

WILD THINGS

by

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ABSTRACT :

Wild Things is a collection of domestic designs that follow the principles of biophilic design, anti-design and post-disciplinary craft processes. Designed in the spirit of experimentation and imagination, this work taps into the phantasmagorical properties that our everyday furniture and objects can hold, if thought of outside the constraints of modernism and mass production. Using visuals borrowed from the natural world, *Wild Things* examines the outcome when biophilic design is executed by hand using craft-based techniques.

Keywords: Biophilic design, anti-design, post-disciplinary craft, furniture design, object design, handmade process, craft.

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WILD THINGS

CHAPTER 1:

INTRODUCTION:

Objects have always been “living” presences in the human habitat; presences with which, since the dawn of time, we have established complex relationships of a psychological, symbolic, and poetic nature: in this sense, objects are never just simple tools, they are fragments of an anthropological universe, a universe at the same time material and immaterial, functional and superfluous, about which we still know very little. (Andrea Branzi 2016, 2)

I have always enjoyed the company of objects. The act of choosing an object from the world and bringing it home and into my personal space is an experience I find very pleasurable, excited by its newness and potential. Regardless of its age, I find hidden meanings and fantastical ideas behind each form and its relationship to my life. Whether the chosen object has practical function or is purely decorative, I always consider its aesthetics before I even pick it up. Does this object suit me? Does this object flatter my tastes? Is this object unique? Though subjective to my personal inclinations and experiences, these questions reveal an alternate perspective. They presumably are part of an inner monologue, directed at my public and private personas as a designer and a consumer. One might call this the ‘standard’ view of an object — something that sits quietly in the corner, existing only for my pleasure and in some cases used as a tool. The object patiently bears my questions appearing coolly indifferent to my judgements, and yet when I pause and consider the object before me, I realize that my questions cannot come solely from within — I simply did not have them before my encounter with the ‘the thing’. This ‘thing’, the object, is prompting me and as I look closer, I must conclude that we are in a discursive relationship with one another.

It is this dialogue, the connection between myself and the material world, that is of great significance to me. This connection, both unattainable and profoundly real, is one of the

many reasons why I became a designer. I feel it is through making that there is an intrinsic link between my perceptive understanding of the world and the object within it, that comes through making and materiality. Through my research and practice, I have learned, and hope to demonstrate in this paper, that objects are not passive. They are active characters in our lives that help shape the world we live in on multiple levels of perception — from the outward aesthetics of the visual world down into the vast and complex landscapes of the soul. Objects act upon space, both inner and outer, in transformative ways, and through an understanding of both their physical and metaphysical properties, I as the designer can also act in transformative ways, specifically in my potential to bring the outside in. When I reference the ‘outside’ I am speaking of nature, or more precisely, a ‘natural aesthetic’. Formally speaking, I am acknowledging the squiggles, bumps, lumps, movement, colour — the absence of straight lines — representing the chaos and charisma of the natural world. This is why I design with my hands. Hands, like incredible pieces of technology, are capable of truly astounding feats of precision, but they are also unpredictable, prone to ‘mistakes’, or more accurately, to ‘variation’. Acting as a filter in this sense, and the materials that pass through are naturalized, sifted through chaos, and as such, imbued with life.

A craftsperson from an early age, working with my hands was initially, and still is, an enjoyable way to pass the time. It taught me patience and a new sense of wonder through an understanding of the intrinsic properties of each material that I chose to use. The techniques of manipulation that I was learning in relation to the innate characteristics of the materials and the development of manual skill, brought insight into the aesthetics of the built world. As I delved deeper into understanding the foundations upon which function relies, I came to better comprehend the emotive intentions that go into the decoration of the built world. I became transfixed by the endless possibilities of expression that objects could hold. As my curiosity increased, I eventually found myself disheartened by the modern attitudes applied to the

majority of our common furnishings. The popular styles, as they became more streamlined, lacked playfulness, projecting only the aura of machination and economics rather than any true reference to the human mind and its boundless imagination.

As I began this journey into my thesis, I knew that I wanted to showcase the human imagination and the broken ingenuity of the hand. I set out to embrace that which I could not predict, the decisions that fall outside of design. While I knew that in creating furniture I would have to rely on my formal training, I craved a chance to explore the avenues of amateur style and essentially ‘deformalize’ my practice. In the art world, this is quite normal — there are no rules. Conversely, my background in furniture design is steeped in considerations that revolve around practicalities, function, and certainly rules. The interdisciplinary platform provided the perfect circumstance for me to explore a free expression of making that has allowed me to redefine objects that are equal parts art, design, and craft.

1.1 RESEARCH QUESTIONS:

My questions revolve around the integration of a design ideology that goes against the modernist view of object design, where mass produced designs are the standard. Examining what happens when a more human-centric and nature inspired aesthetic is adopted instead. What kind of effect can such an aesthetic ideology have on our imaginations and psychological well-being? While this question cannot be answered easily, the discussion around it is worth having insofar as it offers the potential for free expression and interdisciplinary thinking. Considering a tangential ideology around handmade objects and their inherent qualities can replicate nature's untamed effects to counter the fixed, rectilinear, and in my opinion, stifling spaces that inundate our modern built environments. Biophilia is our innate desire for a connection with the natural world, with the word's root literally meaning ‘a friendly feeling towards nature’. In attempting to give an object ‘life’, I hope to suggest that objects can stimulate

our senses and help induce creativity and maybe even become a means towards undoing the flattened features of the today's standardized urban environment. Another way that I aim to achieve this is by pairing the theories of biophilia with the concepts of anti-design. The anti-design movement emphasizes the notions of irony and kitsch to subvert the normative ideals of modernism, using schemes of bold colour palettes and distortion of scale. This movement also highlights the inclusion of anti-functional design features like explicit texture or decoration and ornament. Through the aim of incorporating these concepts into my created works, I aspire to arrive at eclectic designs that can perhaps become a remedial to the industrialized objects of present day.

The central questions revolving around this discussion are:

- How can design move beyond mimicry of nature to capture its essence metaphorically and how can this representational reality be used to positively shape not only physical space but also affect our psychological well-being in a positive manner?
- If applied, can the creation of an 'living aesthetic' using the theories of Biophilia, Anti-Design, and Post-disciplinary craft help to benefit and stimulate our imaginations during our time spent inside our built environments?
- What can be translated and expressed through hand-making? Or rather, what is lost when the hand is removed from the design equation of our made objects?

I have investigated these questions following a design process of practice-led experimentation in the studio, where I use a self-reflexive approach in the creation of biophilic objects for speculation in the design industry. I felt necessary to showcase my research findings through the functions of quotidian furniture objects since it is through our furnishings that we decorate our interior spaces. These silent companions and the narratives of their features are present in our everyday lives and because of this, become an important position to focus my concepts. Through an exploration of the ornamentation of biophilic design and anti-design,

considered through handmade processes found in post-disciplinary craft, I have investigated contemporaries in the field to help analyze my designed objects. With the aim of creating interest and discourse on the topic of imaginative ornamentation that our objects could become, I have created a domestic scene of a seat, surface, light and mirror for consideration as handmade, biophilic, anti-design art-objects.

