manifest many different ideas, notions and philosophies, all of all of which must be tested and considered, not by words but through various visual media; collage, print, digital reproduction, and three dimensional modelling to name a few. Architects must examine the best outcome from these examinations and continually test solutions in order to focus the primary ideas that will approach the desired goal.

It has been said that language and images have distinct features and may not be comparable. For example, language communicates ideas whereas images “evoke emotion, arouse and

express meaning” (Wollheim, 1971). In terms of the design process, the meanings that architects attempt to convey are demonstrated through these images, allowing them to have a dialogue with not only the client, investor, or contractor but also within their subconscious.

In *How Designers Think*, Bryan Lawson begins by defining what the word ‘design’ means. He notes “design is both a noun and a verb; it can refer to either the end product or the process” (Lawson, 1997). This excerpt is critical to a definition of the word ‘process’. Lawson compares a structural engineer’s process to that of a designer. In this example, the engineer uses a system of formulae and values to determine the overall strategy for design, as compared to architects who manipulate images to form interpretations which in turn inform the final design. With this analysis, Lawson reflects contemporary thinking about design as taught through schools of architecture, as opposed to the traditional process of apprenticeship.

Geoffrey Broadbent views the design process as a structured system that explains how architecture is part of life and that the relationship between individuals and architecture is not just perceptual, but also sensual. He argues that the “achievement of human satisfaction should be the primary aim of the architect” (Broadbent, *Design in Architecture: architecture and the human sciences*, 1973). While this might be true, Donald Schön expresses a different view, one that is somewhat internalized. He claims that architectural design process is driven by architects’ conversations with their drawings which can take place either deliberately or sub-consciously (Schön, 1983). Broadbent’s intentions are that of a Modern architect, but perhaps lack the insight of today’s architecture. In contrast, Bryan Lawson delves into the design process and in addition manages to clearly explain it. *How Designers Think* is a significant resource in understanding the complexities of architect’s design process and Lawson makes a point to describe the intricacies involved. He explores the phenomenon of this design process; writing “The first approach, procrastination, is based on the idea that somehow the future may become more certain if only we wait a little” (Lawson, 1997). Lawson also claims that even by procrastinating, the actual situation of not doing anything will have an effect on the overall

process. As part of this argument, Lawson states that the “design response to uncertainty is to be as non-committal as possible whilst still actually proceeding” (Lawson, 1997). Early in the process, architects often design non-specific buildings and spaces that may or may not house a particular function. To avoid commitment they use certain vocabulary such as “flex space”, when really these designers have yet to define function or conceptual notion of the space. In these situations, they are unsure of what form the space will take, either in the short term or in the future. Lawson suggests that architects “design for the present only” (Lawson, 1997). This comment explains how this method of design reflects its intended use and does not speculate on future uses. The designed object is soon obsolete and should be discarded, but if it is to be reused, it should be reconfigured. He relates this type of design to “fashion” and its intrinsic nature can be transient and dependant upon current trends. This approach to design is wasteful and perhaps not the best solution to a given solution.

Given that design process is complicated, designers and architects may have difficulty finding the completion point of the design. Lawson explores this area and notes “the design process rarely has a natural conclusion of its own, but must more often be completed in a defined period of time” (Lawson, 1997). He believes that designers cannot fully explore an idea without extending the allotted time period. Thus, design problems and design solutions are interdependent; “it is meaningless to study solutions without the reference to problems and the reverse is equally fruitless” (Lawson, 1997).

Solutions to design problems have great variety and the outcomes are almost limitless. Every architect or designer will design in a different way and this process may differ from project to project. This comment by Lawson brings forward a thought about puzzles. There is an end to puzzling, an identifiable completion point, however, the open-ended design process does not present the same clear termination point. There are an inexhaustible amount of permutations and variations to any particular design solution; by solving one problem, designers open doors to reveal other potential problems. At the risk of creating diminishing returns architects may

be able to reduce the number of issues but they will never be able to reach a point of absolute completion (Lawson, 1997).

Geoffrey Broadbent developed a specific design model for architecture using four distinct forms of designing: Pragmatic, Iconic, Canonic and Analogical.

Pragmatic design is a simple form of creation where architects use available materials, common construction methods and employ minimal innovation. This method is generally low risk and conservative designs are the norm; creating a low probability of failure. Broadbent notes that although this design method will not grant innovative design outcomes, it may lead to a great deal of form generation for segments or all parts of the design.

Iconic design (Broadbent, 1973) is the type of design that is already instilled into our collective mind. This process is even more simplistic than the pragmatic system. By employing the rules of personal experience with the act of construction, the designer can take the already existing and find ways to improve the design to be somewhat innovative.

Analogical design depends on a method of creating from what we already know. Broadbent (1973) discusses that once a child knows the plural of 'bean' is 'beans' it is logical for this child to pluralize 'deer' as 'deers'. The child has taken a method of creating the plural based on words he/she already knows. The idea of interpretation plays strongly in this system where reading clouds, flame wisps in a fire or stains on rocks inform the designer to solidify these forms on paper or digitally for others to recognize and understand. Frank Gehry uses a technique of analogic design in his work, as he works with scale models and easily formed materials such as paper. He forms the paper in a seemingly random or abstract way and from there he is able to use his imagination and creativity to formulate rational interpretations of architecture.

Canonic design employs the use of proportioning systems, grids other Cartesian devices to control designers when necessary. This system is not new; it was employed through history by the Egyptians, Greeks, and mathematicians, such as the Pythagoreans and

philosophers such as Plato. More recently we see examples of this system being used by Le Corbusier in the 'Modulor'.

Story telling is a strong alternative for the design process and should not be overlooked. Broadbent describes this solution as an extension of an analogical system of design and manages to elevate it to another level. Designers can create characters or players in a narrative who act out the design in question. These players might tour through the building or be set in a particular vantage point to observe or learn more about the project. This occurrence of 'story' is not limited to the field of architecture, since many advertisement companies use this theory to generate product marketing campaigns. This form of narrative is popular with contemporary architects when they speak of a design in terms of how the building is formally constructed or when they attempt to convey this

construction to their potential clients.

SENSE DATA

Our conscious mind is being continuously overwhelmed with images. Richard Kearney states that, "it is virtually impossible today to contemplate a so-called natural setting, without some consumerist media image lurking in the back of one's mind: a beach without an Ambre Solaire body, a meadow without a Cadbury's Flake, a mountain stream without a Marlboro cigarette, a wild seascape without a hair spray or tourism commercial" (Kearney, 1988, p. 1). All of these images form a catalogue, or what is known as a *schemata*. Schemata can be defined as the knowledge gained through everyday life to help us understand common occurrences. For instance, we are able to process the ability to climb a set of stairs that we have not seen before because our brains have been programmed to understand stairs and therefore can climb them with little effort. Herb Green makes note of this type of information gathering in his book *Mind and Image*; his "belief is that sense data that have become associated with the specific life experiences of users should be included in the man-made forms of their environment." Green continues this thought by writing that "... the data of familiar objects - their sounds, colors, shapes - enable individuals and social groups to participate more fully the unique

personal experience, in their cultural heritage and in the organic basis of their existence” (1976, p. xi).

Likewise, Kendra Schank Smith in, *Architect's Sketches*, recollects the mythical story of Diboutades, where she decides to remember her lover, who is departing for battle, through drawing his likeness on a stone. She does not collect a lock of his hair or an article of clothing; she remembers his figure solely through this drawing (Schank Smith, 2008). The drawing provides enough information for Diboutades to piece together her sense data or schemata to form a visual reconstruction of this man in her mind. Green also makes this distinction, defining sense data as follows: “To some extent any object serves as an image in that it can call forth a knowledge-feeling response, but an art image is constituted differently from other objects in that it arouses deep layers of awareness affording insights into our personal identity, our bonds with nature, and our communion with other men” (1976).

The schemata is the information that is loaded into the brain at its first occurrence and stored for a later date when it can be recalled. The data that was first perceived was interpreted by our mind using visual and contextual links. These links may be, but are not limited to shape, colour, the inherent image, and the context of the image. Other links may include a particular social arrangement or special day of the year that can easily be recalled. Green (1976) notes that filters are also in place to discern between an array of accurate and appropriate information. For instance, the programmatic function of a certain element might be considered rather than the formal qualities. In this manner, images have the ability to conjure emotions, even though we are not always conscious why images evoke a particular response.

Bernard Tschumi makes the assumption that one must dismantle the architecture rather than just experience it. He assumes the position that if individuals experience architecture they will not fully appreciate it and therefore the architecture did not do its job. (Tschumi, *Towards a Theory of Architectural Disjunction*, 1988).

REPRESENTATION

Christian Norberg-Schultz acknowledges that the problem with current architectural meaning is that some architects are using semiology as a system to explain architecture, which he finds inadequate. This stems from the article: *Heidegger's Thinking on Architecture*, where Norberg-Schultz questions Heidegger's motivation for architectural interpretation.

Heidegger believes architecture is to be experienced by the user at a one-on-one level. He states, architecture is to provide an "existential foothold," one which provides "orientation" in space and "identification" with the specific character of that space. Heidegger finds strength in language and etymology; he uses language to define and describe such images that are formed in our mind and "the image formed rests in the poem" (Norberg-Schultz quoting Heidegger) "in other words, memory is kept in language" (Norberg-Schultz, 1983). Heidegger discusses the act of building which is linked to constructing, dwelling, and cultivating, while Marco Frascari makes links of similar nature, asserting that the linguistic connection to phenomenology through the detail conveys meaning about the construction. Marco Frascari regards the detail as the basis of architectural meaning. Interpretation cannot be left to chance; it must be defined with boundaries and considered open for interpretation.

In Frascari's, *The Tell-the-Tale Detail*, he outlines this example exactly. He explains how the detail is essential throughout the design and should also be evident in the structure. Again, interpretation is left to the user and the detail is just the "minimum unit" of "significance" with regard to the architectural project (Frascari, 1984). Frascari tells a narrative with the detail; for instance the architectural joint acts to generate language which imposes on the whole to form its order. Much like Heidegger, Frascari is interested in the etymology of words and their connection to the architectural project. "Careful detailing is the most important means for avoiding building failure on both dimensions of the architectural profession-the ethical and the aesthetic" (Frascari, 1984, p. 501).

CARICATURE

“True caricature in this new sense is not content with drawing a long nose just a little longer, or a broad chin just a bit broader. Such partial distortions are characteristic only of superficial or immature work. The real aim of the true caricaturist is to transform the whole man into a completely new and ridiculous figure which nevertheless resembles the original in a striking and surprising way” (Gombrich & Kris, *Caricature*, 1940, p. 40)

Caricature and parody have a traditional relationship where most caricaturists put a humorous spin on their work. Although not always presented in a humorous manner caricature is constantly done in a fashion that expresses and exaggerates the underlying meaning or truth. Linda Hutcheon describes, in detail, an assessment of parody and how it fits into the art and architectural world. The bias of this interpretation focuses on parody and its relationship with the architectural world. Hutcheon defines parody as “one of the major forms of modern self-reflexivity” (Hutcheon, 1985, p.2) offering an important insight to the past works of great caricaturists such as Woody Allen, James Joyce and Magritte (responsible for “This Is Not a Pipe”). This assessment of different types of art forms will be critical to this thesis to test whether the use of parody in terms of image use in the design process of architectural projects affects the outcome of projects, or their ultimate success or failure. Parody in architecture can be traced back to the sixteenth century when the same themes of tension, conflict and experiment were examined (Norberg-Schulz, 1975). Classical language was still used in the Mannerist period; however, the organization of this language lacked the rhythm and order once seen in pre-sixteenth century architecture. The distinct distortion or deformation of the classical use of columns, arches and domes is one example of this kind of architectural parody.

This concept has been explored in post-modern architecture as well. Architect and urbanist, Robert Venturi has set the standard on what post modern architecture should be. In *Learning from Las*

Vegas, Venturi notes how the image of Las Vegas is an allusion of architecture, thus parody of the “pleasure zone” (Venturi, Scott Brown, & Izenour, 1977) is born. Venturi examines a truth concerning Las Vegas and gives it the title of the “pleasure zone”. This is of course a play on the meaning of the architecture in Las Vegas and describes the inherent qualities of what Las Vegas truly is about. He also mentions that people have fun with architecture that reminds them of something else, “perhaps of harems or the wild west in Las Vegas” and states that “an image employed by a designer should be something very evocative, something that does not limit by being too defined and too concrete, yet it helps the designer think...in physical terms” (Venturi, Scott Brown, & Izenour, 1977, p. 82). This can be further understood by investigating other forms of caricature such as ridicule, which removes the element of an amusing or humorous art (Hutcheon, 1985). The intention in architecture to mime or imitate precedent more than its illusionary image creates an exposure to ridicule (Hutcheon, 1985). Caricature may also be in the form of mimicry or metaphors, much like the work of Santiago Calatrava. Inherent in Calatrava’s work is the use of natural forms to help him make rational design decisions. Calatrava’s drawings of the natural form of the human body posed in a particular fashion (ie. with hands above the head, outstretched and firm) will lead to the formation of a slightly angled column. This kind of mimicry is useful to help architects communicate their designs in a way that can be understood. This relationship is important when thinking about demonstrating certain characteristics in a particular design. A single feature often stands for the whole and a person can be represented by one salient characteristic only (Gombrich & Ernst, Principles of Caricature, 1938, p. 325). The part to whole relationship becomes an essential component of how architectural meaning is conveyed.

THE GROTESQUE

“From so simple a beginning, endless forms most beautiful have been, and are being evolved” (Darwin, 1998)
Imagination also plays a role in architecture where the grotesque is concerned. “Imagining a complex object or event in concrete

symbols as images, whether or not the object exists; or the symbols or images themselves: for example, a daydream” (English and English as cited in Klinger, 1971). These images form a dialogue or narrative that allows for greater design processes. Further, Klinger states that fantasy is spontaneous until the time where the situation becomes forced and the intended effect is lost (1971). The only difference between fantasy and imagination is the additional component of creativity, illusion or hallucination (Schank Smith, 2008).

Kendra Schank Smith covers the topic of the grotesque and notes, “sketches in their brief, incomplete, notably unfinished and imprecise states may be comparable to the intermediary qualities of the grotesque” (2008, p.103). The significance of these sketches opens an argument where personal interpretation is a key factor. In a sense, the sketches are in limbo and the meaning remains slightly hidden, however it is evident that there is a theme to be discovered and that in “their ambiguity they become visible in the grotesque as fragmented or jumbled” (p.103).

Grotesqueries have many literary co-meanings and as Schank Smith states: “...[grotesqueries] are personal in nature and can depict...humor, satire and paradox” (p.103). There are fundamental similarities between the grotesque and its counterpart, caricature; in fact the two words were once used synonymously. They share properties of ridicule, exaggeration and deformation, however, with caricature there is a visual that is involved where the beholder is reliant on intellectual knowledge to further understand the object. In contrast, the grotesque may be revealed in the form of the visual, literary or narrative means. (Schank Smith, 2008)

Peter Eisenman considers the nature and beauty of architecture in his essay *En Terror Firma*. Both hold value concerning the Vitruvian triad of Commodity, Firmness and Delight. In his writing, Eisenman describes the challenge of defying beauty and the obstacles associated in overcoming it. Eisenman defines beauty as having “airy qualities” in contrast to the grotesque, which has “real qualities”. He goes on to claim the grotesque illustrates the “uncertain, the unspeakable, and the unphysical” (Eisenman, 1996). These qualities can be found in most research on the topic, however very few have dissected the truths that lie in gap of what is truly grotesque. Michael

Steig writes in *Defining the Grotesque: An Attempt at Synthesis* that there is a lack of in-depth research regarding this topic and his article begins to look deeper into the subject. In terms of the visual arts, prestige of the grotesque can be seen in the Mannerist period as well as caricature of the eighteenth century architecture. These characteristics in architecture start to evoke emotion, such as the anxiety and fear associated with a nightmare, and this dreamlike world begins to blur the realms of real and unreal. There have been a number of studies concerning the grotesque “but no one study seems adequately to cover the field” (Steig, 1970, p. 253). This downfall in the study of the grotesque has led to ambiguities and unclear methods of distinction, “on the one hand, from the merely horrific and, on the other, from the purely comic” (Steig, 1970). There are few studies covering the topic effectively, but one entitled *The Grotesque in Art and Literature* by Wolfgang Kayser gives a greater insight into the subject. Kayser assesses a definition; fundamentally, he examines the attributes of the grotesque and how it evokes emotion through levels of absurdity and ridiculousness. Kayser also makes a distinction between comedy and the grotesque by stating “in the genuine grotesque the spectator becomes directly involved at some point where a specific meaning is attached to events. In the humorous context, on the other hand, a certain distance is maintained throughout and, with it, a feeling of security and indifference” (as cited by Steig, Kayser, 1966, p 118). Again, this analysis falls short of a true conclusion of comedy in the grotesque and the necessary explanation is absent (Steig, 1970).