CHAPTER 2:

THEORETICAL FRAMEWORK

My central goal in establishing a new type of interdisciplinary object that combines the theories of biophilia, anti-design and post-disciplinary craft, is to create space. The space I am speaking of is primarily abstract and fanciful in the sense that it appeals directly to the imagination. Acknowledging that objects have agency — a fact that I take for granted as an *a priori* building block of my thinking — I began to wonder at the psychic politics of the sleek and smooth world of mass-produced, machine fabricated design. The discussion of mass-production is a very large conversation that of itself falls out of the scope of this thesis. Rather than argue against mass production, I am more interested in the fact that it exists. There is nothing to argue so to speak, since it is the world in which we live and it therefore lives within us. The furniture and objects with which we align our lives are generally produced en masse and designed to be produced in this way — inorganic materials, CNC cut, flat-packed, etc. — which creates a certain aesthetic that is visually ‘perfect’, but emotionally vacant. Sleek and smooth surfaces cut in crushingly straight lines and algorithmically perfect curves project through our senses and absorb into our minds but our physical reality is contrary to this information. We are not sleek and smooth and perfect. We are flesh and bone, a wild tangle of chaos and evolution, steeped in a timeless tradition of variation for the sake of variation. Caught in the mechanized stillness of an ‘en masse’ world there is a palpable dissonance with what I feel are the natural inclinations of the human experience of movement and variation. We are born from the wildness of nature and, as I will discuss further, being placed to live amongst the hyper-organized properties of built objects and spaces, goes against our fundamental natures. In this light, objects designed with this variation in mind, have the potential to create a space for movement within the imagination. Using different aesthetic techniques borrowed from the aforementioned movements in biophilic

design, anti-design, and post-disciplinary craft, I attempt to set things in motion within the mind and allow for organic dialogue with the material world.

2.1 BIOPHILIA

The biophilic hypothesis, developed by Edward O. Wilson and Stephen Kellert, is the belief that we have the innate tendency to seek connections with nature and other forms of life. Although the idea is rooted in biology and naturalism, biophilia has been adopted by the world of architecture to help advance our general well-being during our time spent indoors. The basic theory is that if buildings allowed for more light, diverse space, attention to details and natural types of ornamentation are applied, then we can exist in a more 'relaxed state'. Extensive studies by Roger Ulrich, a professor of environmental health design, have been done on the effects of visual cues that evoke nature in hospitals. Studies that show even a simple poster of a landscape, hung on a hospital wall can have positive effects on the well-being of post surgery patients and their rehabilitation times (Ulrich 2003). Ulrich's research made me begin to question how far representations of nature could be extended to produce even greater effects of well-being and how I could extend the idea of biophilia into my own practice. The majority of the findings from my research entailed the integration of live plants into our indoor spaces and Ulrich's study was the first I came across, which incorporated representations of nature and the effects that they may have on their participants. Since I knew that I would be dealing with faux nature within my practice, this particularly peaked my interest and I began to consider biophilia as a development of decoration. That said, considering biophilia more as a tool of ornamentation, I set my attention to a greater extent on the qualities it could produce as a product of delight rather than overall well-being. In my opinion, delight is an aspect of well-being and although it is a difficult phenomenon to measure, it can be quite simple to feel. With this feeling in mind, I began to apply biophilia as a device in strengthening the connection to the

natural world and the benefits which exist in its visual effects — to bridge the gap between urban settings and natural landscape.

BIOPHILIA AS ORNAMENT

The act of mimicking nature has been a habit of humans from the onset of our first artistic inclinations. From art to architecture, we tend to develop styled versions of the natural in our fabricated world. The rise of the industrial revolution from which modernism was born, induced the popular belief for the literal mimicry of nature to become taboo. Ornamentation was frowned upon, form demanded pure function and the materialities of concrete and glass began to dominate the visual landscape of our urban centers. It is believed that the hard and flat visuals which inundate our everyday experiences within this urban setting, are the cause of negative influences on our psyches. The classic maxim of post-modernist architect Robert Venturi I believe says it best stating, “Less is a bore”, an antidote to modernist Mies van der Rohe’s dictum of “Less is more” (Schudel 2018). According to a research study by Ulrich that investigated the effects of the visual cues of nature, or lack thereof, in the production and regulation of stress in individuals, “most urban settings lacking nature (streets, parking lots, building exteriors without nature, windowless rooms) are unsuccessful in producing restoration, and in some instances worsen stress” (Kellert 2008, 91). If this is true, and stress can be produced and maintained from the experience of our urban environment, then it is no wonder that there is a longing for reprieve from these visually stressful situations. It is only in the past 10 to 20 years where we have started to look back to nature for a solution to the oppressive effects that this ‘new’ landscape of concrete and glass has created. The idea that we have built this harmful environment for ourselves may seem oxymoronic to a designer’s understanding, but in the words of Stephen Kellert, “if we designed ourselves into this predicament we can theoretically design ourselves out of it” (Kellert 2008, 5). Biophilic design provides one possible

answer as a remedy to the designs of tomorrow. In essence, biophilic design acknowledges urban living as a reality, but proposes to integrate nature and natural forms into the built environment with the goal of creating a biophilic response which in turn will foster individual well-being. It was through this intention of instilling the important connection with nature back into our daily modern lives that Wilson and Kellert, in collaboration, began to theorize which specific elements from nature can be implemented into the designs of our built environments.

Although, Wilson was the missionary for biophilia, it was predominately Kellert who developed the term biophilic design effects and compiled the list of natural attributes that architects could reference as they designed with the benefits of nature in mind. As with any study of an ornamental style, “understanding of their structure and vocabulary is an important step to their creator’s world” (Trilling 2001, 35). When that creator is nature itself, there is a vast expanse of inspiration to pull from. Kellert in his book, *Biophilic Design*, has developed over 70 biophilic design attributes (Kellert 2008) which fall under 6 main biophilic design elements: environmental features, natural shapes and forms, natural patterns and processes, light and space, place-based relationships, and evolved human-nature relationships. It is interesting to think of the natural world as a type of design model where the aesthetics of the natural can become a successful pathway towards a plentitude of shapes and forms to draw inspiration from. According to Kellert, “By discerning beauty and harmony in the natural world, we advance the belief and sometimes the understanding of how certain configurations of line, space, texture, light, contrast, movement, prospect, and colour may be employed to produce analogous results in the human experience” (Kellert 1997, 36). This thought, along with the idea that the elements which exist in nature remain some of the best holistic designs in existence, makes it clearer as to why we have been borrowing from nature for our own designs, long since humans began painting animals on cave walls.