There is a constant tension in the grotesque, a pull between emotions, reality and the sublime. Fear and amusement are two common attributes of the grotesque, existing in a tense relationship where “the playfulness at hand and is constantly on the verge of collapsing and giving way to the concealed horror” (as cited Steig, 1970, Jennings). The defence that we use to defuse the feelings of horror or anxiety is employed through thoughts of comedy. Often we suppress these feelings by disarming the mechanism to create fear and lessen the aspect of threat. (Steig, 1970). It is possible to take these concepts of the grotesque to form a definition: the grotesque is a mechanism that is fearsome and ludicrous, it uses infantile material to threaten and the reaction is to employ techniques of

pleasantry to defuse this intimidation.

A game invented by the Surrealists called *cadavre exquis* (exquisite corpse) involved one person drawing on a portion of the page and, when finished, folding the page over to conceal most of the image. In this game, it is important for the participant to leave only a small portion of the drawing visible before passing the page along to the next player to continue drawing without knowledge of what had been previously drawn. The result with anxiety and playfulness as a natural component of the process, was a montage of drawings perhaps telling a story or narrative of the grotesque.

THE MONSTER

Monstrosity historically has been viewed as something hideous, ugly, frightening, but more contemporary research has given it much more meaning than is initially perceived. Étienne-Geoffrey St.-Hilaire wrote “that monsters are a means of study for intellects”. The idea of a monument, which could be argued as an embodiment of a monster, gives a degree of praise to the monster. Having a monument in the centre of the town square or an iconic building resting on a pediment much like the Metropolitan Museum of Art in New York City represents this type of monster yet it may not be viewed as such. Umberto Eco claims that monsters are types of signs or signifiers and that they must be interpreted and not merely viewed (Eco, 1984). With similar affinity to St.-Hilaire, Terry Kirk states, “there are significant ideals associated with monsters and they “mark the boundaries of cultural values”. (2008, p. 7)

It has been said that monsters have many meanings, for some deviant, threatening, horrible and for others marvellous, astonishing, and remarkable. The justification is that, for each of us, there holds something true about a monster whether it is perceived or interpreted as good or evil. That these interpretations are left to the beholder is supported by the idea that the most feared monsters are the ones conjured in our own “perturbed imaginations” (Kirk, 2008). One might argue that the monster that is created for television, art or architecture is merely a fascination that embodies a creative soul.

The imagination is left open and free to create spectacles, horrifying or ludicrous inventions. These creations may bear manifestations of our culture. They are identification of the norm and they evoke physical, psychological and philosophical reactions because they violate collective memory. When dealing with a monster, one cannot leave out the relationship of monument. Derived from the same etymological roots, monuments are designed for the greatest impact possible. They stand strong to represent power, strength and dominance. Also, the word monument plays as a simulacrum of *memorial*, where the monument is the demonstration of the subject to be remembered. Monuments in the nineteenth century swept across Europe and America taking over large areas of space and erected in focal points of cities, towns and villages to commemorate significant people, events or actions. They immortalized these times in stone and mortar, expressing economic, social and political prowess. These monuments have been designed with only one thing in mind: maximum impact (Kirk, 2008).

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THESIS STATEMENT

This thesis seeks to define the architectural concept of monster through five aspects of artistic and literary investigation; Association, the Complex, Abstraction, the Unnatural, and the Sublime. Architecture attempts to solicit emotional dimension, by contrast, buildings merely provide enclosure. By investigating the monster in media such as art, literature and film, methods of conveying concepts of cultural, religious and/or political discourse can be revealed. One way to understand and design architecture imbued with meaning involves a comparison between architecture and monsters. Thus, the purpose of this study is to explore how these elements can instill meaning into architects' design processes and transform buildings into works of architecture.

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INTRODUCTION

Twelve years ago, I had no intentions of attending a post secondary institution of higher learning or could I conceive of a career as exciting and challenging as I now foresee my work over the next forty years.

I began my architectural career when I was twenty years old as an over-paid, under-experienced draughts man. I had a natural talent in architectural drawings and conventions that I embraced as I launched into the work force. At the first architectural firm in which I worked, my boss paired me with a very experienced architect that berated me on a daily basis for every architectural tick, improper use of dimension lines, sloppy text and poorly articulated partition notation. I worked hard to become a competent technologist and grew to be a strong member of the team, fluent in construction methods and precise in my drawings. Not long after that I began working on my own projects and negotiating with contractors, clients and consultants became a new focus. It was this environment that I learnt very quickly that we were primarily in the business to make money and 'architecture' seemed secondary.

A strong technical background has contoured my thinking in a way that is not particularly imbued with the *genius* architecture. I was more concerned with the precision of drawing lines rather than the ideas and concepts of what the architecture was trying to

portray. Motivated by my passion for this industry and a desire to build new strengths, I began contemplating my thesis. Architecture is a multifaceted study within which there are many divisions and disciplines of work. In my opinion the most challenging and interesting of these domains is the way in which architecture tells a story, has meaning, and elicits emotion; qualities that are also evident in other forms of expression such as painting. A person standing in front of a painting reacts emotionally and perhaps speculates on its meaning. This thesis fed on my desire to instil meaning in the expression of architecture and created the opportunity to build on my existing technical skills while also developing new capabilities in my aspiration to become a 'whole' student of architecture.

This thesis began with inspiration of three things: a passion for architecture, a lingering question: 'What is architecture?', (first posed to me by a professor at Ryerson) and a question which I ponder on a daily basis, "Why is architecture important?"

With an architectural thesis, students essentially have the liberty to take a carte blanche approach, where their topics are unrestricted and their subjects broad. Typically over time, the topics become more refined as students begin to define and become more specific about their particular area of study. Some choose to research a particular building type, some use a philosophical standpoint, and some research various theoretical approaches. This thesis is somewhat unusual in that it does not intend to solely describe a building through drawing lines or depicting it through texts, but instead explores architecture through a process-oriented lens, unleashing the motivation of the overall processes rather than the specifics of how to design. It exposes a method of interpretation, speculation, and narrative ideas based on firsthand knowledge regarding architectural meaning.

Why is architecture important? Because, at a very fundamental level, architecture surrounds us on a daily basis. It is the very medium through which we filter and absorb our environments; it is the impetus of our existence. More importantly, as this existence is built by us or built for us, we should ask ourselves, is this what we want? Architecture surrounds us; we live in shaped environments,

from skyscrapers to churches, parks, and video games, we are engulfed by architecture. The very ground we walk on is architecture; its formation represents intention, from the technical to the philosophical, rational to irrational, and it encourages human interaction. Given its pervasive nature it becomes critically important to rethink our built environment in order to begin to cope with the multitudes of form, function, and scale. Through this analysis and intellectual inquiry we begin to understand architectural meaning.

The exploration of this thesis began by contemplating the design process that an architect might pursue. I quickly discovered that the architectural process takes on many hats and that there are innumerable ways to design with each architect implementing different techniques in their craft. Given these variants, it is impossible to track each architect's design process and deduce how that process influences and infuses intent in their architecture.

From this broad analysis some clarity did emerge. Architects all strive to portray ideas through their designs; be it political, environmental, or economical; this commonality led me to a more defined thesis topic: meaning in architecture. But what is meaning, and how do people interpret meaning? Is it obvious or is it subtle?

This quest for meaning led to an association between monsters and architecture. A monster has a purpose, they demonstrate something, the mere fact that we are scared of monsters is due to our own perturbed imaginations. However, we can overcome this fear if we learn to understand what a monster is, what its motives are and what it represents. Given this, how do we begin to understand the monster?

The first step towards understanding is to actually define the monster. Given the ubiquitous nature of architecture and the varied processes for imbedding meaning, it is likely that it will only be possible to approximate a formal definition of the monster as it pertains to architecture. This definition relies heavily on individual perception and interpretation and was crafted through a series of explorations, drawings, paintings, models, discourse and texts. Through this process, it became clear that architecture has the

ability to tell stories while also existing as marvels of engineering and material science.

The very nature of a monster is to depict meaning. To demonstrate an idea that can be interpreted by an audience and then retold as a story to someone else with their own interpretations, and so on. Within architecture, monsters are able to portray ideas, concepts, and notions of cultures; they can deliver messages, force us to reflect on ourselves, and pose the most arduous of questions. A monster is intricate and abstruse, it can elude our cognitive grasp, existing instead in the realm of imagination, morphing and re-appearing without notice.

This same depth of interpretation can be found in architecture, given the architect's willingness and capacity to capture it in the built form. Architecture must have a message.

ARCHITECTURE VS. BUILDING

“Architecture is nothing but the space of representation. As soon as it is distinguished from the simple building it represents something other than itself: the King, the idea of God, and so on.” (Tschumi, Architecture and disjunction, 1996, p.36)

This may be the single most important idea in architecture; however, believing ‘architecture is nothing’, it may be appropriate to conceive of architecture as everything. This notion seems implied as Tschumi suggests that the simple building becomes architecture when it is associated with something else that has intellectual meaning. Architecture surrounds us on a daily basis, we walk through it, sit, eat, sleep, and dance in it; in this manner architecture becomes the very foundation of our lives. Despite this base commonality, we each interact with architecture differently, and vary in our intellectual interpretations of architecture.

An architectural technologist would find difficulties in distinguishing architecture from building because of the isolated nature of the work itself. The constant microanalysis and focus on details removes the technologist from the larger architectural concept. The line work, which in itself is a representation open to interpretation, starts to become an abstract notion of fenestrations, partitions and codes which to the untrained eye could be viewed as a creative mode of artwork. This organization of lines and symbols, representing the larger conceptual work are forgotten as such, and lie on the page in a prone state depicting plans, elevations, sections and perspectives. So the question arises: Is the line work depicts a building, architecture? The act of drawing the windows, doors, and walls is inarguably an architectural process, but is that process executed in light of the overall design concept? In most cases, I would argue that it is not. Leading us to again conclude that meaning is instilled not through the physical act of designing but rather through the cognitive and creative design process.

It is important to listen to the words of Donougho, who states “A building should not merely be, serve some purpose, useful or not; it should also mean or at least we should be able to take it as meaning something or other.” (Donougho, *The Language of Architecture*, 1987, p.53). The argument made by Donougho implies that building and architecture are two very distinct things. Architecture employs the cognitive, the intellect and the psyche, while buildings exist to perform a particular function.

This does not necessitate that form follows function, or less is more, rather it implies that there is something embodied within the architecture that we understand, that challenges our emotions, raises questions and prods our conscience, forcing us to speculate about our environment, political situation or economic era. Architecture encourages an exploration and contemplation of space and environment, thereby opening avenues of abstract realities, emotional connections, and amazing realizations all through a process of critical engagement.

Architecture as Memory

I showed my father-in-law one of the sculptures I made during the process of this thesis, and he looked at it for a short while and responded to me with, “I think it looks like the one part of the building left over from the 911 attacks in New York”. He mentioned that the arm of the sculpture looked similar to the last tangled steel beam that was cased in concrete, and stood post-attack. It is interesting to hear such a comment when my original intentions had nothing to do with that particular event. The difference in our interpretations often based strongly on our memories and individual experiences highlights the challenging nature of architecture and the ability of a single protean concept to facilitate different perceptions and emotions.



Fig. 3.1 Above: Wood sculpture reminiscent of the September 11th attacks in New York.

Fig. 3.2 Top right: Frankenstein's Monster, portrayed by Boris Karloff in 1931.

Fig. 3.3 Middle right: An example of Exquisite Corpse.

Fig. 3.4 Bottom right: Godzilla, Ishiro Honda



Recognizing then, that intent and effort is required to convey meaning and transform buildings into architecture, we must consider the process through which this takes place. How do architects communicate their intentions to instill intellectual matter into our everyday lives? This question is made all the more complex by the reality that architects each use different language to 'speak'. Building materials and finishes may be similar from architectural project to project, but it is each architect's design method that produces a different finished product, full of meaning.



To bring some clarity to the complex question of architecture and meaning, I began to explore other forms of expression. Poetry provides an appropriate comparison because it assists us in understanding how meaning is interpretable. A poem read in a person's native tongue is understood and ideas, emotions and assumptions subsequently form in our minds. The meaning of the poem or the intentions of the artist become 'readable'. However, if a poem is read in a language with which the audience is unfamiliar, it is reduced to only the sound from the reader's voice and only that sound can be comprehended. These sounds would form a sort of harmony with rhythm, cadence and tone, forming a composition to be understood. It is important to remember that each person will define, speculate and interpret differently from the next especially with poetry; they are infinitely interpretable even in a person's native language.



Continuing an exploration of other mediums my analysis of film and literature, discovered an emerging theme of the monster. The use of monsters was typically intentional, as signified by the very meaning of the word. According to the Oxford English Dictionary, monster is a way to demonstrate, "to show", and at the same time be explicit in meaning and representation. Latin links *monstrum* with *monere*, "to remind or warn", it is a "sign or an omen". It is said, that monsters are great signifiers, and in doing so, portray protagonists out of the ordinary. The type of monster I am describing is not necessarily something that is hideous, ugly, frightening, or that thing hiding under a child's bed. Instead, it is likely more real, fascinating, humorous, sensual, and intriguing.

Monsters are also something that is intellectual. Just as a sense of humour requires an intellect in order to perceive small nuances in jovial content, puns or the like, so too do monsters require an element of observation and interpretation. Étienne-Geoffrey St. Hilaire notes “monsters are the study for intellectuals.” highlighting again the importance of the audience’s interpretations in establishing meaning. Just as the monster creates meaning in works of film and literature, perhaps so too could it imbed meaning in architecture.

Humans are not chaotic creatures, rather we seek order, and strive to make even the abstract and complex understandable and coherent. A primary means of achieving this end is through instilling boundaries and defining parameters to facilitate context and meaning. These boundaries force architecture to have meaning because of the intrinsic language that must weave its way into the design in a well thought-out manner. Taking cues from other disciplines, “...there are productions at the limit of literature, at the limit of music, at the limit of theatre.” (Tschumi, *Architecture and Disjunction*, 1996, p102), Bernard Tschumi recognized that “architecture simply does not exist without drawing, in the same way that architecture does not exist without texts.” (ibid, Tschumi). Texts, drawings, models and computer manipulations are the media through which architecture can be explored and meaning conveyed.

If architecture can convey meaning within and often through these boundaries and limits, then perhaps so too can a monster show meaning through limits. These limits together form a definition of monster which can then be applied to architecture in the search for meaning. Defining the monster will be a process which will form this thesis and backup the argument through texts, drawings, and sculpture which will facilitate a means to come closer to a formal definition of the architectural monster.

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Fig. 4.1 "Ceci n'est pas une pipe", René Magritte.

FIVE DEFINITIONS CLOSER



In order to explore how monsters can be used to transform buildings into meaningful works of architecture, the notion of the monster must first be examined in some detail. What is a monster? The very nature of the monster is to explain something so it is only natural to define the monster through the process of definition. The challenge with definitions is that the object we seek to define is rarely static; it can change from day to day based on new information and new interpretations. As a result, definitions should not be absolutes; rather should seek to approximate a singular definition through exploring examples and establishing connections to issues that drive intellectual thought.

The next five sections will attempt to define the monster through an architectural lens. The elements of Association, the Complex, Abstraction, the Unnatural and the Sublime, define the monster and when manifested in drawings, models and sculpture they establish a means of communicating ideas in architecture.

Through characterization and designation, it will be easier to classify the monster in architectural terms. Characterization in the form of

texts will aid in referencing other literature, essays, and articles, while, designation in the context of craft, will include models, drawings, sculpture, and paintings.

ASSOCIATION

Information is interpreted by our minds using visual and contextual links. These links include, but are not limited to, shape, colour, the inherent image, and the context of that image. Other associative links may involve a particular social arrangement or special day of the year that can easily be recalled. Herb Green (1976) notes that filters are also in place to discern between an array of accurate and appropriate information. For instance, the programmatic function of a certain element might be considered rather than the formal qualities. In this manner, images have the ability to conjure emotions, even though we are not always conscious of the association which evokes a particular response.

This element of association is fundamental to the monster. Monsters stem from our own imagination, formed by knowledge and experiences acquired over time and then sorted and condensed into comprehensible pieces to be later fit together in a dialogue or narrative. Imagination is crucial to the monster insofar as it pulls from our past, hinting on ideas at the subconscious level, shaping the way we view or understand our surroundings cognitively. Through these patterns of creative and often, unpredictable associations, the monster is formed and defined.

Likewise, memory links to imagination and helps to formulate associations through which architecture can be interpreted.

Challenges arise, however in the fact that memory is unreliable and infallible. There are gaps and holes in the way in which we remember events so that small distortions and fragments are parsed together to reconfigure the episode or impression. We soon associate emotions or events to memories, often leading us to surprising images and conclusions, the monster takes advantage of these capricious and mercurial associations and so too, can architecture.

This is Not a Pipe

René Magritte's painting of a pipe is an example of representation. He did not intend to stuff the pipe with tobacco and therefore declares that it to not be a pipe, but rather is a representation of a pipe.

Despite the visual realism within this painting, there is truth behind Magritte's definition.