Yannick Joye, a researcher of environmental psychology, explains, “Many natural objects are structurally efficient and are characterized by an economic and delicate balance between form and function” (Joye 2011, 27). It is precisely this design efficiency found in nature that generates its secret allure. James Trilling, an expert on ornamentation and a historian of the arts, shines light on the universal thought found behind aesthetics which are considered beautiful. He writes, “graceful ornament, to be effective, must rest on a foundation of strength, just as strength, to please the eye, must incorporate a measure of grace” (Trilling 2001, 35). In both references, Trilling and Joye allude to the fact that for an item to be considered pleasing it must contain both intuitive structure and an element of elegance, making a strong case for the use of biophilic design as the main theory behind my designed objects. As a maker of furniture, it is exactly these two characteristics that I strive for in all of my designs, style and structure. One to please the eye and the other to satisfy the body.

A further thought towards the argument as to why we find the natural so pleasing, is the fact that biological structures found in the natural world of plants, trees, and water ways at base level share similar structure to our own genetic makeup. Architectural theorist Nikos Salingaros describes these structures as,

the geometrical rules of biological forms with which we share a ‘template’ and this structure is believed to elicit a general response in humans of recognizable ‘kinship’ that cuts across the divide between living and inanimate form. Manmade structures with basic properties in common with our own bodies resonate, ‘strumming the strings’ of our biophilia. Mechanisms of living structure are either the same, or they parallel the basic organization of biological systems. Biophilia, therefore, mixes the geometrical properties and elements of landscape with complex structures found in — and common to — all living forms. (Salingaros 2015, 9)

We have evolved in the natural world with our sensory organs and systems developed in such a way as to be able to respond to the natural geometries around us. The argument that Salingaros makes is that if we lack these signals of colour, fractals, scaling, and complex symmetries within our daily environment, our bodies will produce signals of anxiety and illness

(Salingaros 2015, 9). Therefore, if we interact with a minimalist environment, lacking in any ornamental variety on a regular basis, then we are not receiving the visual 'nutrition' that our biological instinct craves. With this new evidence that works against the rules of modernism, an ideology that has made its way into the very fabric of present-day society, I feel more determined in making biophilic, anti-design objects that can take part in combating the dreariness of the post-industrial world.

BIOPHILIC WELL-BEING

Biophilic design elements at their fundamental core resonate with human beings. We have come to learn the reasons through research, how experiencing nature, both directly and indirectly, affects our mind and our bodies. Nature, for the most part, can do wonders to help us relax, by way of calming heart rate, overall stress reduction, cognitive functioning, productivity, and social behaviour (Heerwagen 2009). The general overview of making a case for why it is important to have nature or representations of nature in our lives has become a popular topic in the discipline of architecture, especially for the healthcare sector. My research is less directed at the effects that biophilic design has on physical well-being, for example, recovery time after surgery, and is more focused on emotional well-being; specifically the emotion of delight. Using visual representations, or rather, the indirect and symbolic occurrences of the image of nature, and how these natural references can enhance decorative ornamentation for interior use. My interest in the concept of well-being is more as a principle of design rather than a biological fact, to be applied in the creation of our made objects.

Biophilic design qualities are experienced through our senses of sight, sound, touch, smell, taste, and movement. As a designer, sight generally dominates the way I think about my surroundings. What we see, be it reality or representation, can trigger physical, emotional and cognitive responses. According to Kellert, "aesthetically attractive nature particularly arouses our

interest, curiosity, imagination, and creativity. By contrast, when we lack visual contact with the natural world, such as a windowless and featureless space, we frequently experience boredom, or fatigue” (Kellert 2008, 11). In other words, if we consider the eyes as windows, when put in a windowless room, robbed of colour, light, stimulation and variation, the inner space is left in darkness and our imaginations suffer. Studies show that even being inundated by straight lines and right angles without any occurrences of a curves, can affect our general well-being. The appearance of curves within our built environment creates positive arousal within our brains (Banaei 2017) and it is this stimulation that gives us the feeling of calm engagement. I consider the banality of the environments we have built, to be the direct account of why most experience malaise when stuck in these settings without access to the presence of any natural features.

What resonates with me the most, when pondering the notion of well-being is a sense of delight, especially when considering ornamental objects. While delight is a state of psychological well-being that can be a fleeting emotion, the effects can do wonders on our psyches even if it is just for a moment. Considering what well-being means in regard to nature, I relate it to the emotions of awe and curiosity. This curiosity which Kellert lists in his breakdown of the biophilic design attributes, “reflects the human need for exploration, discovery, mystery, and creativity, all instrumental in problem solving” (Kellert 2008, 13). The feeling of awe relates to recognizing a power which is greater than us and it is through this sense of wonder that we can allow our imaginations to expand, I would argue, infinitely.

2.2 ANTI-DESIGN

Anti-design is known by many names: radical-design, counter-design, creative-design, pop-design or super-design, to name a few. This was a movement consisting of a collective of designers and architects who aimed for design to be just as radical, super, creative and counter culture as the terminology of the movement implies. No matter which name it is referred as, the

fact that remains a constant in the movement's approach is a revolutionary spirit of wanting to create change and produce new visions of what the world and its objects can be. It is thought as a design movement which belongs to post-modernism, or even some critics claim gave rise to the post-modern era (with the inauguration of the term 'post-modernism' by architectural critic Charles Jencks in 1972), (Palmer 2014). My reasons for labeling my work as anti-design rather than post-modern are for the subtle differences between the two terms. Anti-design is linked to a more artful approach where the inclusion of function is secondary. It can be thought of as an art act within the territory of design. Whereas post-modern design is inclined to keep function at the forefront while the form is free for experimentation. Since my designs question both the practicality of function along with experimentation of form, I felt a closer connection to the term anti-design than to post-modern. There is also the fact that I consider my interdisciplinary designs to be as much in the scope of art as well as design because of the personal expression I have imbued into each of my works.