Fig. 4.2 Above: Howl's Moving Castle

There is a strong affinity between architecture and the anthropomorphic. Humans have a strong ability to conjure manifestations of human-like attributes in architecture. Façades with openings justified in such a way to prompt an association with 'eyes', a vent for a nose, and a colour change to elicit the notion of a mouth. Columns placed strategically may begin to allude to the notion of legs and the concept of walking emerges. The very language of architecture implements this association through structured metaphoric or analogous language to accompany the anthropomorphic: words such as skeleton, wing, spine, and skin, all of which are recognized and associated with the human form and are also employed architecturally. This language of architecture begins to make representational connections using terms and concepts to which we are very accustomed. In addition to human anthropomorphic gestures, we also see natural associations in architecture. Toyo Ito displays this in his work as he takes advantage of what nature has provided and interprets an architectural solution. The Tod's building in Tokyo uses a structural (skeletal) system on the exterior of the building, which also serves as the façade (skin). Similarly, architectural critics make associations such as the Dancing House or Fred and Ginger (after Fred Astaire and Ginger Rogers) when referring to the Nationale-Nederlanden building in Prague by

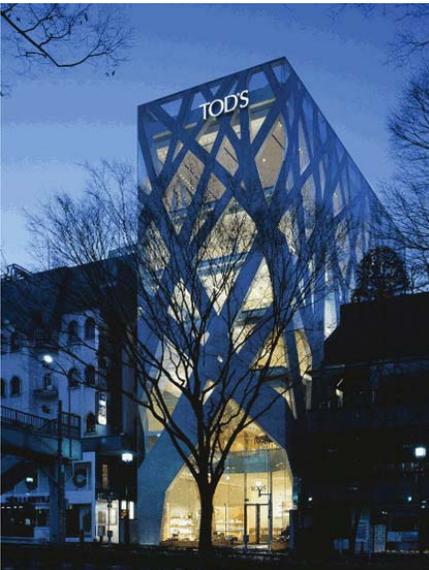


Fig. 4.3 The Tod's Building, Toyo Ito, Hong Kong



Frank Gehry. This association evokes meaning into the building. The concepts of dance, movement, and partnership in form transform a building into a work of architecture.

Fig. 4.4 Left: Fred Astaire and Ginger Rogers dancing.

Fig. 4.5 Right: Nationale-Nederlanden building in Prague, Frank Gehry

Anthropomorphism is not the only form of associations made where architecture is involved; post modern architecture also associates itself with another society or time. Philip Johnson's Sony Building (formerly the AT&T building) in New York takes on qualities that might be associated with a piece of furniture, (eg. a highboy, with its Chippendale top). In the post modernist era, this building defied every precept of the modernist aesthetic, combining historical cabinetry with modern architecture; Johnson was one of the first to make a post modernist statement made all the more powerful by invoking associations to a more classical form of expression. Norman Foster's design of the Suisse Re Building at 30 St. Mary Axe, London, England, has taken on the name of the 'Gherkin' as a result to its formal qualities. The building is located in the heart of London's

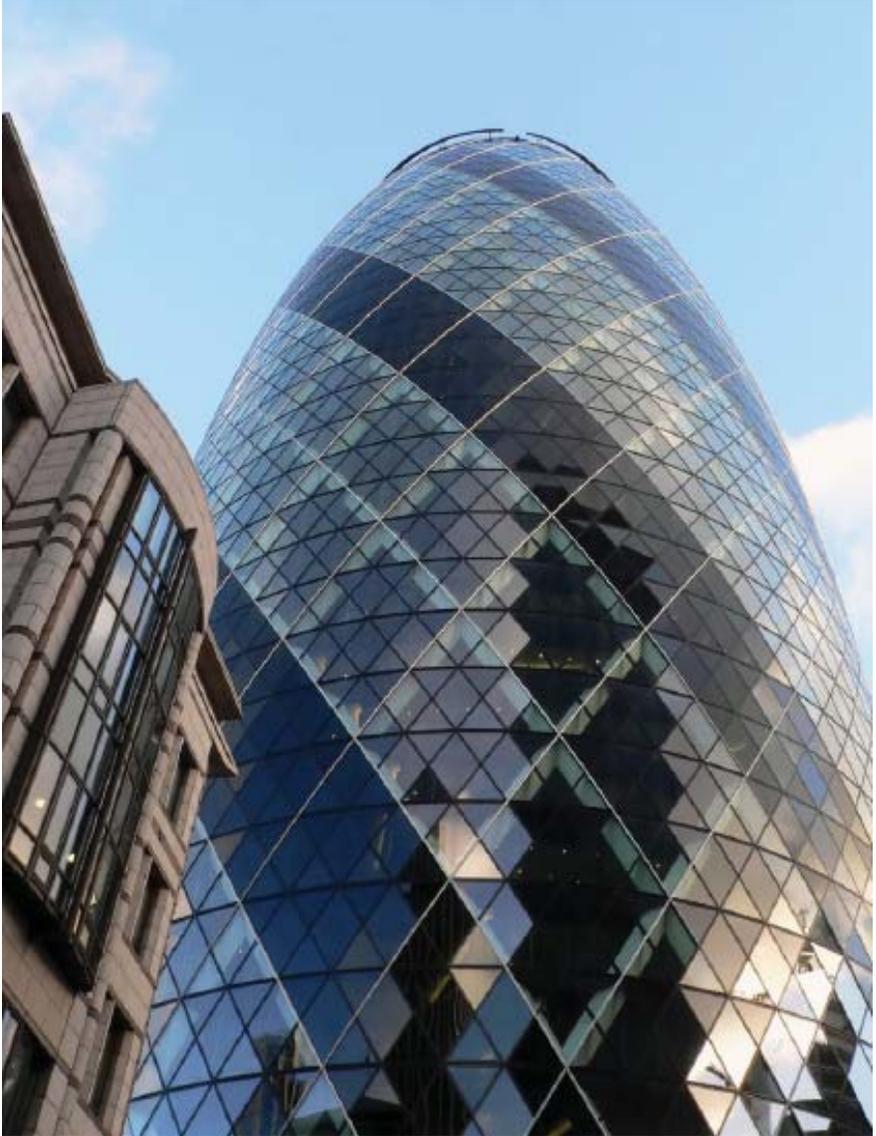


Fig. 4.6 Top left: Chippendale High boy furniture and Phillip Johnson's Sony Building (Fig. 4.7 below), New York (formerly the AT&T building)

Fig. 4.8 Top right: 30 St. Mary Axe, 'Gherkin', Norman Foster

Fig. 4.9 Lower right: Pacific Design Centre, 'The Blue Whale' Cesar Pelli



banking district, towering over streets filled with three-piece suits and briefcases. The association between this male dominant business and the phallic symbolism of the Suisse Re building have caused some to view it as a commentary on gender. A further example of architectural association is the Pacific Design Centre by Cesar Pelli, commonly referred to as the “The blue whale”. Again we see the use of association to achieve meaning and to provide an explanation, for example, of the building’s massive scale among its counterparts.

THE COMPLEX

The complexity of a monster should be intellectual, thought provoking and emotional. Even though the monster is intellectual, it does not mean it is accessible only to the leaders in speculation, rhetoric, and academia, rather, it exists to provoke everyone’s thoughts and actions.

For the monster, complexity need not be evil, bad or deceiving; instead, it acts as a portent, a signifier, embodied with current events, social questions, and political motivations. Complexity allows the monster to be free, to evoke interpretations, and conjure a range of imaginative observations. The inherent complexity of monsters elevates their importance and functionality to the point as Cohen describes; “we live in a time of monsters, they are the cultures of our world” (Cohen, 1996). For instance, Toronto is one of the most multicultural cities in the world (Statistics Canada 2006), it has many cultures mixed together forming a multicultural amalgamation of people that have to work out differences and intricacies within each nuance of a particular cultural custom with another. The ‘city’ is a monster; the interracial, cross-religion and mixed societal interactions make day-to-day life exciting given complex juxtaposition of people, colour, and customary activities. This begins to describe the multifaceted and multi-partitioned arrangement of the monster.

The complex also refers to the idea of ‘many parts’, layers upon layers that overlap and work together to form a single cohesive structure, sculpture or style, which can provoke memories or the like

Are Associations Literal or Subtle?

It is questionable if Frank Gehry intended to design the Nationale-Nederlanden building as if it were a dancing duo; this type of literal translation is one way of designing through association however there are more subtle ways to make association in architecture.

For instance, the Blue Whale that Cesar Pelli designed is more subtle an association as it is very unlikely that he was directly inspired by a whale. The tendency towards association is evident in how quickly critics make up associative names for much of the architecture that we see today.

It is interesting to consider the labeling that happens with a more literal translation, much like what Venturi was speaking of in “Learning from Las Vegas” (1977), where the architecture becomes a literal sign for its function. Frank Gehry uses this type of thinking to his advantage insofar as he can appreciate the architectonic form as dance. Much like language is used in architecture, dance plays a critical role in the way the structure is situated and moves across the landscape.

for the purposes of speculation and interpretation. The composition of these parts becomes important as well, in terms of the overall harmonic aesthetic, appearance and juxtaposition. An intriguing example is the idea of Frankenstein's monster, where he was a manifestation of something that dismissed the beliefs of 'God as the creator' and where science becomes an intricate part creating life through a literal translation of many parts. These many parts (of cadavers) form the being that is Frankenstein's monster, but they also comment on the complexity surrounding the issues of the church versus that of science.

In examining Parc de la Villette, we see the architectural use of the complex as Tschumi breaks up the design of the park into layers and forms a palimpsest to generate an architectural organization of points, lines and surfaces.

The monster is complex in a manner that evokes intellectual acts such as questioning, speculation and interpretation. The layers of the monster can act as a commentary on events or topics intended to evoke a rush of emotion paired with an intellectual response. This visceral response is sometimes created through the perceived simplicity of the architecture. In the Kimball Art Museum (Louis Kahn) we see this technique of layering used to effectively evoke a complex emotional and intellectual response. The interplay between light and space influences the audience's physical and emotional perceptions as they interact with their surroundings. Light has a multilayered, multi-cerebral effect on the way we perceive objects, space, and colour as well as the way in which we interact with the physical realm. A dark grotto hints towards the underworld and perceptions of chimeras, abnormal humanistic forms, and demigod beings, a place where we tread more carefully and are filled with a sense of uncertainty. In contrast, light airy environments have qualities of the 'heavenly' world or somewhere almost beyond our imaginations and we can feel secure and more confident in our movements and explorations. This layering in the design of the Kimball Art Museum allows for a greater level of speculation and begins to pull forcefully at our emotions and intellects. It is doubtful that Louis Kahn intended to have us believe that this space was to be imitation of heaven; however, it is through his use of complex design techniques that we



are able to produce such a thoughtful and meaningful response to the architecture.

Fig. 4.10: Prouns, El Lissitzky

The layering effect in architecture can also be seen in other disciplines such as animated film and television. Walt Disney recognized this at a very early stage, facilitating his creation of a product with layered levels of appeal, fuelling its commercial success. Disney employed subtle cues and humour to elicit emotion in

Prouns According to El Lissitzky

Lissitzky was interested in designing and drawing propaganda posters and print, which led him to work with Kazimir Malevich (his former teacher), where Malevich brought forth a number of new ideas that were not viewed well with the public, however, Lissitzky was fully inspired and began to work in the Suprematism genre and soon tore away from his Jewish roots associated with Marc Chagall.

Lissitzky's fascination with Malevich's work led him to further develop the Suprematism art movement. During this time Lissitzky developed an Avant Garde style of his own that he named Proun, this style of drawing embraced the teachings of Malevich's cubism, holding the geometric paintings true, but then converting to an architectural context and style. He defines the Proun as "the station where one changes from painting to architecture."

Lissitzky challenged himself by using multiple axis and perspectives combined with geometric spatial elements to make drawings architectural. His work expanded from paintings, to lithographs, to fully realized three dimensional physical models and installations. Lissitzky's architectonic work begins to suggest a new formulation of architectural thought and an architectural design process through the examination of space and form in drawn objects. (Tupitsyn, Drutt, Lissitzky, & Pohlmann, 1999)

all age groups, demonstrating how something intellectual can become complex due to the different levels of interpretation. From the children's perspective the cartoon was something entertaining because of the slapstick style of humour and colourful pictures, while adults were encouraged to engage in more sophisticated associations based on the actions and innuendo.

ABSTRACTION

Abstraction appears in many forms, throughout many disciplines: art, dance, music, psychology, mathematics, and for example. Abstraction is a way to communicate a range of topics (from the concrete to the theoretical) through varied representational media including painting, text, and digital media, allowing for conceptual interpretations that stimulate the mind. The abstract

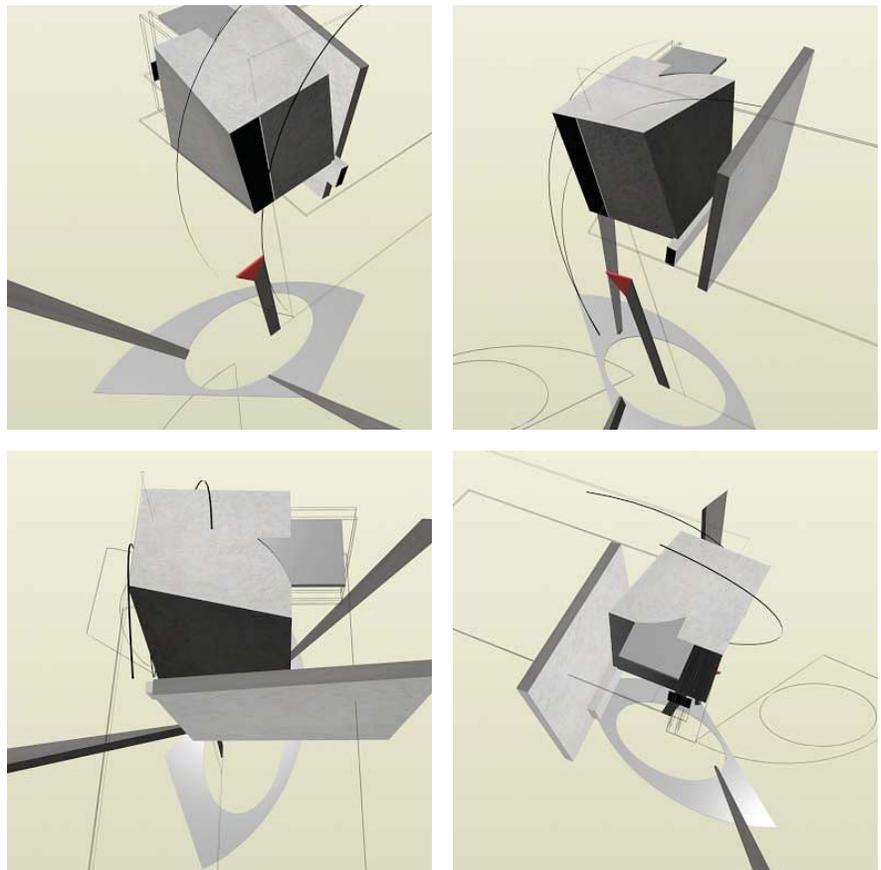


Fig. 4.11: Prouns, El Lissitzky

may be best categorized by what it is not. It is not concrete, firm, or straight forward. Instead it dwells in the domain of conceptual ideas based on intellectual thought and perception. With the abstract the boundaries become blurred and the use of metaphors and other intellectual discourse becomes important in trying to explore ideas and convey meaning.

For instance, pure mathematics has been said to have methods that are similar to painting and poetry due to their ability to be independent of the physical world. Many artists have experimented with the abstract, however, they did not begin their work at this stage. Similar to the manner in which pure math experts first exist in a world of basic calculations and theorems, these artists began with basic concepts that formed a foundation for their later work and experimentations. For instance, Pablo Picasso did not begin with his now well-known cubist style, but rather started drawing, painting, and sculpting using the concrete absolutes of realism. Through experimenting with these different theories, techniques and ideas he later developed his widely acclaimed and far more abstract style. Likewise, El Lissitzky, a Russian artist and architect, began with foundation type skills, which developed into avant garde techniques such as the Proun. This form of art that Lissitzky developed came out of years of testing and experimentation, which led him to a form of art that was communicative, meaningful and rational. Lissitzky invented the term 'Proun', however he chose to leave it in an abstract form by never fully explaining or defining the word. The drawings associated with the Suprematism style depict the primary elements of architecture: volume, mass, color, space and rhythm – which were abstractly explored ideas related to architecture and specific “task oriented creations” (Tupitsyn, Drutt, Lissitzky, & Pohlmann, 1999).