The anti-design movement started in Florence in 1965, stemming from a group of architects¹ who wanted to change the world of design from the rationalism and functionalism that the modernist movement had been selling up to that point. A move towards both emotionalism and functionalism was what this new crop of designers and architects were striving for in their contemporary designs (Martinique 2016). And, like them, I feel an affinity with radical, anti-design ideologies because they take into consideration free spirit in design and fabrication. In my own experience as a furniture designer, a large part of the industry's goals are tied to commerce where many ideas are linked to an efficient and compact style of living where the clean lines, easy assembly, and low prices dictate function and aesthetics. The politics of not being challenged by our objects, of our individualities being buried by the homogeneous effects

¹ Emilio Ambasz, Franco Albini, Dario Bagnoli, Lapo Binazzi, Andrea Branzi, Germano Celant, Gilberto Corretti, Pietro Derossi, Piero Gilardi, Ugo La Pietra, Roberta Meloni, Alessandro Mendini, Adolfo Natalini, Gaetano Pesce, Gianni Pettena, Franco Raggi, Ettore Sottsass, Charlie Stendig, Cristiano Toraldo di Francia

of conformity maybe easily ignored but the psychological effects are real. This can especially be felt, I believe, when the human hand is removed from the process of design — even up to where ideation sketches are computer generated. It is my belief that the emotive qualities of the human spirit are difficult to translate through machine fabrication and have been subverted by the field's overarching powers that be; dictated by obvious economical and competitive production goals. For me, the closest translation of concept upon the world is through our hand to mind connection. The designers of the anti-design movement, however, were actually on the other spectrum of traditional crafts people and were rather excited about the possibilities of the future of technology and what possibilities it could hold. The foundation of the movement was during a different era, unlike today, where mass production is the norm and we now bear witness to the impact our over-industrialized, global society has had on the environment. Fundamentally speaking, we know that excess mass production is not the answer. While I don't expect to find a solution for a utopian future of production within the scope of this paper, I do put confidence in the concept of 'fewer better things' and the slow movement that is carried by a craft mentality. What drew me into investigating the anti-design movement, was for its bold reaction to what society's agenda was arguably at the time, pure functionality without any emotion, and the anti-designer's dream of creating a world that went against this thought and went on to create works which supported both emotion and function.

Anti-design was trying to move away from the political climate which was taking precedence over the entire atmosphere of design at the time. It was agreed, that a universal design ideology of form following function, should be centred around neo-conformist ideals (Martinique 2016). The anti-design movement, therefore, sought to focus on critical social consciousness and cultural awareness to put forth a new perspective of what design could be. The new perspective on the design process was attempting to shine a light on the consumerist society that had taken over the political ideals of the time. As part of the introduction to the

MOMA catalogue for the first major North American exhibition of anti-design in 1972, curator Emilio Ambasz notes the temperament of the Italian designers, writing:

They have thus developed a rhetorical mode to cope with these contradictions. Convinced that there can be no renovation of design until structural changes have occurred in society, but not attempting to bring these about themselves, they do not invent substantially new forms; instead, they engage in a rhetorical operation of redesigning conventional objects with new, ironic, and sometimes self-deprecatory sociocultural and aesthetic references. (Ambasz 1972, 19)

In trying to adopt this approach in our contemporary times, I feel that the mass production of objects has taken up a great portion of the social values of today and we need a reminder of the natural forms that we have covered up with our constructed environment. The aesthetic of modernity, which has become the aesthetic normative of our times, needs yet again, the revolutionary spirit that arose in Italy over fifty years ago.

The minimal and easily reproducible object of today diminishes the conventions of handmade craft. If we adopt mass production values whole heartedly, then we lose out on an important section of our own creativity that could eventually disappear. Luckily, this isn't quite the case and there seems to be a rise in contemporary artists, designers and makers who are adopting sentiments similar to the anti-design movement. Instead, creators breaking free from the forms of prescribed modernity, are designing through atypical application of materialities, using common and inexpensive materials of paper pulp, concrete or tin foil in their designs. It is the ingenuity, and daresay the naivety of style, of the maker that becomes the freshness now celebrated and valued more so than the previous streamlined aesthetics of which we have become accustomed.

2.3 POST-DISCIPLINARY CRAFT

Post-disciplinary craft is a term used by craft practitioners, theorists and historians to label a new movement in craft which has risen in response to the strict rules of precision that

have governed the discipline for millennia. As a trained woodworker I was taught that if anything is worth making, then it must be made well. In woodworking, especially when building furniture, as little as an $\frac{1}{8}$ of an inch gap can be considered too much of a mistake and almost every precaution is taken to avoid such things. And, while I enjoy building furniture immensely, I never entirely had that element within me which longed for the same continuous standards of perfection. I found myself pursuing the ability to be more expressive in my making, allowing room for material freedom and agency. A fascination with re-engineering my practice to allow for happy accidents and witness the tension between the exactitude of my formal training with the naïve chaos of adopted amateurism. Stepping into the Interdisciplinary Program at OCAD U, I wanted to explore the artistic side of my practice and create in the realm of functional sculpture rather than traditional furniture (which holds function in the highest regard). As I investigated my research topics involving craft, ornamentation, and art, I came across the craft movement of ‘sloppy craft’ — that is also referred to as post-disciplinary craft — a movement which values concept over skill and welcomes messy results. While I do not consider my craft practice to be a true representation of sloppy craft, I do feel a connection to a post-disciplinary craft practice that allows room for the imperfect.

Traditional aspects of craft, for example working in only one material and honing your skills until perfection, are dissolving because of the digital climate of our times. Now we can openly share knowledge through the internet which has brought about a spirit of DIY (Do-It-Yourself) ‘amateur’ making, that allows for the inclusion of unconventional materials beyond the typical craft materials like wood, metal, glass, textiles and ceramics. It is this free spirit of making that I feel most connected to within my own practice, allowing me to focus on materials that were new to me and led to the absence of any wood in my thesis objects; an important exercise towards a more free or artistic approach. There is a high level of precision involved in woodworking that I am happy to explore outside of. Moreover, by adopting completely new

practices such as ceramics, paper-mâché, mosaic etc., I found myself able to embrace an amateurism that I also found quite liberating. Howard Risatti, a craft theorist and historian writes that,

For a craft object to come into existence what must be recognized in addition to functional form is a suitable material and then an appropriate technique with which to work that material into the desired form. In short, to actually make a craft object one must have a conceptual grasp of how a functional-form concept can be ‘filled’ with material via technique. (Risatti 2007, 64)

According to this statement, without some knowledge of the innate nature of the given material, the object could not take its intended form, either aesthetically or functionally, which is exactly what I want to explore, the sincerity of the material and my use of it. This deviation from a perfected motive allows me to meet the object on its level. Once I began experimenting with the materials, tuning in to how they spoke to me, allowed a kind of collaboration to take place between myself and the unintended object. Glenn Adamson explains this approach as “a conversation between the artist and the object, which requires a sensitive and nuanced dialog with the material” (Paterson 2015, 195). I would add that the process is also tied to a sense of joy and the freedom of my imagination to take part in the type of function I both can and can’t imagine in a material form.

A way in which post-disciplinary craft approaches new ways of making lies in reimagining traditional techniques in new applications. Progress occurs when there is room for it to grow, and this takes an open mind willing to step out of the laws of tradition and technique. Risatti states, “technique could be understood in the abstract sense of a process and not simply the property of certain things. With this conceptualization of weaving as process rather than property, things other than baskets could be created, such as fabric, netting and clothing” (Risatti 2007, 64). By separating the process from its traditional function and form, different interpretations of how and where to apply different techniques can be made.