The drawings created for this thesis were also abstract manipulations of line work, undertaken in an attempt to achieve a greater understanding of how abstraction impacts the overall definition of the monster and its rule in delivering meaning to architecture. This exercise led to a the recognition of the power of this technique in its natural ability to prompt interpretation and speculation, much like the Prouns. The sketches were generated from a subconscious

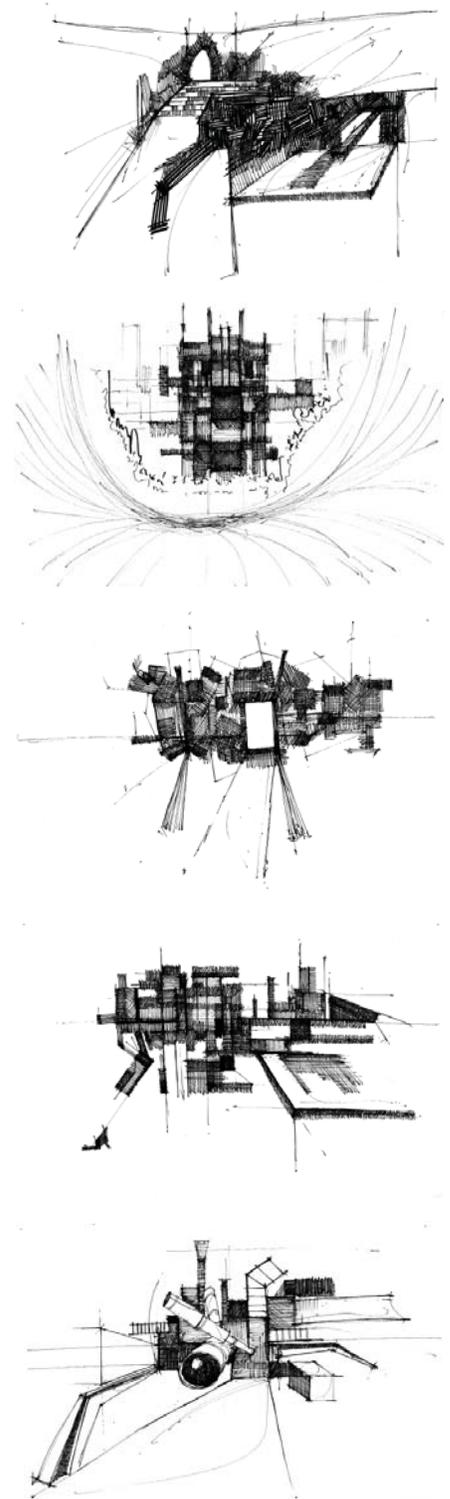
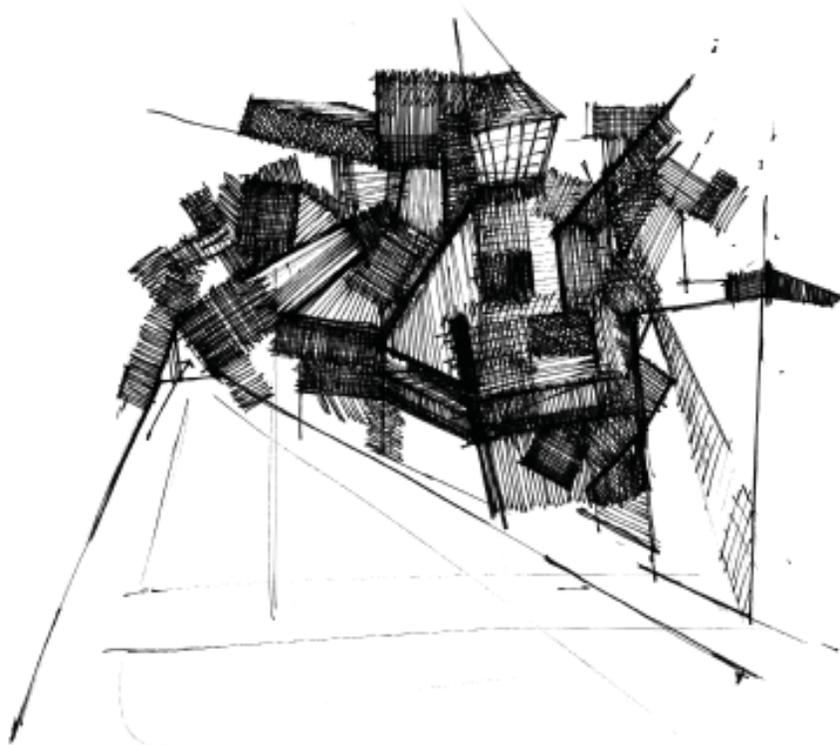
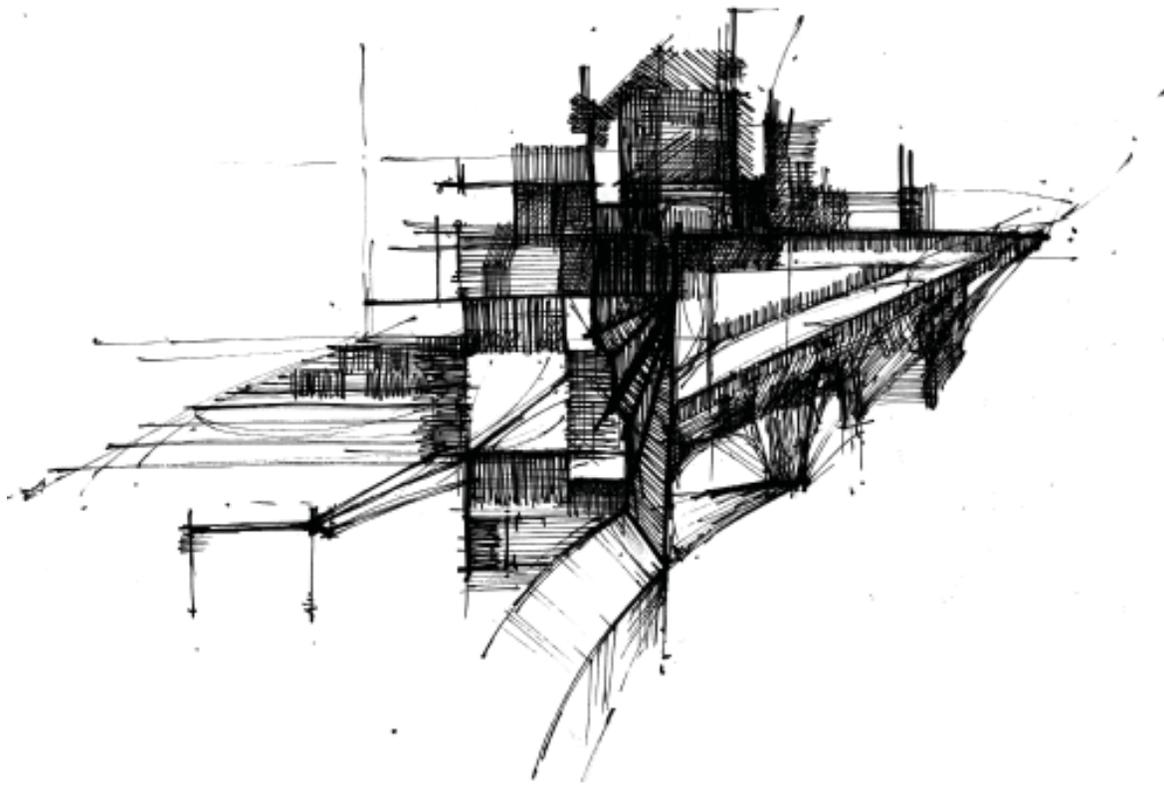
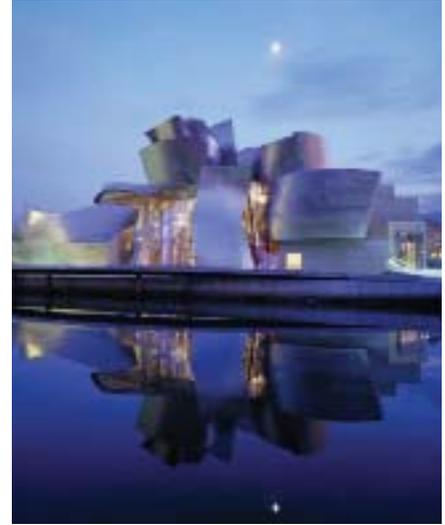


Fig. 4.12: Black line sketches, Author





style of sketching, where techniques of fast sketching and quick thought were used. The line work composed itself naturally, crossing, overlapping, and joining to form light and dark areas that seem to extrude from page. At the same time, spaces began to emerge from the free-form style of sketching. Rather than concretely programming where each line should lay it was important to let the mind and hand work in a symbiotic and unguided fashion. The resultant images force the eye in and out of the page to explore the faux third dimension and movement can be understood from the drawings as well.

An architectural monster fills the requirement of being abstract when it embodies architectural ideas (such as those evoked in the sketches), concepts or archetypes with intellectual stimulus, invention, sophistication, and irony. Abstraction's ability to confuse is strong; however, the mind is powerful and can overcome an obstacle like this with techniques of speculation and intellectual thought. The message is not always a literal translation and often the message is very difficult to read as it is vague and sometimes obscure.

Frank Gehry's house in Santa Monica is interesting to interpret because of the abstract nature of the design, the use of materials and the way in which it was assembled. He dissects the construction process and breaks down the essential parts of building, rethinks, and reformulates the organization of materials to reveal a truth about architecture and architectural discourse. Gehry's

Fig. 4.13 Left: Santa Monica House, Frank Gehry

Fig. 4.14 Right: Guggenheim, Bilbao, Spain, Frank Gehry



Fig. 4.15 Above: Blur by Diller and Scofidio

response to the design process is one that is particularly unique. His work exemplifies a technique that is rich with formal exaggerations and deconstructive manipulations that reveal a truth and purity to convey concepts of the monstrous.

The Guggenheim in Bilbao, Spain is another example of Gehry's use of abstraction to evoke interpretation and suggestive content in his work through formal manipulations, curved surfaces, and complex geometries. Gehry uses paper as a study material to interpret forms and began to develop a narrative to support his craft. Many iterations are typically explored and it is through a system of deductive design (removing what does not clearly make sense) that Gehry finds a final composition of materials, forms and structure that compliments the narrative. It could be argued that Gehry's techniques can be thought of as a type of Corpse Equis, responding and reacting to each of his last architectural gestures, building and expanding based on an absolute notion in order to generate the overall architectural message.

Fig. 4.16 Below: Blur by Diller and Scofidio





Fig. 4.17 Above: Blur by Diller and Scofidio

In contrast to the techniques of Frank Gehry, Elizabeth Diller and Ricardo Scofidio understand the basic principles of architecture and know how to manipulate them, pulling away from the concrete into the abstract to create their own style of commentary and meaning. They question the way in which architecture is represented and push the limits of the formal state of architecture. Their Blur project is based on distorting spatial concepts and challenging people to explore and experience the abstract notion of 'non-space' on the platform. High-pressure misting tubes form a cloud of vapor creating a phenomenological experience of architecture. The space that is created is unconventional insofar as it does not bear the traditional conventions of architecture such as walls, floors, and ceilings.

This demonstrates the question: can architecture exist without form, in the traditional sense? This abstract idea of architecture conveys strong statements regarding the limits and conditions of today's architecture. Arguably, the Blur project's sense of architecture, which is based on water molecules, is not architecture at all, it only represents architecture or what we perceive as architecture. The space that contains us must be architecture because it bounds us



Fig. 4.18 Above: Chair Equis

The chair was successful because it made it possible to understand how the unnatural elicits emotion and allows for speculation. In this case, the chair was not massive in scale; however, it implements irony and satire combined with the grotesque and caricature to convey the intentions and meaning. In addition, the chair begins to conjure Frankensteinian ideas insofar as all the parts assembled in the chair originate from another place and form much like the body of Frankenstein (Shelly, 1818) was assembled from different cadavers and mechanical parts.

yet it is formless and for some reason we feel inclined to accept it as architecture. Perhaps it is because there is a 'sense' of enclosure or perhaps it is only perceived as enclosure. This would not hold true on a windy day for instance, the enclosure of mist would be blown away and all that remains are the pipes and mechanical units used to extract the water from the lake and expel at high pressure the fine mist of water. The monstrosity of this work lies in the abstraction's ability to engage us in this intellectual discourse and, in so doing, attributes further meaning into architecture.

UNNATURAL

The unnatural may be hard to recognize in architectural work because of the subtle nature that it employs. The characteristics of the unnatural are more sophisticated than those previously discussed in the definition a of the monster. These characteristics include irony, where an incongruity is employed to invoke meaning and where often something might not be what it initially seems. For instance, the Chair

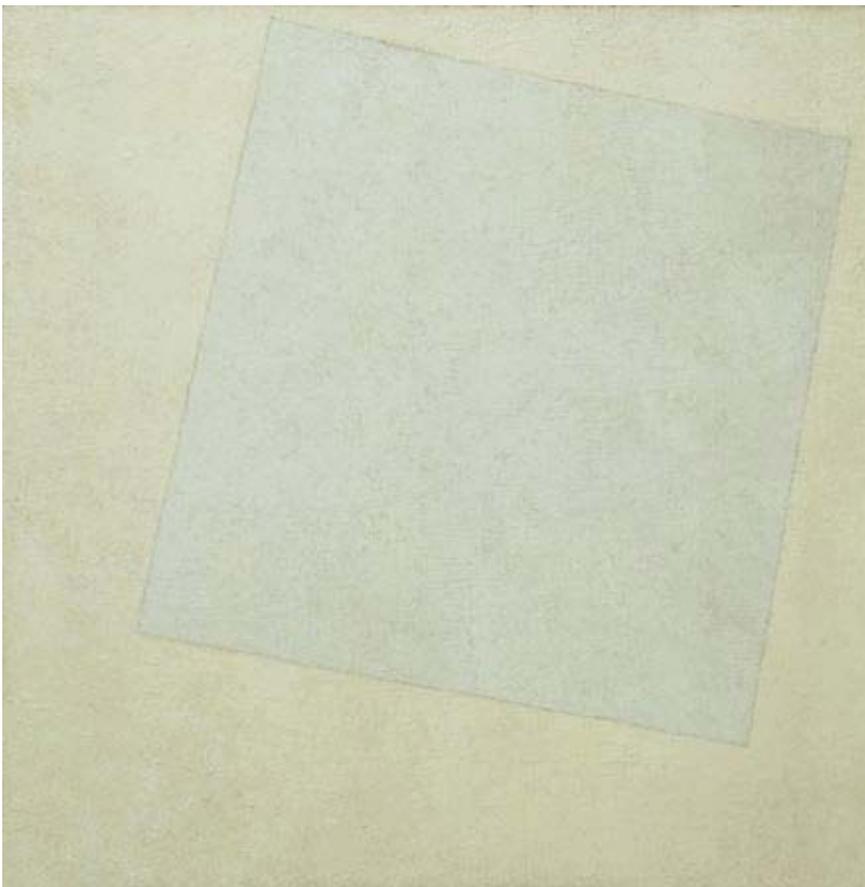


Fig. 4.19 Left: White on White, 1918, Kazimir Malevich

Equis may initially be perceived as a chair, however upon closer inspection sharp blades are seen to be twisting and wrapping around the frame and legs, rendering lethal the surface that would normally be used for sitting. This discordance is further demonstrated by its Frankenstein-type qualities. The sculpture is made from a mixture of parts collected from a number of different objects all of which come together in architectural composition to form a coherent idea through employing the unnatural ideas of grotesque and caricature.

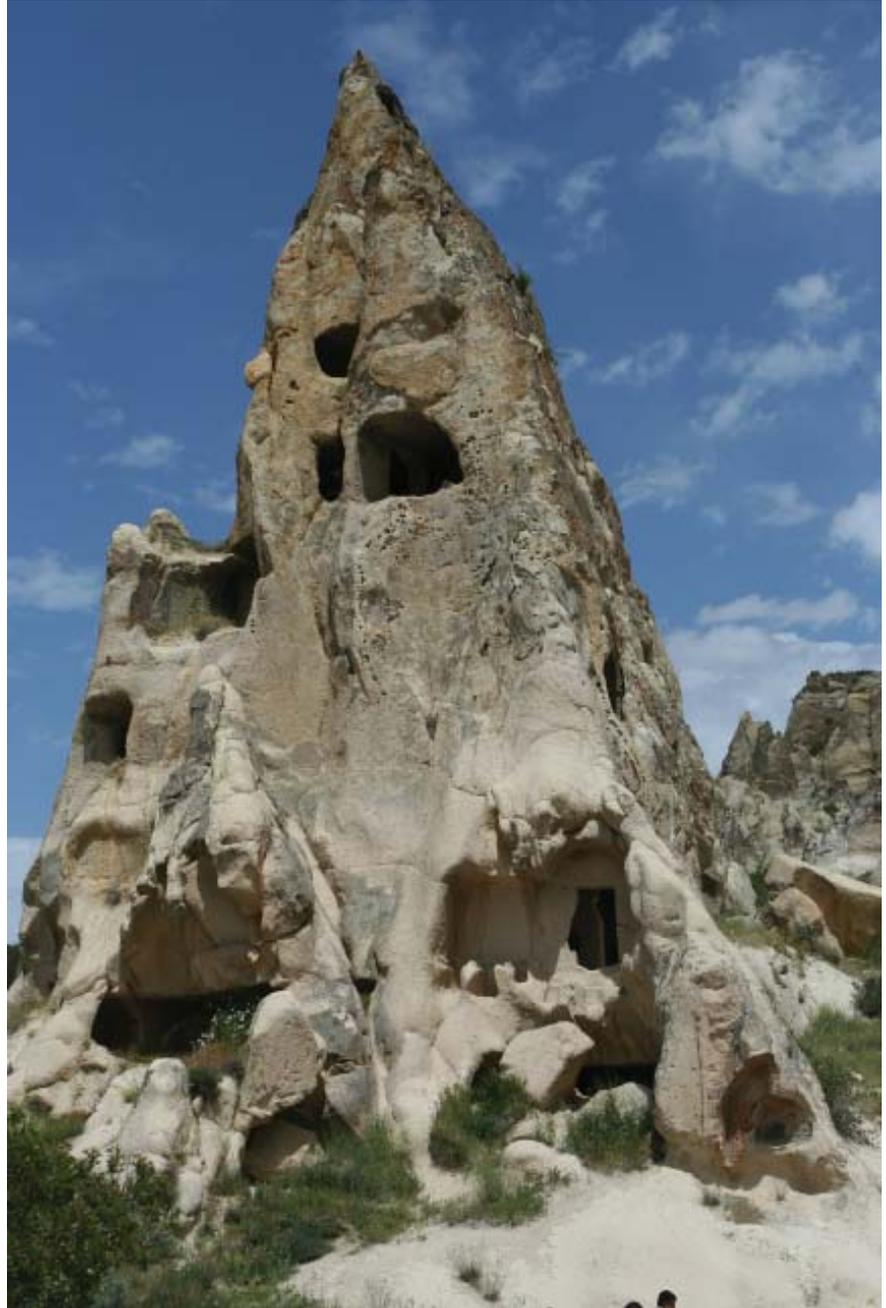
The unnatural can also be described to have an affinity and a repulsion that pushes and pulls back and forth to form the narrative, which gives the monster a sense of context. Architecturally, context is important because it allows us to situate our mind and enables a greater understanding of the object in question. For instance, it is interesting to think about the complications that arise when trying to attribute meaning to Kazimir Malevich's painting of a white square on a white canvas. This work by Malevich stems from the Suprematist art movement in the early part of the 20th century and is an example of how it is important to have context to use as a means of allusion.

Fig. 4.20 Below: Caryatids at the Erechtheum

The duality expressed often through the unnatural offers a strong



Fig. 4.22 Right: Goreme open air museum, Cappadocia, Turkey



previously impossible. The parody portion of a caricature, in the form of humour or ridicule, opens the discussion of what might be but the grotesque caricature lends itself to the underworld, chimeras, beaked creatures, part man and part animal, all infused with duality such as the signs of heaven and hell.

Grotesques have existed for as long as the human imagination has created distortions and transformations of truths, morals, and



Places of Beauty

Again, through my travels in Istanbul, Turkey, I found what Bas Princen noted about beauty to be very true and began to look at the landscape and urban milieu through a series of photographs to understand where beauty comes from and how it is interpreted.

Separated by sea and sky the landscape of Istanbul with its diverse arrangement of docklands, dense housing and mosques creates an aura of beauty as described by Princen.

Fig. 4.23 Top Left: North shore off the Golden Horn, Istanbul, Turkey

Fig. 4.24 Lower Left: Docklands, Istanbul, Turkey

ethics. The notion of grotesque evolved from its Latin roots meaning 'grotto' to biblical transformations of the word, which alludes to the underworld, deviants and abnormalities (Kayser, 1966). These "unnatural" forms of being depict a range of mythical creatures from chimeras, goblins, and gargoyles, all of which have close association to humans, but are monstrous in nature. These so claimed devilish creatures have been said to have beaked faces and animal features accompanied by plant and floral detail and decoration (Steig, 1970).

The unnatural also hints at ideas of anthropomorphism, where some of these animal creatures can be seen to have faces of humans or bodies shaped similarly to humans. An example of this can be seen in Athens, Greece at the Erechtheum. Columns bearing the name Caryatids are flawless sculptures of the female form at its most beautiful, standing in row strongly holding up the roof of the Erechtheum.

SUBLIME

Although we may see similar dualities in the sublime as we do with the unnatural, where the unnatural veers towards the grotesque, the sublime is focused on understanding beauty. There are key differences between beauty and the sublime: beauty is found in form, while sublime is formless. Beauty is bounded and sublime is boundless. To explore this further I was compelled to ask, "What is beauty?" A project called Utopian Debris by Bas Princen describes beauty through a series a photographs and he notes that the images "are only filled with beauty when they are portrayed, and looked upon by a viewer from a comfortable distance. To see the beauty you need distance; you need to exclude the context; you need to give it an aura of being an unreal place." (as quoted by: BLDGBLOG, Manaugh, 2009, p.10)

George Santayana defines beauty as "pleasure regarded as the quality of a thing" (Santayana, 1961). His intentions were to sum up a variety of distinctions which gives beauty its concreteness. A value that is not just perception but more absolute and factual. Santayana also states that:



Fig. 4.25 Above: Mark Gage, Library Project

“it is an emotion, an affection of our volitional and appreciative nature. An object cannot be beautiful if it can give pleasure to nobody: a beauty to which all men were forever indifferent is a contradiction in terms”

The sublime does not rely on aesthetics, rather its value comes from and emotional and visceral response to an object often described as a sense of terror. However terrifying the subject may be, it is not evil, nor does it elicit unethical or immoral connotations. We act upon the sublime because of its pleasant nature and these emotions are what drives us to seek the sublime. If it were something unpleasant, the sublime would be a quality never encountered.

The beautiful horror refers to “the principle effect of the Sublime” (Trachtenburg & Hymann, 2002), it is the realization or reaction to stimuli evoking great emotion, adrenaline, and astonishment. This can be experienced with Francis Bacon’s paintings which challenge us to find actual beauty in his work. When we experience one of Bacon’s paintings, there is a compulsion to stare. His fascination



Fig. 4.26 Top: Portrait by Francis Bacon



Fig. 4.27 Below: Portrait by Francis Bacon

with flesh and movement keeps us intrigued, the resemblance to cut flesh and inner parts of the body create a sense of unease, while at the same time, the colour and composition pleasantly draw our eye. This simultaneous affinity and repulsion allows us to understand something about the monster. A person may initially perceive a monster as ‘ugly’, but upon closer inspection may find its inherent beauty. The term ugly may be linked with the grotesque, an analogous relation to something humorous. This is an interesting effect when something is composed by a reformation of an ideal type combed with another to invent something abnormal, either inferior or superior which does not commonly occur in nature, then we have the grotesque. “It is half-formed, the perplexed, and suggestively monstrous” (Santayana, 1961).

Mark Gage employs architecture to explore the sense true beauty and the sublime. His sinewy and swirling designs are deliberately portrayed in an absence of context. This vacuum or disregard to context, architecturally speaking, creates a sense of unease or unbalance. Gage’s work is perceived as boundless and endless, it confuses the mind allowing for greater interpretation and intellectual discourse. His designs lack conventional structure and the open space is obscured by this sense of endlessness. By chasing the sublime with his work Gage propels us to a place of beautiful terror or unease, in the same way a person riding a roller coaster experiences a euphoric horror as they ascend the final peak. The moment of realization, descending the final ramp or discovering meaning in the architecture, is truly beautiful.

Daniel Libeskind’s addition to the Royal Ontario Museum placed a new ‘crystal’ like building against the old historic building. The repulsion lies in the pairing of materials (steel and glass against stone), the context (historic frontage with a parasitic new addition) and even the form, which seems to have been designed in a context-less fashion. It is these very same features however that lend a sense of awesomeness to the structure and appeals to our sensibilities.

Frank Gehry’s Guggenheim in Bilbao is another example of this dichotomy. The Guggenheim is monstrous because it changes

the city – everything around the Guggenheim reflects traditional Spanish style design (the low roofs, traditional red clay tiles) while the Guggenheim protrudes into this landscape, jutting over the roofs with its metallic and reflective surfaces, changing the topography of the entire area. The building is reminiscent of Bacon's repulsive style: Gehry made an incision in Bilbao's urban fabric, pulled and pushed the styles, materials and space to create an appealing new focal point.

This attraction and repulsion, ying and yang concept is also reflected in the concept of a foil. A foil is defined in the Oxford English Dictionary as being "a person or thing that contrasts with, and therefore emphasizes, the qualities of another person or thing". We see foils used in all forms of expression: literary, visual and physical. The comedic and magical duo of Penn and Teller are a classic example of a foil: their characters are defined by one another, contrasting and manifesting not only through their personality traits (outspoken extravert versus shy mute) but also by their physical appearance. Architecture also can employ the foil to achieve meaning and expression.

It is through these contrasts, such as the beauty and the beast, that we can start to see the architecture and understand it. If only one of these elements was featured, it would be far more challenging to clearly define the architecture and strive towards the sublime.

SPECULATION

Most would assume a conclusion would discuss the findings of my research, or the answers to all the questions that arose from the countless hours of reading and writing that went into completing this project. An architectural project whose basis was not architecture at all. Instead, it will be a place to reflect and think about the architectural process that enabled me to be critical about my work and ruminate on the lessons it has taught and the skills I have learned.

From the very beginning of this thesis, it was clear to me that I had to choose a topic that would be enjoyable and would capture my attention for at least a year. I knew that I did not want to come into this project to draw a particular building type in the essence of a cultural issue that is currently being questioned. However, I wasn't sure what else I could do to fill the requirements of my thesis.

I began this thesis by thinking of things that excited me about architecture and it struck me that the architectural design process might be the most important element in distinguishing between architecture and buildings. Not only was the process of architecture interesting but through that process I found that architecture has the ability to convey meaning through gestures of materiality, form

and scale. The way architects orchestrate these materials to form wonderful pieces of art and building science was what I found inspirational.

The fundamental motivation for engaging in a thesis about monsters was to examine and explore architecture in way that was not particularly familiar, by choosing a topic such as monsters, I left the playing field open to numerous manipulations or perversions of architectural study. It occurred to me that this thesis had to be a challenging endeavour and I had to not think of it as the last project of my formal education, rather the first project of my career. The genesis for my career must be something that I am able to reflect on and begin to define who I am as an architect.

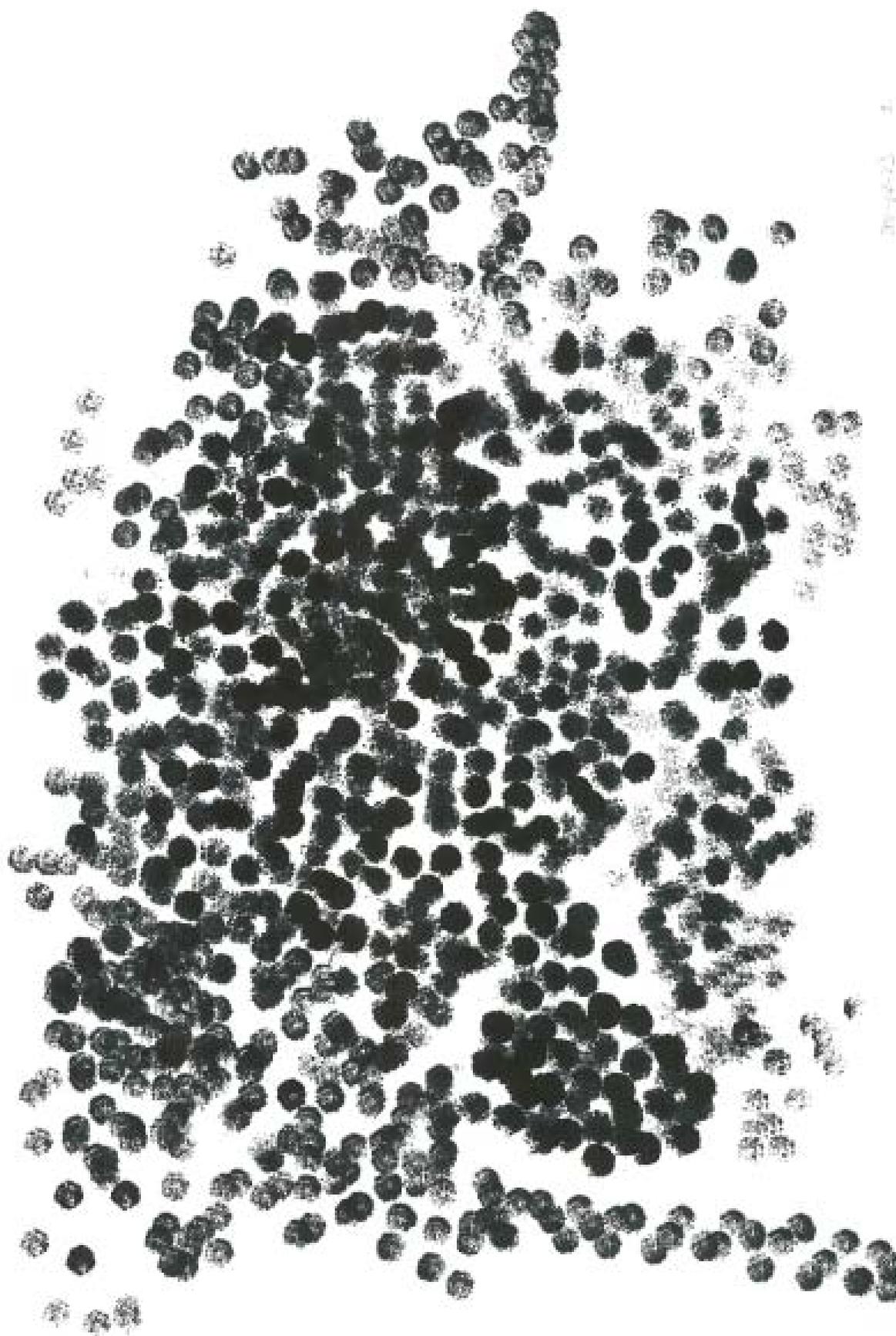
In reference to Frankenstein's Monster, I have set out to define what a monster is in respect to the architectural design process and how that will effect the way architecture is conceived. The five definitions or cadavers that make up the monster include association, the complex, abstraction, the unnatural, and the sublime. These parts form the whole or the "hard core" definition and the process of painting, building, drawing, and writing led me to a closer discovery of architectural meaning, interpretation and representation. Rather than analyzing what architecture is today or was in the past or speculating what it will be in the future, this thesis defines a process that is relevant for all those that wish to find their own monster.

The process used to complete this body of work includes a combination of writing, modelling, drawing and painting. Each of these tasks did not happen in singularity or linearly, rather the process oscillates from one task to another with revisions and refinements of thoughts leading me to new discussions, drawings and models allowing a more clear definition of the monster through association, the complex, abstraction, the unnatural, and the sublime. The images depicted here are the result of an exploration of the five definitions of monster in search of techniques and procedure that would begin to aid in the overall architectural design process.

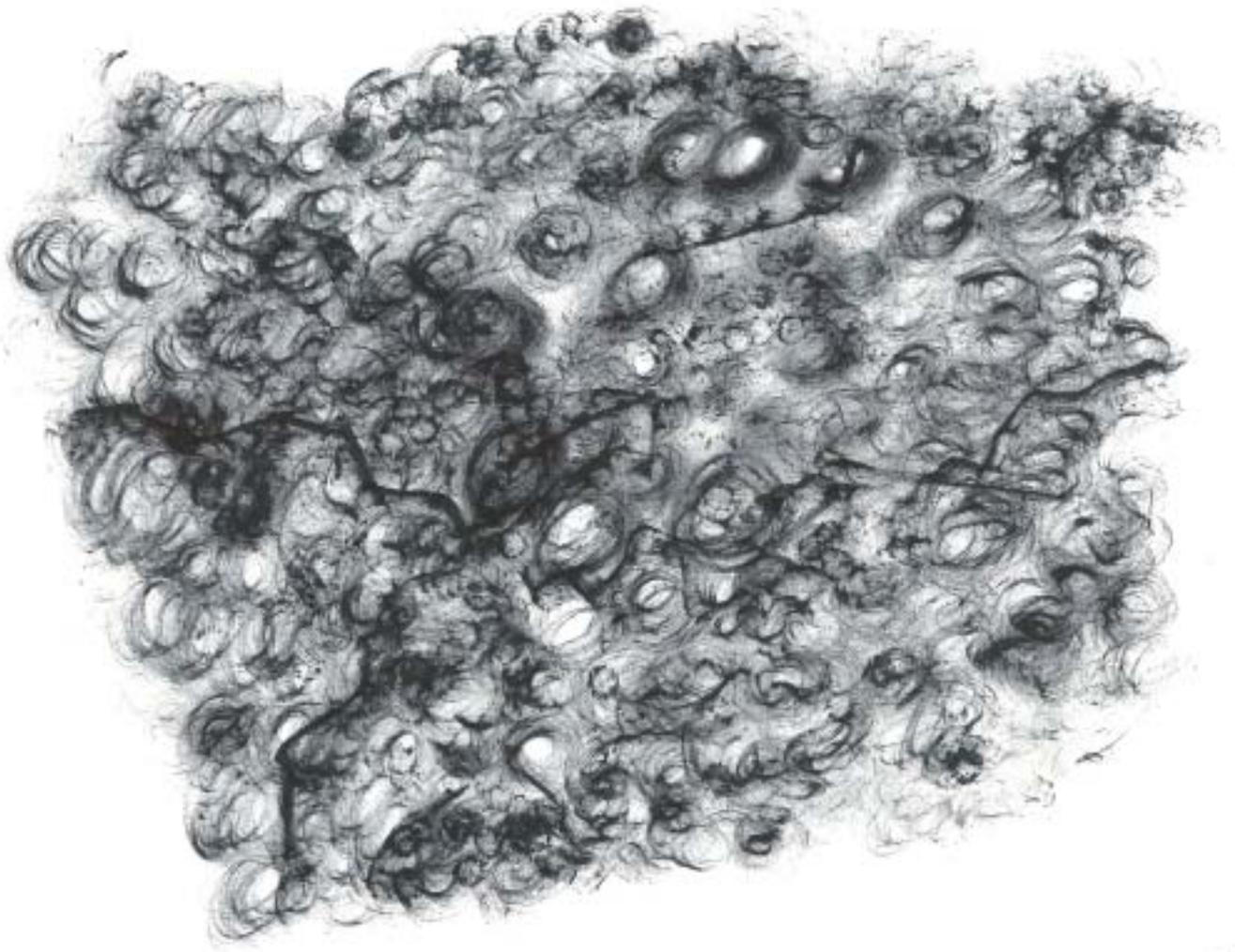
Now I see monsters everywhere.