One critical perspective of post-disciplinary craft is the importance of the hand in the visuals of the work. Through showcasing the handiwork that went into the creation of the object, sets it apart from the machine work of mass produced objects. Adamson discusses the ways in which “we value craft’s irregularity —it’s human, indeed humane, character. We want craft to stand in opposition to the slick and soulless products of systemized industrial production” (Paterson 2015, 199). Although, the irregularity that Adamson refers to suggests a new phenomenon in the world of craft, considering there have been moments in craft histories tied to perfection of skill and exactitude of form. I am arguing for the current making atmosphere that celebrates the human touch in the creation of contemporary objects. I believe that our humanity and our connection to nature can be perceived through the aesthetics of objects that are made by hand. According to Risatti, these handcrafted objects embody our unconscious and conscious relationships to the realm of nature, where the former refers to our physiological needs and is nature speaking through us. The latter relates to our subjectivity and the development of creating a higher cognizant plane, one that is moving away from nature. Risatti believes that, “craft objects must be seen as nothing less than a physical manifestation of human subjectivity in confrontation with nature. They are concrete expression of human subjectivity’s worlding capacity, of human subjectivity’s potential to create a world of culture out of the realm of nature” (Risatti 2007, 57). Craft objects, because they are created through our hands, are the children of the natural world. They demonstrate our innate connection to nature and in a way, nature itself.

Through exploration of the handmade qualities of free expression in varying materials, I aim to gain a closer understanding of our connection to nature. Looking to nature to both mimic and evoke her designs through a lens of anti-design, I want to return to the moments of design that move past the modernist aesthetic which has taken over the built landscape of daily urban

life. This diverse aesthetic that has been hidden from sight, the part of nature that we evolved with and then the separation from it, has begun to affect our psyches. By returning to natural ornament in our built environments, through furniture and object design, perhaps we can gain an element of nature back into our objects once again.

CHAPTER 3:

METHODOLOGY

I am using hand fabrication processes of making that focus on materiality to create form. Form, consequently, follows process. The more traditional maxim, coined by architect Louis Sullivan stating, 'form following function' is tied to a modernist design mentality. Rather than applying the concept of form following function in my designed objects, I consider the function the secondary feature. Instead, I am focused on the aesthetic presence of the object to be the primary element, which takes prominence over the obscure practicality contained amongst the ornamentation. Holding biophilic forms in mind as I create, the theory helps shape the objects and deepens the narratives held within their forms. In this section, I will focus on the methods that I have undertaken in my research. As a craft designer, process is everything to my methodology and by working directly with the materials, and allowing the properties of these materials to guide the aesthetic of my design, the final results are a body of work that favours form over function, and more importantly, form that favours a natural aesthetic.

The methodology that I am following in my practice-led research is a self reflexive approach to the design process. As I develop a new stream of biophilic anti-design, using craft based practices of making, I notice the projected effect that these objects may have on the world. Through various processes of hand fabrication I will showcase the similarities between the inconsistencies translated through our beings and that of the variation in which nature presents itself. One might say, I am attempting to use the hand as a mirror to reflect something beyond the comprehension of my mind — the vast vistas of the natural world, the strange polyrhythms of life, light and darkness. Through the study of natural design effects seen through the lens of biophilic design principles, I aim to emulate the natural world through the imperfections of my hands. Since I am considering the topic of biophilia more as a method than a theory, I am mainly focused on the biophilic design effects as elaborated and determined by

the architectural world. Through the use of these biophilic design effects in my own designs, I am able to reflect on what can be determined by my own interpretation of a natural aesthetic and create knowledge that can be used towards new imaginings of furniture design. I am drawn to furniture because of its innate intimacy with the human body. It has an ability to communicate directly, outside of language, making it more readable, shareable, and even transformative. This holds great interest for me insofar as I can use these qualities to transform modern architectural space which may feel boxed in and grey. By placing these ‘living objects’ within such an environment I believe that I can effect change in how the space is perceived and ‘unbox the box’, so to speak. This is by no means a new approach, as design activist from the 19th century William Morris noted, “we have at all times more or less striven to beautify the familiar matters of everyday life” (Adamson 2010, 227). What I am doing is merely a contemporary effort in this direction.

3.1 PRACTICE-LED / DESIGN PROCESS

In my thesis work, I am using a practice-led methodology paired with a self-reflective approach to making art-objects. This practice-led methodology I believe runs parallel with the design process that I also employ within my practice, since both methodologies perform in a space of explorative creation. The design process entails experimentation, ideation, form testing, prototyping, and analyzation, all of which may be considered the same elements that exist within a practice-led methodology. Alex Seago and Anthony Dunne, researchers of new methodologies in art and design, describe this intersection of research as, “a mixture of a more art based practice-led methodology and a design based design process, research can be interpreted as *conceptual modelling*” (Seago 1999, 16). As a designer I am most comfortable with traditional design terminology and will continue to use the term design process which refers to the methods that fall within these overarching procedures.

The first step I take when engaging in the design process is to ruminate on what seems to be lacking in a particular environment, and which issues I wish to address. For me, the conversations of craft, and the techniques and principles associated with the discipline, recede into the background whenever art and design are discussed. As a maker employing a handmade approach, I consider it important to maintain a discussion of craft both within my writing and in my practice. Believing them missing in the mainstream conversations surrounding art and design, I chose craft techniques to be the main focus of my thesis work. Howard Risatti, a professor of art and critical theory who specializes in craft theory, explains the condition of craft as, “both material and process are essential to craft and must be understood together as the basis of craft technique” (Risatti 2007, 99). Craft techniques frequently take on the terminology of the process-based material manipulation that occurs within each procedure of making i.e. “throwing”, “weaving”, “turning”, “carving” etc. It was primarily these hand techniques who’s histories began within the discipline of craft where I focused my attention. Labeling ‘craft techniques’ as the first design parameter to be incorporated within my designs, I began the process of ideation. In the ideation phase of the design process, which usually runs parallel with the experimentation phase, I begin by imagining the forms, materials and interactions that I feel are important to create in the world of object design. Starting with a combination of sketching out design ideas along with experimenting with new materials and processes, I begin to imagine art-objects wherein craft techniques are the focal points. Technique, however, can only provide the initial and most basic building blocks of aesthetics. The various craft techniques employed in the realizations of my designs are like engines — craft gives them the energy I strive to unleash, but needs direction. Without direction, craft spins in circles, locked in the gravity of tradition.