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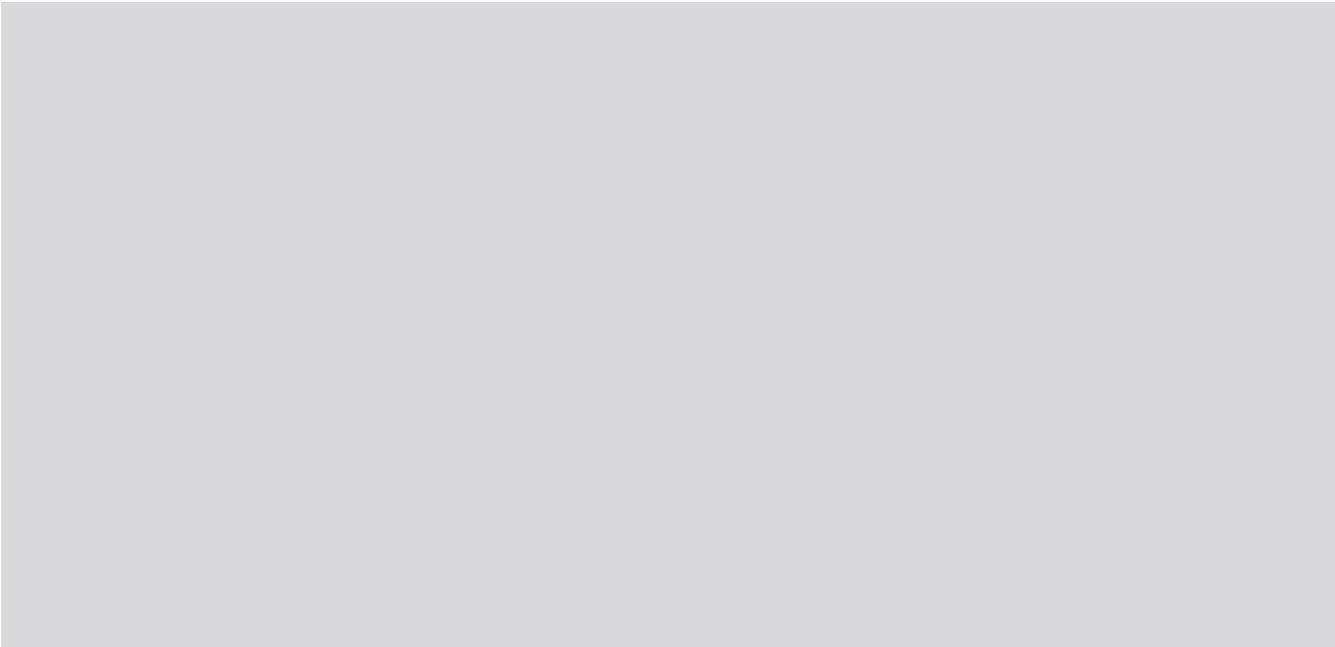
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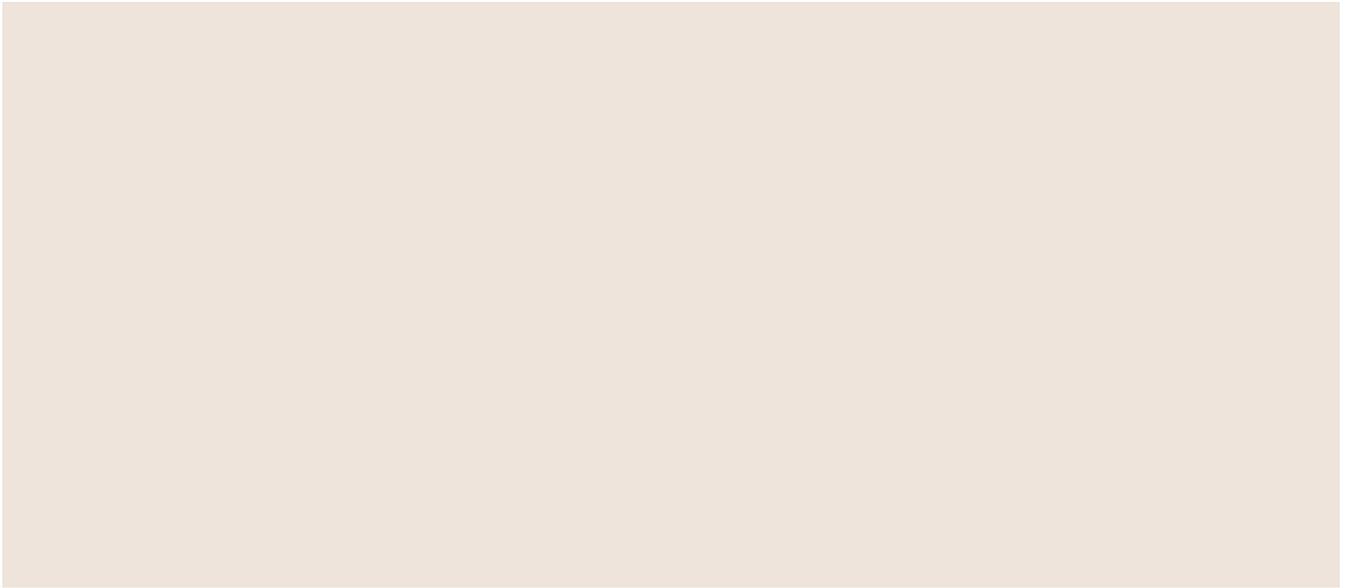


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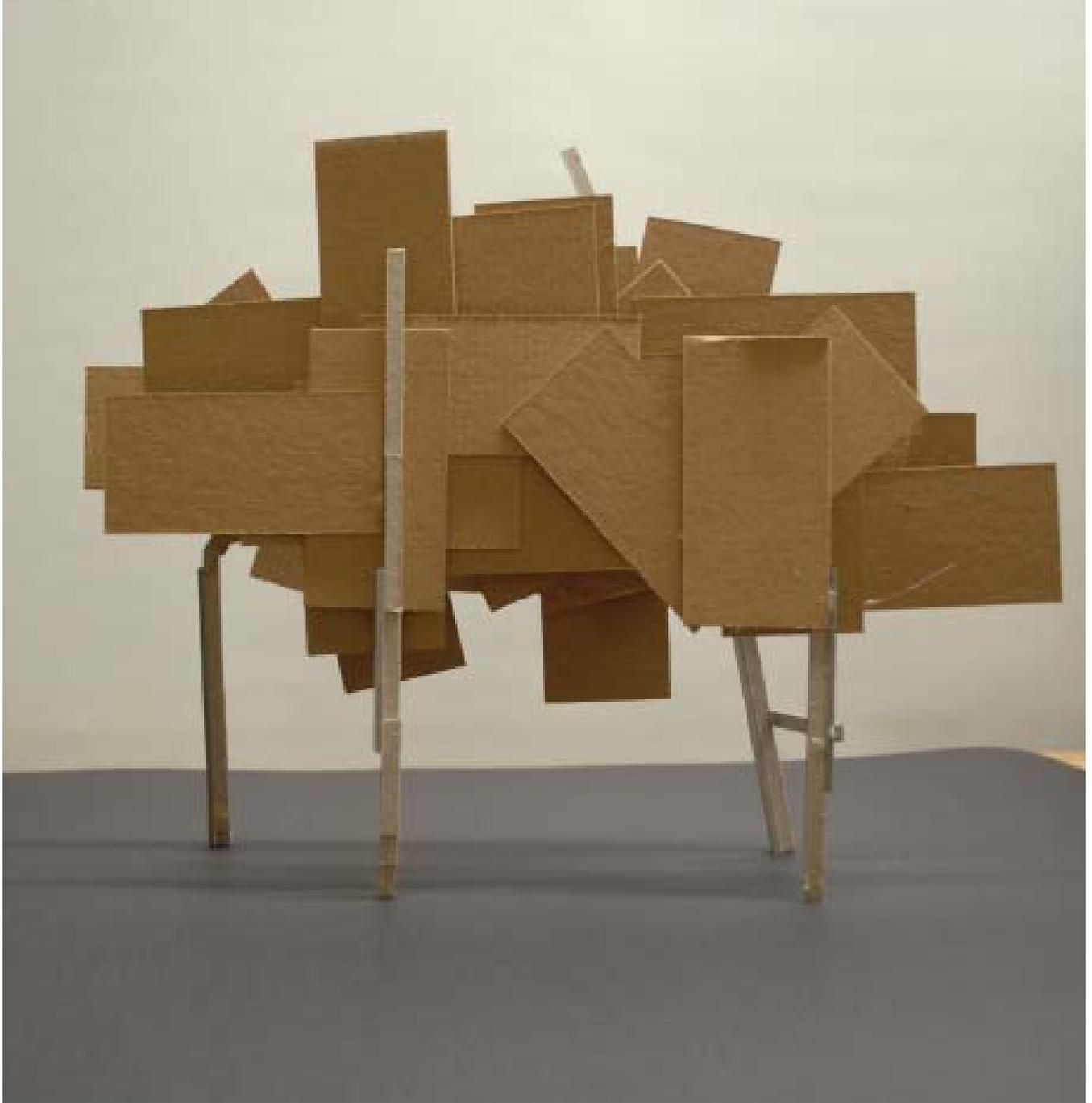


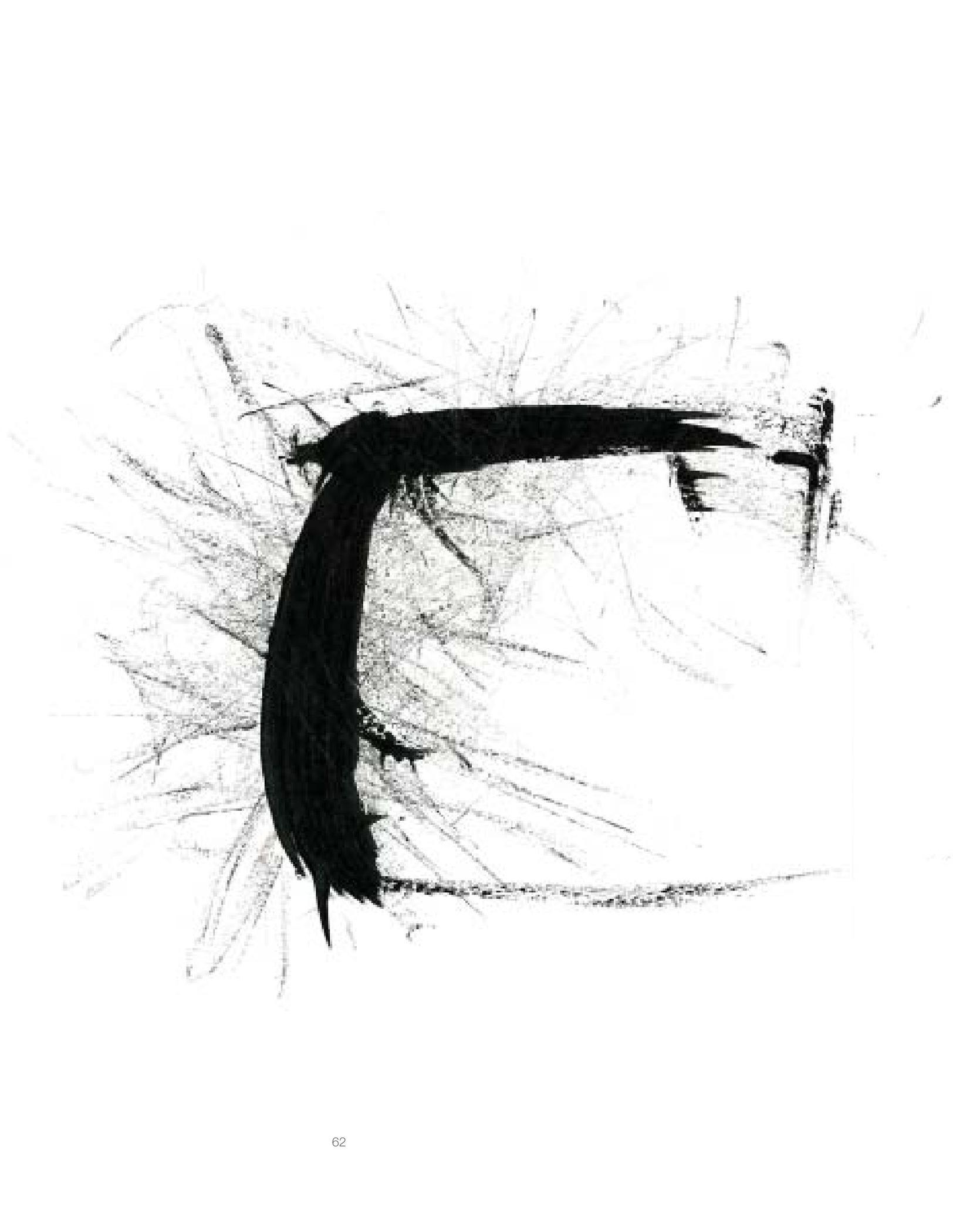
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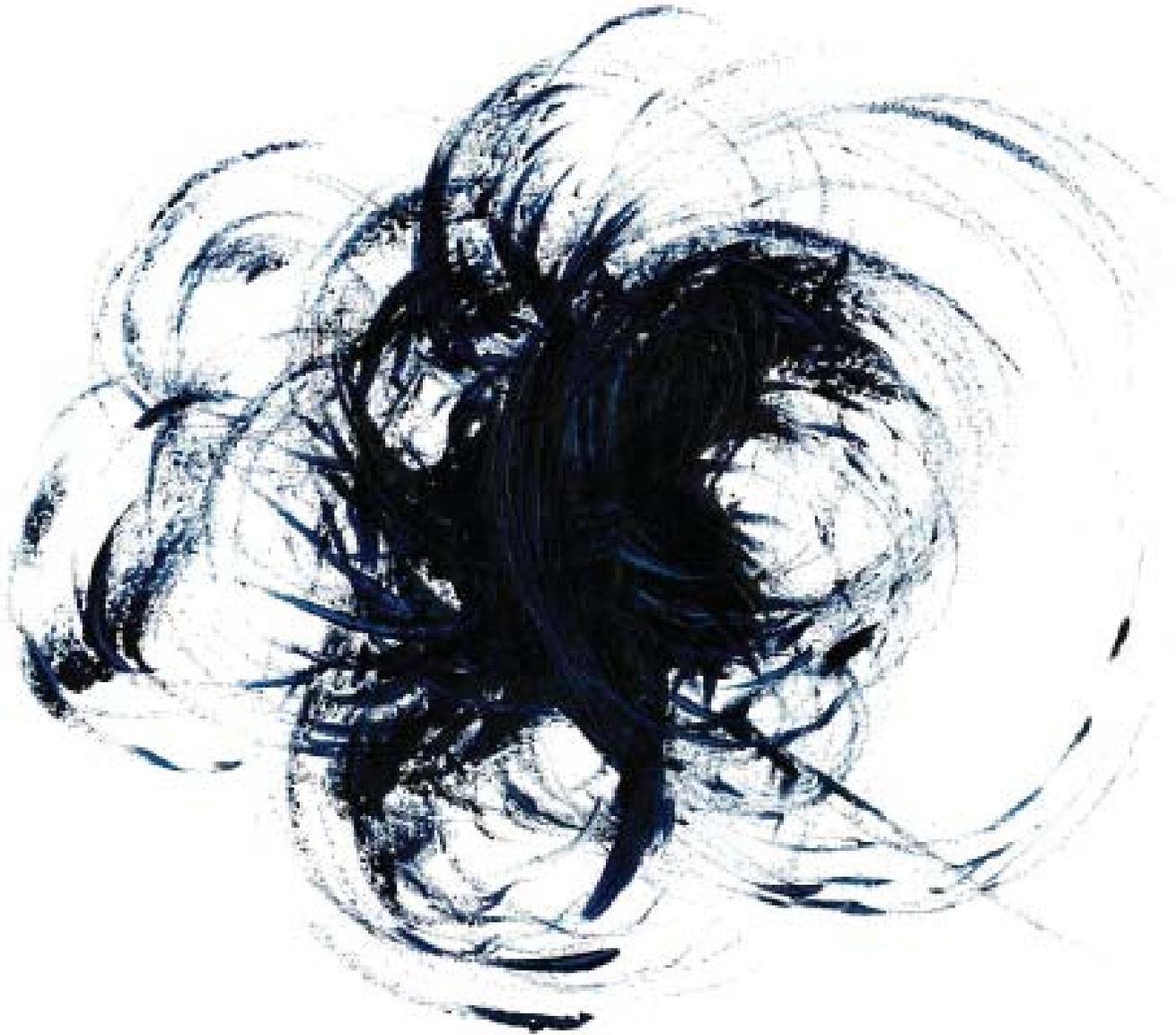


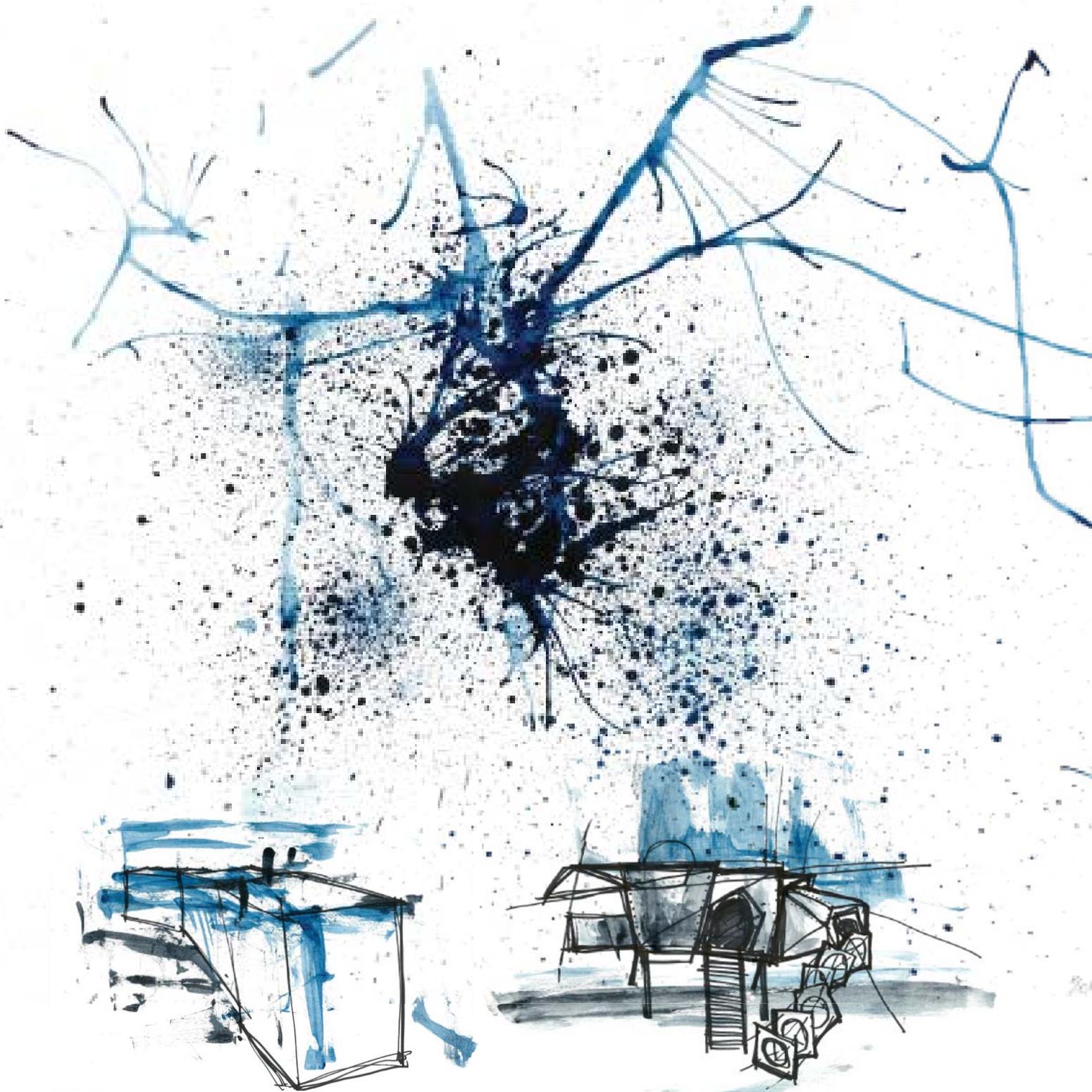


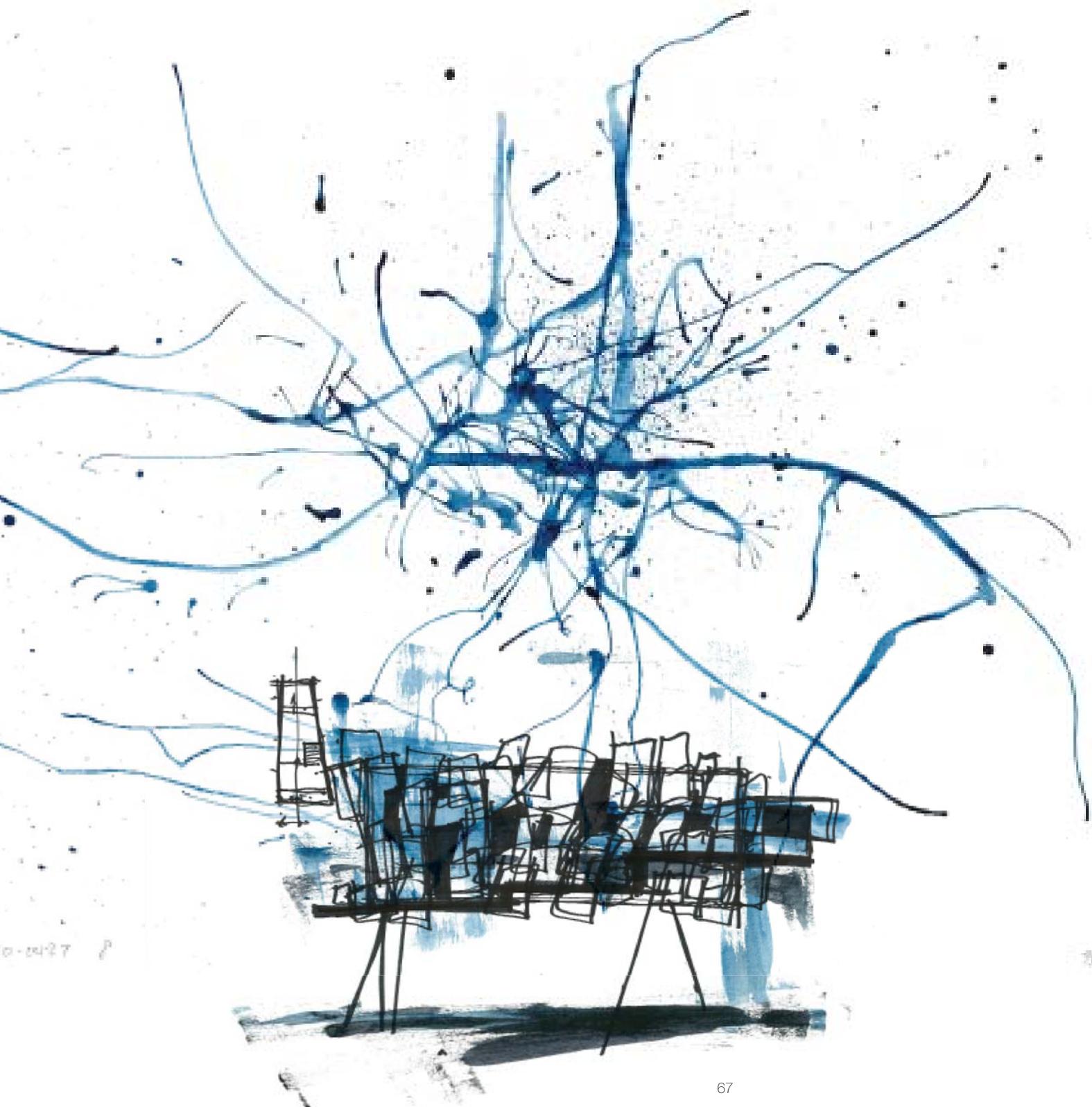


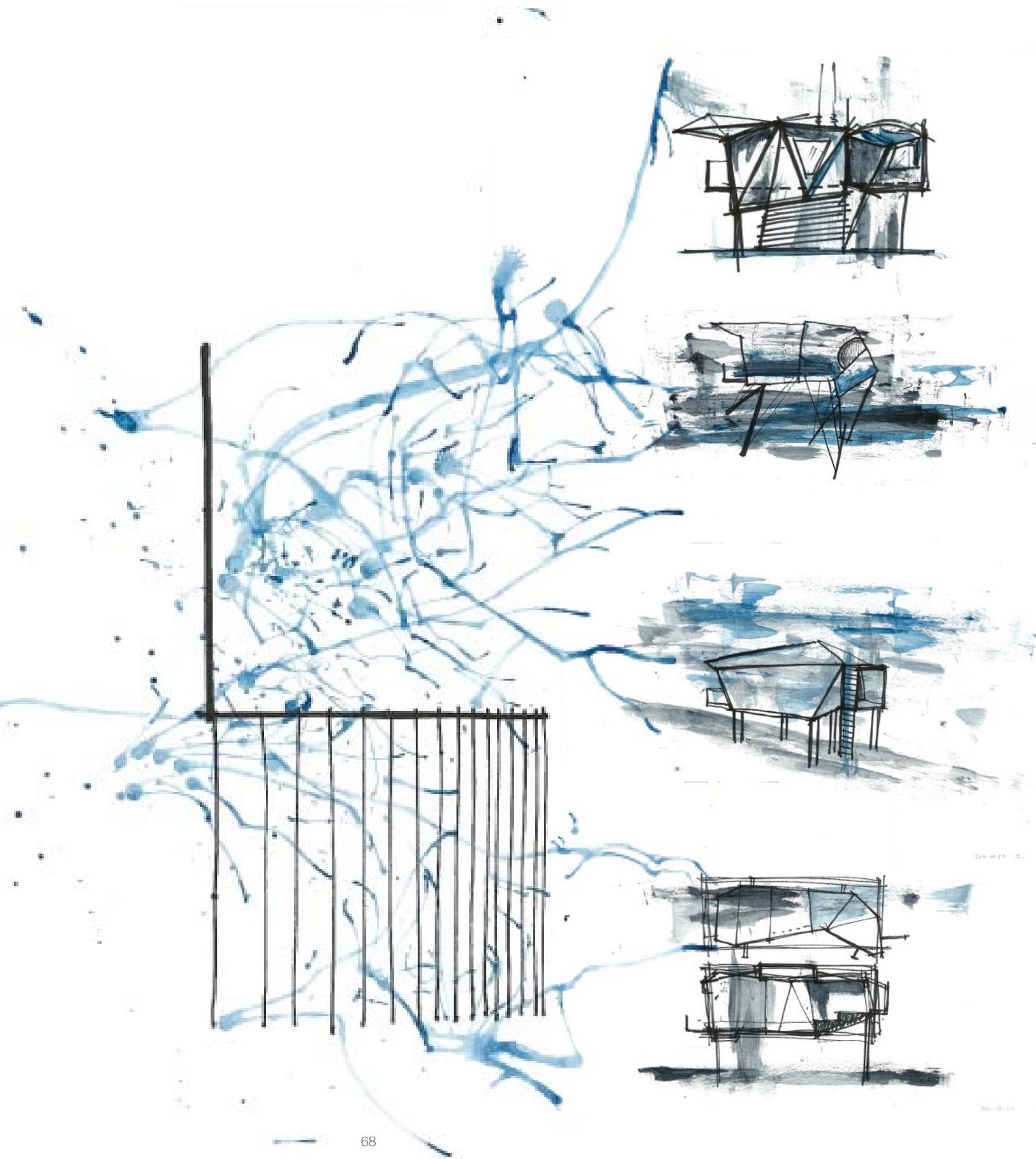
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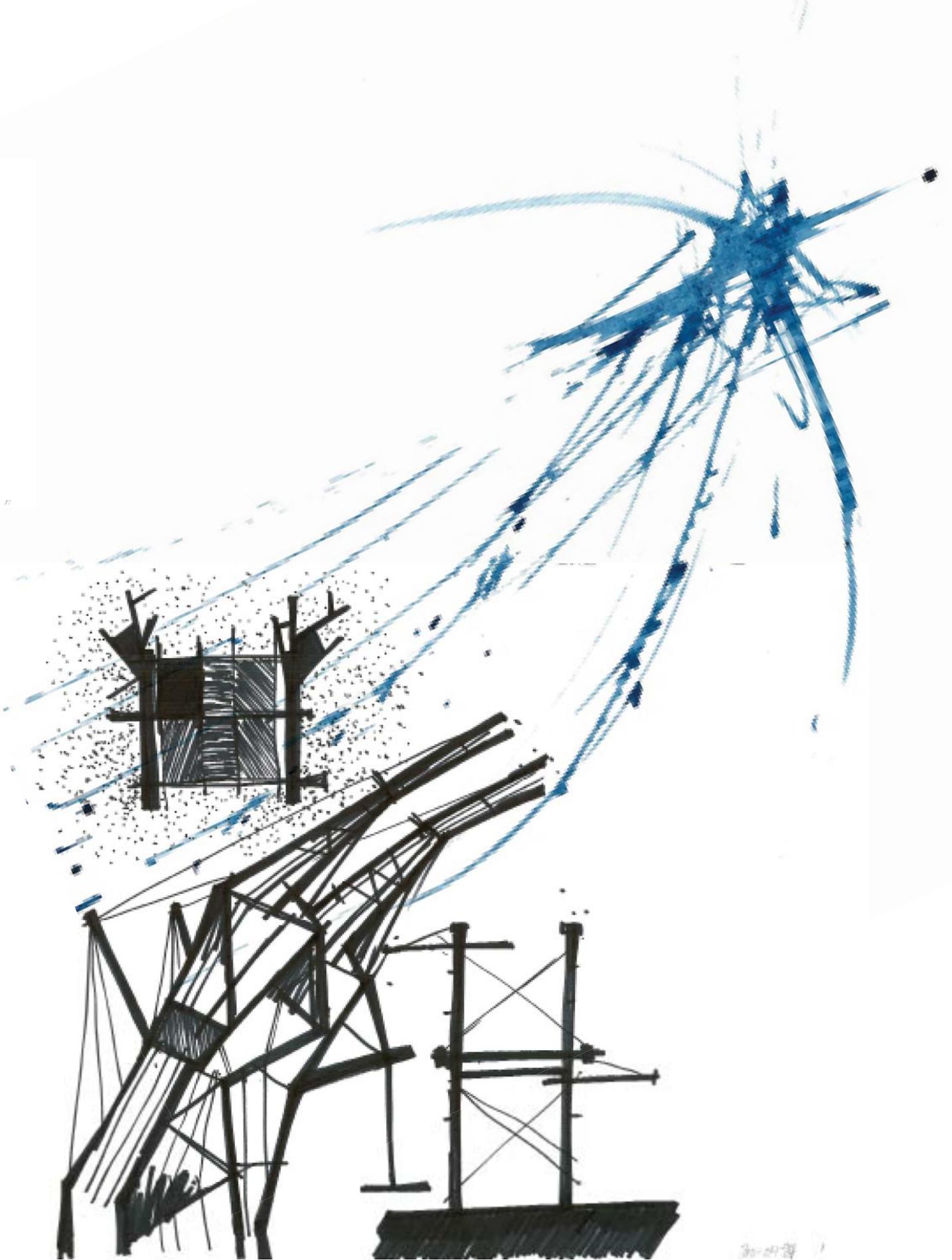