In the experimentation phase, I try as many different materials and techniques as possible. This way I can make an educated decision as to which craft practices I want to incorporate into my thesis designs. Learning about the materiality of the materials, along with

the appropriate techniques involved in stained glass, ceramics, wood turning, mosaic, papier-mâché, sewing, rug hooking and macramé have given me a rudimentary understanding of the processes involved within each, and helped develop the specific hand feel in the manipulation of each component. While hand feel is a term found primarily in textiles used to describe the tactile sensory perception of how a fabric feels and moves, I believe it appropriate to use across the different craft disciplines. By gaining an understanding of the properties held within each technique, I can then consider and explore new approaches of incorporating them into my designs. By injecting craft into contemporary art and design fields, I want to try and push the boundaries of the usual context that craft techniques are typically explored. Furthermore, in applying critical thinking and critical making in my practice, I am able innovate and transform these techniques to create new forms and perceptions. Industrial designer Ashley Hall describes this process as 'making to think'. She writes,

If design can be summarized as 'thinking to make,' then craft may be summarized as 'making to think.' Experimental design processes can move fluidly between making activities to allow the release of thoughts on the one hand and rational calculation of ideas to be tested by making on the other. The interplay between innate response and conscious calculation generates the critical balance that allows for the progression to new discoveries. (Hall 2011, 20)

The space Hall describes exists between dream and reality, a space, that hovering moment just before sleep, a temporal space that acts much in the same way as wet concrete, a solid liquid whose plasticity is limited by a given time frame. At some point the work must stop because the material will no longer allow itself to be manipulated and in this imperfect moment, the work finally becomes itself. While this speculation is not necessarily true for every material that I use in my design work, the underlying point that I am hoping to make is that the materials have just as much agency as I do and I must listen to them as we work together. The final collaborative product that will reveal itself once we both tire of the performance and the work that is achieved will ideally capture the movement of life.

In my thesis work, my intent was to create art-objects that could support the functions of a seat, a surface, a light and a mirror. For the design of my seating, I wanted to exercise the technique of rug hooking. I became quite enthusiastic about it during the individual studio course when I tried my hand at it for the first time. Instantly transfixed with the motions of the technique, I found myself making this way for hours. This feeling of connection I experienced with this craft method led me to use it as a concept in the creation of a lounge chair. Focusing on the latch rug hooking technique in particular, I made scaled models to examine ways it could be made into a seating form. Through the process of form making and scaled prototyping I was able to form a deeper connection with the process of rug hooking and see how the guiding principles of the technique could take on different forms. I imagined this technique gigantic, with large, full threads and a net big enough to drape over a lounge chair or couch. To push this interaction further, I decided to unite the soft, plush feel of the foam into the design of the gigantic 'threads' and inject the structure into the net itself rather than having the woven net be draped over another form. Moving between 'thinking to make' and 'making to think' the object slowly took shape, and into something I had not fully imagined. The final product is a piece of unique furniture that is half-practical and novel. I exhibited the chair during Toronto Design Week 2019, inviting people to sit in it and tell me their thoughts. The general response was that once they were seated, the chair's energy came to life with the giant rug hooked 'blades' (they were modelled after grass) embracing the sitter, prodding them harmlessly. In this tactile way, the chair is able to communicate in a way a fully functional chair cannot. What the chair may or may not be saying differs from individual to individual, but the communication is there. At its heart, the communication is kinetic; the feeling of touching something hot and cold at the same time made possible by the melding of craft techniques and materials that don't necessarily belong together. This technique allows craft to join the contemporary conversation within art and design through challenging the participant's perception and interaction with my designs.

I aspire to keep these tactile aspects of knowledge alive because the objects that we surround ourselves set about a chain reaction of importance of identity and projection of future desires. Mihaly Csikszentmihalyi and Eugene Halton, investigate this concept in their book titled *The Meaning of Things: Domestic Symbols and the Self*, where they research individuals and the objects that they cherish seen through the lens of material culture. Csikszentmihalyi notes, “The material objects we use are not just tools we can pick up and discard at our convenience; they constitute the framework of experience that gives order to our otherwise shapeless selves. Therefore the things we make and use have a tremendous impact on the future of humankind” (Csikszentmihalyi 1981, 16). Here Csikszentmihalyi refers to how, through the use of objects, we first develop our sense of self, thus the things that surround us are inseparable from who we are. As a result, the narratives that our objects hold in their essence is where our possibilities of self, and ultimately culture, exist. As a maker I am contentiously concerned with the type of objects I produce, and through reflection I become aware of what kind of culture my objects could create in this world. I believe that if there is more variety of handmade objects available, then the design ideologies will shift from the importance of smooth, perfect, mass-produced items towards wild and textured items which celebrate the complexity and variation of the natural world. I also feel there is an instinctual link to handmade craft and self-reliance that is lost in post-industrialized world. Design theorist Tony Fry is a firm advocate for the use of the hand in making and in our general learning because of its connection:

To an accumulation of learning which, like mind, is educated by observed experience and practice. The hand draws on a source of knowing from Being which is the knowing of mind. The loss of the ability of the hand is thus a loss of: being in the world, knowing it, and shaping it by the expertise of specific skills which can be employed by the will of the self. The hand is an essential means of staying in touch with the world. (Fry 1994, 261)

That is why it is imperative to keep these traditional techniques alive in an increasingly automated world. Haptic knowledge and manual dexterity are key components of our primordial

intelligence. Fry goes on to note, “the more of the world we see through system technology the less is known to our being — the body is emptied of spirit and the mind drained of life” (Fry 1994, 261). I worry at the prospect of losing the hand to mind connection which has been such an integral part of our existence and indeed very much connects us to the pulse of the natural world.

3.2 SELF-REFLEXIVE APPROACH

I am applying a self-reflexive approach to making since I believe it is important, especially as a designer attempting to create new material culture in my objects, to step back from my actions and reflect on what type of ideologies I may be bringing into the world. I am also determined to gain a better understanding, through reflection, of the decisions, theories and guiding principles that I place into my interdisciplinary practice and have concern for the effects that they may produce through their presence.

I use the term self-reflexive because as I shape the materials to create objects, moving through the process of manipulating the materials into forms, I feel that I too am shaped, as an artist, a designer and a maker. This reflexive state of making helps inform both my embodied knowledge and my intuition. Being able to reflect upon what was done each day in the studio highlights the importance of each decision that has been made; deciding when to use which tool, in which fashion, with which material etc. These nuances seeming so automatic and simple, are actions that I take for granted, since it is only through repetition they have become embodied knowledge. Embodied knowledge is a vital aspect in my practice because it “refers to the skills and information that our bodies understand and remember as a result of sensory — especially haptic — experience and practice. Together, practice — thoughtful doing — and embodied knowledge help transform raw materials into a physical expression of an idea” (Dunnigan 2013, 97). John Dunnigan, a professor in the Furniture Department at the

Rhodes Island School of Design, explores the important roles that critical thinking and critical making take within a designer's creation of objects. He believes that embodied knowledge is one of the key factors in developing a critical making practice. "This type of knowledge not only helps us with new ways of doing but also opens up our understanding of ourselves" (Dunnigan 2013, 97). It is through reflection on the happenings that occur within my body movements, along with the connection to the thought patterns that arise during the process of making with one's hands, which leads to the development of learned knowledge.