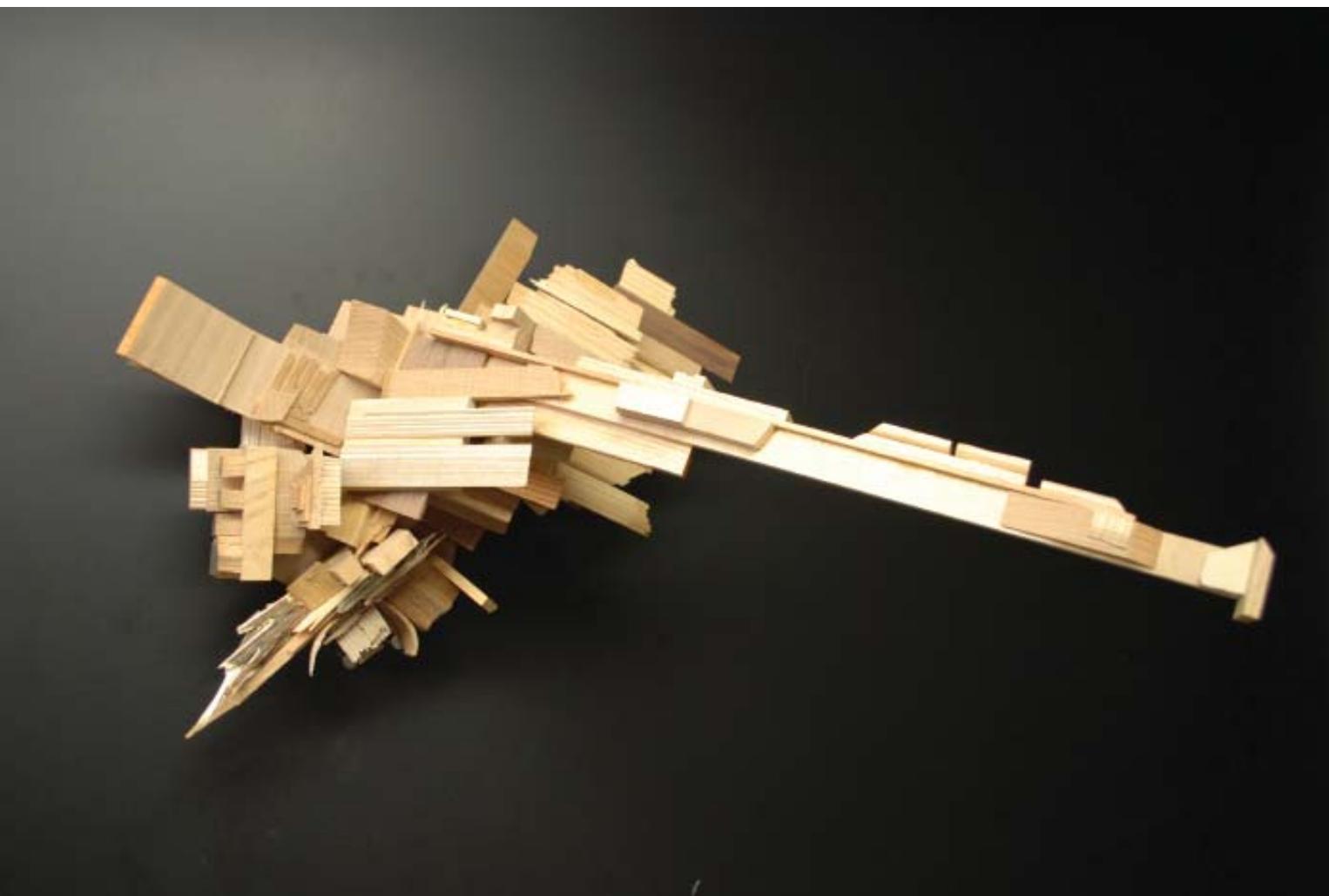


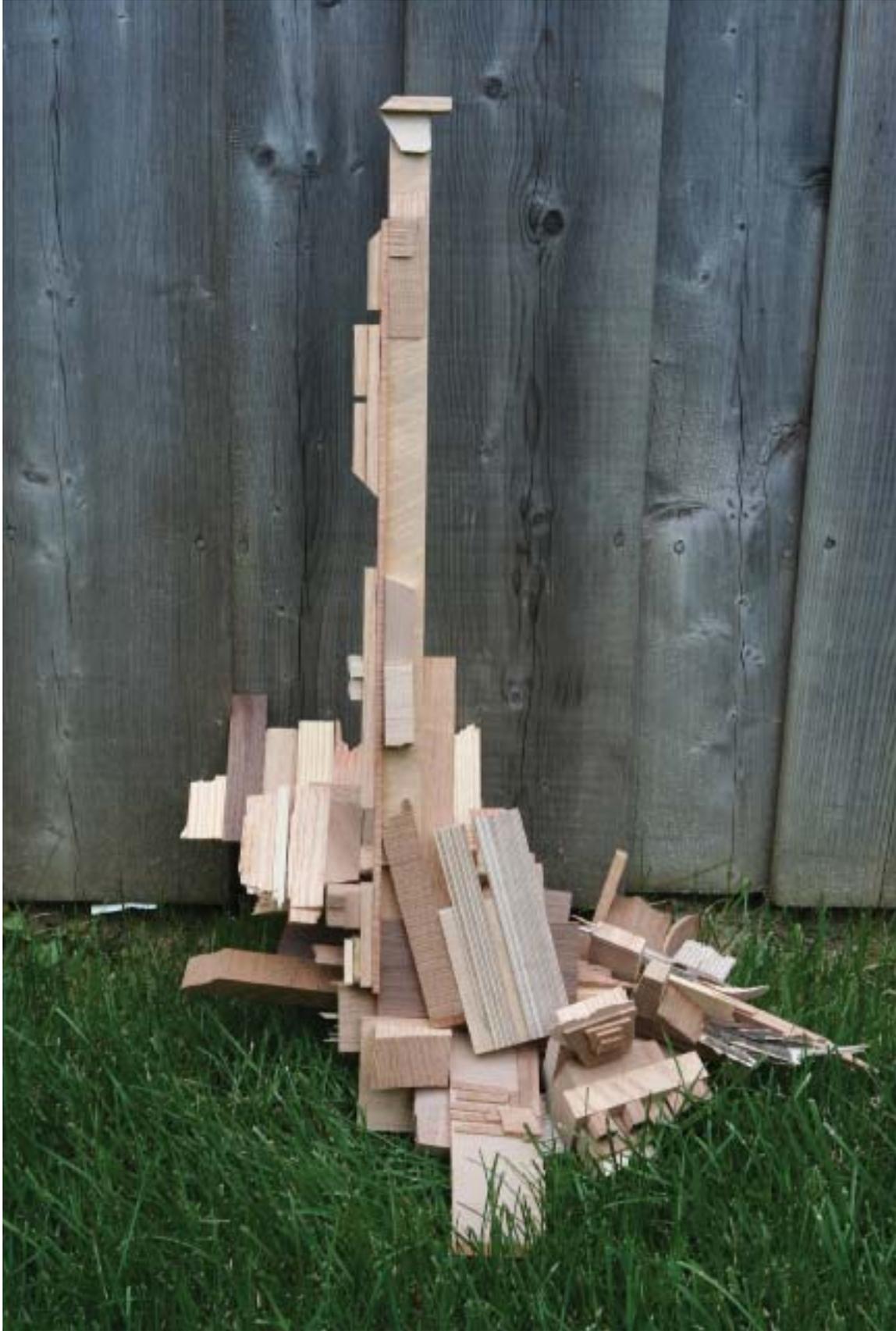












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THE FOLLY

Follies are monstrous creations that serve no particular purpose and can be attributed to garden ornaments and sculpture. They exist as decoration and falsely appear to have a particular function. Most designs are eccentric adorning qualities of fruit, abnormally tall turrets, and unconventional use of materials which calls attention to the construction through satire and caricature. Often, follies have been falsely depicted as something it is not, for example, a folly may appear to be a ruin eroded away by time when in fact the folly was originally designed and constructed in this manner. Follies exist around the globe and originate from the late 16th and 17th centuries.

The choice for this thesis to exemplify the monster through a folly was done purposefully because of the mere fact that a folly generally does not contain a particular program. Removing function from the architecture, in this case, was done so because it was important to concentrate on the task of defining what monster meant in terms of revealing meaning in architecture through representation and interpretation. The first examples are follies from various locations in Great Britain, which help set the stage of how a folly





18th Century Folly

Folie means “madness” in French, and although it also refers to small constructions hidden by dense foliage, its meaning – even applied to the built objects - differs considerably from that of the English word “folly”: “The name generally given to these dwellings by the eighteenth century was “little houses,” no because they were small, but from a play on words deriving from popular humor. The idea of the folie was obviously associated with madness, and at that time lunatics were confined in the Hopital des Petits Maisons or Little Houses – not the first instance, perhaps, nor the last of a Parisian pun.” From Bernard Tschumi quoting Michel Gallet, *Paris Domestic Architecture of the 18th Century* (London: Barrie and Jenkins, 1972). Although Tschumi is referencing the meaning of madness that is inherent in the word folie, this thesis refers to it as an the 18th century English little house.





Fig. 6.1 Page 88: King Alfred's Tower

Fig. 6.2 Page 89 top: Old John

Fig. 6.3 Page 89 bottom: Broadway Tower

Fig. 6.4 Left: Mowcop Castle

might exist in the landscape.

Through research and the process of architecture (drawings, paintings, texts, and sculpture), this thesis has engaged architecture and explored it through an imaginative process. It has served as a vehicle in which design has been engaged through critical thought and has opened the opportunity for discussion on the subject of monsters. The final images are examples of the folly as depicted through this body of work and the process in which it was explored.

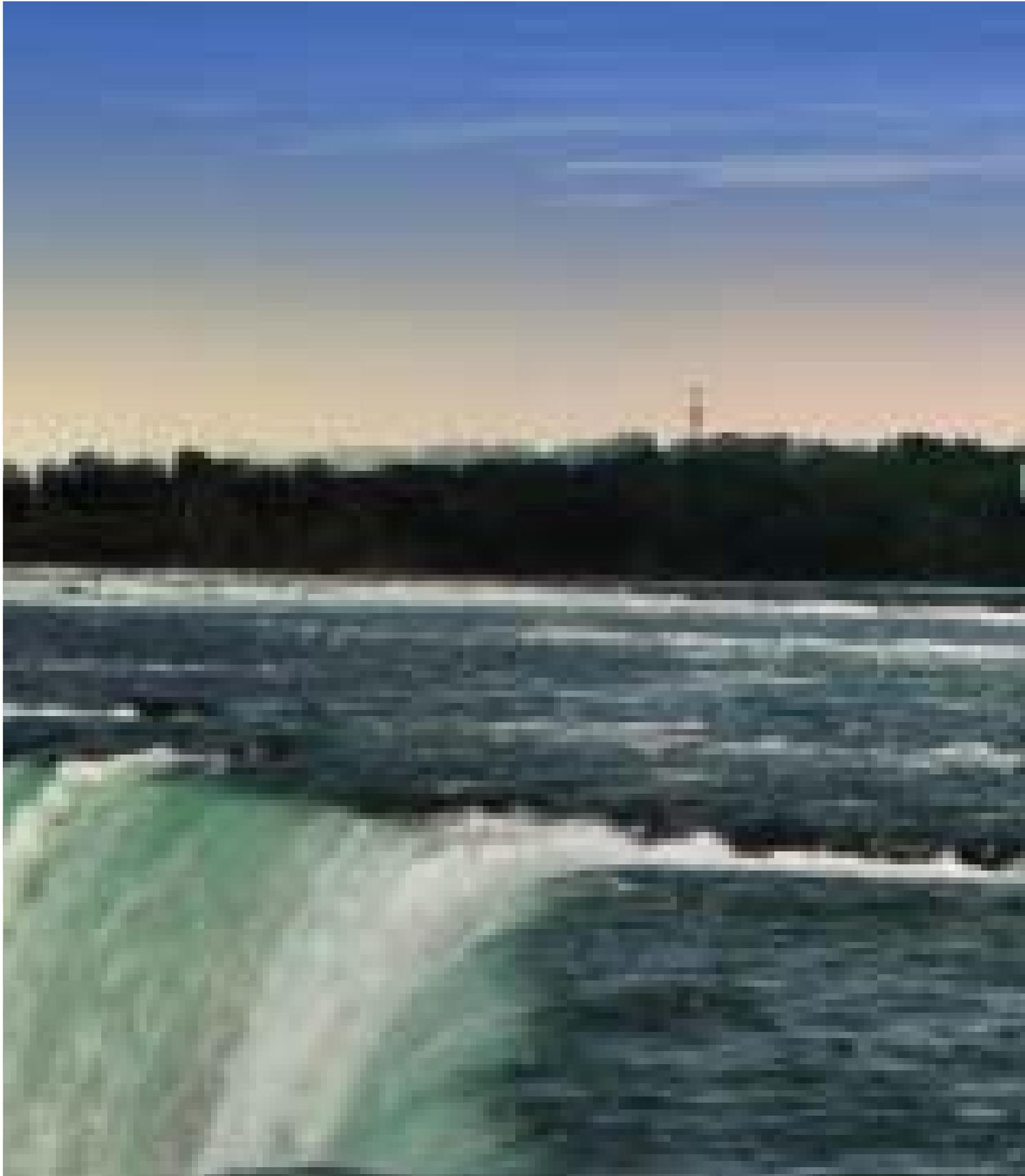
Fig. 6.5 Pages 92-93: Farm

Fig. 6.6 Pages 94-95: Power

Fig. 6.7 Pages 96-97: Home













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BIBLIOGRAPHY

Adamowicz, E. (1998). *Surrealist collage in text and image: dissecting the exquisit corpses*. Cambridge University Press.

Alberti, L. B. (1988). *On the Art of Building Ten Books*. (N. L. Joseph Rykwert, Trans.) Cambridge: MIT Press.

Alberto Pérez-Gómez, L. P. (1997). *Architectural Representation and the Perspective Hinge*. The MIT Press.

Bettella, A. (2010). Exuberance, I Don't Know; Excess, I Like. *Architectural Design* , pp. 70-77.

Bono, E. d. (1967). *The Use of Lateral Thinking*. Middlesex, England: Johnathan Cape.

Broadbent, G. (1973). *Design in Architecture: architecture and the human sciences*. London: John Wiley & Sons.

Broadbent, G., & Ward, A. (1969). *Design Methods in Architecture*. New York: George Wittenborn Inc.

Cohen, J. J. (1996). *Monster Theory: Reading Culture*. Univ Of Minnesota Press.

Darwin, C. (1998). *The Origin of Species*. Oxford University Press.

Donougho, M. (1987). The Language of Architecture. *Journal of Aesthetic Education* , 53-67.

Eco, U. (1984). *Semiotics and the Philosophy of Language*. Bloomington: Indiana University Press.

Eisenman, P. (1996). En Terror Firma: In Trails of Grotexes. In K. Nesbitt, *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory*. New York: Princeton Architectural Press.

Elizabeth Diller, R. S. (1996). *Flesh*. New York: Princeton Architectural Press.

Frasconi, M. (1991). *Monsters in Architecture, Anthropomorphism in Architectural Theory*.

Savage, Maryland: Rowman & Littlefield Publishers, Inc.

Frasconi, M. (1984). The Tell-the-Tale Detail. In K. Nesbitt, *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory*. New York: Princeton Architectural Press.

Gombrich, E., & Ernst, K. (1938). *Principles of Caricature*. Cambridge University Press.

Gombrich, E., & Kris, E. (1940). *Caricature*. King Penguin Books.

Greene, H. (1976). *Mind and Image: an essay on art and architecture*. Lexington: University Press of Kentucky.

Hutcheon, L. (1985). *A Theory of Parody*. London: University Printing House, Cambridge.

Kayser, W. (1966). *The Grottesque in Art and Literature*. McGraw-Hill Book Co.

Kearney, R. (1988). *The Wake of Imagination*. Minnesota: University of Minnesota Press.

Kirk, T. (2008). Monumental. *Perspecta 40 Monster*, 6-15.

Klinger, E. (1971). *Structure and Functions of Fantasy*. New York: John Wiley & Sons, Inc.

Koestler, A. (1969). *The Act of Creation*. London: Pan Books.

Lawson, B. (1997). *How Designers Think: the design process demystified*. Jordan Hill: Architectural Press.

Lokke, K. E. (1982). The Role of Sublimity in the Development of Modern Aesthetics. *The Journal of Aesthetics and Art Criticism*, 421-429.

Norberg-Schultz, C. (1983). Heidegger's Thinking on Architecture. In K. Nesbitt, *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory*. New York: Princeton Architectural Press.

Norberg-Schulz, C. (1975). *Meaning in Western Architecture*. New York: Praeger Publishers Inc.

Perez-Gomez, A. (1994). *Polyphilo or The Dark Forest Revisited: An Erotic Epiphany of Architecture*. The MIT Press.

Pérez-Gómez, A. (1984). untitled. *Journal of Architectural Education* , 58-60.

Santayana, George. (1961). *The Sense of Beauty*. New York: Collier Books

Schank Smith, K. (2008). *Architect's Sketches: Dialogue and Design*. Oxford: Architectural Press.

Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. London: Temple Smith.

Schuyt, M., Elffers, J., & Collins, G. (1980). *Fantastic Architecture*. New York: Harry N. Abrams.

Steig, M. (1970). Defining the Grotesque: An Attempt at Synthesis. *The Journal of Aesthetics and Art Criticism* , 253-260.

Tschumi, B. (1996). *Architecture and Disjunction*. Cambridge: The MIT Press.

Tschumi, B. (1988). Notes Towards a Theory of Architectural Disjunction. In K. Nesbitt, & K. Nesbitt (Ed.), *Theorizing A New Agenda for Architecture*. New York: Princeton Architectural Press.

Tupitsyn, M., Drutt, M., Lissitzky, E., & Pohlmann, U. (1999). *El Lissitzky: beyond the Abstract cabinet : photography, design, collaboration*. Yale University Press.

Venturi, R., Scott Brown, D., & Izenour, S. (1977). *Learning From Las Vegas*. Massachusetts: The Massachusetts Institute of Technology.

Wollheim, R. (1971). *Art and Its Objects: An Introduction to Aesthetics*. New York: Harper & Row Publishers Inc.