Beyond reflecting on the processes that occur in the studio and the decisions that are made through my embodied knowledge, along with the interpretation of how to apply the research I have done on process and working with the materials themselves, it is important to reflect on the outcomes of what was made and how I believe it will take up space in the world of designed objects. This is an aspect that I consider to be part of the larger material culture conversation that has many different theories behind how the shape, function and aesthetics of our objects affect our individualism as consumers. Choosing to infuse my designs with the narratives of biophilia and anti-design, creates potential for new realms of thought and new design knowledge. As Mads Nygaard Folkman, a professor of design culture, suggests that "In its doubling of material and immaterial, of physical-visual presence and imaginary meaning, design can affect major shifts of paradigm in how we see, perceive and understand the world" (Folkmann 2013, 189 &190). It is exactly this type of thinking about the hidden possibilities that lie in the perception and experience of design, that I as a designer and maker find fascinating. The possibilities of perception through the audience of my work holds the capability of affecting change, albeit small, in the world through my object creation.

3.3 HAND FABRICATION AS TECHNIQUE

I will now define my relationship with my hands in a little more depth. In furniture making one does rely heavily on tools and machines to accomplish such tasks as milling, joining and finishing a piece of work, but for me it is the learned techniques that are carried out by my hands which I feel carry the majority of the workload, and ultimately create the aesthetic. Risatti describes the difference between machines and tools in how they use energy. More specifically, he writes that, “unlike machines, tools don’t alter the direction, speed, or the magnitude of a force, nor do they involve mechanical advantage...tools simply carry in the same direction as the material being worked” (Risatti 2007, 50-51). When I reference hand fabrication, I am referring to the process of using one’s hands to navigate the tools but also to push the materials through the machines. I consider this ‘hand-making’ since it is still through the technique controlled by my hands that the process is carried out. It is when the maker starts to introduce digital fabrication that I feel the distinction starts to waver. Although craft is mainly considered as a handmade discipline, it stills allows room for digital processes. In my practice, I shy away from using the digital fabrication tools such as the CNC machine, 3D printers and laser cutters, since I like to celebrate the inconsistencies of the hand within my creations. It is through my hands that I am able to display the translation of embodied knowledge upon the materialities.

The handmade object is intimately connected to the discipline of craft and has been a major defining attribute to the discipline throughout the years. For Risatti, “craft as a practice centres on the manipulation of physical material by the skilled, knowing hand” (Risatti, 2007, xiv). Skilled hands and embodied knowledge are powerful forces with the potential for endless creativity. It is also important to note the tension and drama that can occur when fabricating by hand. Woodworker David Pye labels this as the “workmanship of risk” which he describes as, “workmanship using any kind of technique or apparatus, in which the quality of the result is not predetermined, but depends on the judgement, dexterity, and care which the maker exercises

as he works. The essential idea is that the quality of the result is continuously at risk during the process of making” (Pye 1995, 20). Pye opposes the “workmanship of risk” with the term “workmanship of certainty” which implies automated and reliable production, usually engaged through machines. It is exactly this risk and unexpected outcome that excites me about the concept of showcasing our human nature through the material manipulation of hand-making. The connection with a handmade object articulates the “hand and mind in making, which secures a direct human presence, as the loci of power and knowledge, in the made” (Fry 1994, 264). This uniqueness is felt in each and every handmade object. The impression that the maker acts upon their creation becomes the undeniable texture, interest and beauty which can be admired through the decisions that the mind and body made together. One extreme way that this force of human character is making itself known, is through the sloppy craft movement that is being adopted by present-day artists and avant-garde designers. Adamson speaks of this new trend as a feeling that it is, “not only ok but necessary for a contemporary artist to be amateurish. The lack of evident skill somehow implies the presence of concept” (Paterson 2015, 198). This presence or imprint of the artist's hand in the materials and the ‘unpolished’ outcome that may arise from the absence of perfected skill, showcase a resistance towards the machined objects that patina the surface of everyday life in the modern world — hand making has become a way to disrupt the normative.

3.4 BIOPHILIA AS METHOD

As previously stated, I am using the biophilic design effects, as the framework to follow while I create. Researching both Kellert’s biophilic design attributes along with the design elements of architectural theorist, Nikos Salingaros, I aim to put them into practice through my furniture and object designs. Being curious of the outcomes, if any, a participant may experience by using my biophilic designed art-objects and whether biophilic design effects can be

successfully translated into objects, as they are applied in architectural design. Using the biophilic effects as stated by Salingaros and Kellert as the starting framework for my own practice, I aim to integrate the same principles and start a conversation surrounding well-being within furniture and object design.

Biophilic design can be organized into three categories according to Salingaros' research and writings on the topic – Nature in the Space (direct experience), Natural Analogues (in-direct experience), and Nature of the Space (experience of space and place), (Terrapin Bright Green 2014, 9). Nature in space refers to the direct experience of plant and animal life, as well as water, breezes, sounds, scents and other natural elements. I will not be using any direct experiences of the natural in my objects so I will not be explaining the sections within this category.

Natural analogues of biophilic design addresses organic, non-living and indirect evocations of nature. This includes objects, materials, colors, shapes, sequences and patterns found in nature, nature as artwork, ornamentation, furniture, décor, and textiles in the built environment. The division of natural analogues encompasses three patterns of biophilic design: biomorphic forms and patterns, material connection with nature and complexity and order (Terrapin Bright Green 2014, 10). It is principally from this category that I will focus on integrating its effects into the design and fabrication of my objects. Targeting colour, detail, curves, and the use of pattern as the elements to formulate an aesthetic design language. Although, some aspects of the other biophilic categories will be touched upon since my aim (at least within a couple of my designed objects) is to construct visual representations of direct experiences of nature like water and plants.

The main biophilic design experience that I have decided to focus on throughout all of my designs is information richness, which usually occurs through natural patterns (Kellert 2008, 9). The use of patterned wholes where many parts when joined or grouped together make a

larger pattern full of visual texture and variety. Information richness can stimulate curiosity, imagination, exploration, discovery and problem solving, and work best when the detail involved mimics natural patterns of the golden ratio, or structures that occur in nature, like spheres or shells (Ibid.). The use of pattern helps evoke from the viewer an experience of dynamic balance and tension, and if applied correctly can even mimic the occurrence of fractals. While scenes in nature typically support multiple fractal dimensions in different scales all included within the same view, recreating such complex affairs properly without causing a sense of chaos is an extremely challenging performance in design alone. The ornamental patterns in my designs were created at random, without any mathematical planning, limiting myself to simple uses of patterns and patterning. Through the use of random patterning and the addition of surface texture, I am creating visual and tactile detail within my designs. This detail leads to curiosity or enticement from the participant and my specific aim is to induce imagination within the viewer.

I have also implemented the use of colour, both bright and more natural tones, to help stimulate attraction within the viewer; inviting them closer to further investigate the details within each of my designs. I have limited my use of right angles and straight lines to the design of the surface piece alone, since for a surface to be functional, it needs to be flat and perpendicular to the wall. All of the other details found in my object designs are curvy, uneven or rugged in both texture and form. Through the application of all of these design features in the making of my art-objects I aim to create a contemporary sector of biophilic furniture design.

CHAPTER 4:

CONTEXTUAL REVIEW

Through the review of works by Alexandra Kehayoglou, Wendell Castle and Chris Wolston, I will demonstrate biophilic ornamentation in the contemporary market of object design and also establish the type of object(s) that I am creating within my practice. All of the artists, designers and craftspeople discussed below, have been chosen primarily for having their practices equal parts art, craft and design. All of these designers exemplify an interdisciplinary aspect in their practice using art, craft, design and the natural world to directly influence their designs.

4.1 ALEXANDRA KEHAYOGLOU

Kehayoglou is a craft based artist who creates her works in textiles, primarily surplus materials which come from her family's rug factory in Bueno Aries. Interested in representing the disappearing natural landscapes that are being altered through heavy human interaction and industrialization, Kehayoglou uses her art to showcase the extinction of the natural world. Her



Figure 1. Alexandra Kehayoglou. 2016. *No Longer Creek*. Alexandra Kehayoglou. <https://alexandrakehayoglou.com/No-Longer-Creek>

works are large sculptural installation pieces that mimic natural landscapes that she wants to visually preserve, fearful that one day they may no longer exist. Kehayoglou states that her interest lies in “bringing together art and craft, and developing functional works as complete works of art, in which knowledge of the materials, the technique, and spectator are inseparably intertwined” (Kehayoglou 2016). In a piece titled *No Longer Creek* (2016, Fig. 1) Kehayoglou reimagines what the Raggio creek landscape was before it was dramatically altered by human



Figure 2. Alexandra Kehayoglou. 2016. *No Longer Creek*. Alexandra Kehayoglou. <https://alexandrakehayoglou.com/No-Longer-Creek>

activity, producing a lush version of what the creek was before it was destroyed.

Presented during Design Miami part of Art Basel, *No Longer Creek* (2016, Fig. 2) allowed for the participants to sit or lie on its surface and it became a place for people to enjoy an imaginary aspect of what the ruined creek once

was. In most of her large installations, Kehayoglou invites the participants to interact with the artwork and imagine what the landscape must have felt like before its destruction. She uses biophilic aesthetics as a call for the restorative action that needs to be implemented in the real life landscapes before they all disappear. By using craft as a tool to criticize heavy industrialization of the natural world by representing landscape in a decorative sense, I believe that Kehayoglou’s work aligns with my message of needing the visual representations of nature within our built environments to be reminded of the effects that urbanization has on our psyches.

4.2 WENDELL CASTLE

Wendell Castle is an interdisciplinary maker who has pioneered a practice that blends art, design and craft into a cohesive whole. Having a fascination with biomorphic forms and living in nature for most of his life, organic shapes can be seen everywhere in Castle's works. It could be argued that Castle was one of the first designers to incorporate overtly biophilic designs in furniture, long before the term biophilia was considered a concept. Referencing his



Figure 3. Wendell Castle. 2014. *Above With Beyond*. New York: Carpenters Workshop Gallery. <https://www.carpentersworkshopgallery.com/works/outdoor/above-within-beyond-bronze/>

works from an 1966 art show, Castle's designs are described as being "hailed for its revolt against the prevailing aesthetic of the mid-century modern. It was the height of counter-culture in America and Castle's 'wandering forms' were compelling as testaments to transformation, possibility and unbridled fun" (Olshin 2017, 5). Castle using his 'free forms' of stacked laminations that he would reductive carve to create biomorphic, lively shapes that held questionable function. Castle was quoted in Life magazine of the same 1966 year stating, "I

have no special interest in form following function. I want to be inventive and playful, to produce furniture to make life an adventure” (Olshin 2017, 5). Ever since I started building furniture, I have looked up to Castle as an inspiration. His sense of play paired with his intrinsically careful attention to detail created a craft aesthetic that was both meticulous and experimental at the same time. In his work *Above Within Beyond*, (2014, fig. 3) Castle creates functional sculpture which resembles seed pods stemming from the ground and, “the organic shapes of these bronzes create a new interplay between the works and their surroundings; the cohesiveness of the design is such that the seats only emerge on close inspection, appearing to spring out of the conical structures that support them and which in turn seem to grow out of the ground on which they are planted. Viewed in the round, these pieces seem to be in a state of constant flux, oscillating between furniture and sculpture, and embodying the inventive spirit that has been the hallmark of Castle’s career” (Sotheby’s 2016). In the words of Castle himself, “furniture should not be derived from furniture. The practice can only lead to variations on existing themes. New concepts will arise only when we clear our minds of preconceived notions about the way that furniture should look” (Taragin 1989, 24). I use Castle’s portfolio of biophilic craft made furniture as inspiration as I work toward my own designs that I believe to exist within similar tradition of functional sculpture that interprets forms from the natural world and places them into the realm of the decorative arts.

4.3 CHRIS WOLSTON

Chris Wolston is an experimental furniture designer based in New York City. Interested in material exploration and handmade processes, Wolston creates crafted designs for the contemporary art and design markets. Trained in glass fabrication, Wolston explores many different materials and tries innovative ways of making with each new material. In his terracotta chairs (2016, fig. 4), Wolston actually applies his finger marks as decoration. These chairs and



Figure 4. Chris Wolston. 2016. *Ceramic Chair*. 1st Dibbs. https://www.1stdibs.com/furniture/seating/chairs/ceramic-chair-chris-wolston/id-f_6210993/

tables act as planters with areas to contain live plants within their structure. As a result, the chairs and tables come alive and look like fuzzy creatures, which I believe stems from the features of live plants incorporated into the design, along with his use of texture applied to the surface of the clay. It is the mixture of hand prints intentionally left on the surface of Wolston's chairs, the naturalness of the chosen materiality of terracotta and the integration of providing housing for plants that fully places this work in the biophilic category. Since I am not dealing with

natural materials and live plants within my own designs, I turned to other works of Wolston's to help describe the type of biophilic design that I am creating in my own works. Specifically, the



Figure 5. Chris Wolston. 2016. *Tropical Cabinet*. New York: The Future Perfect. <https://www.thefutureperfect.com/made-by/designer/chris-wolston/tropical-cabinet.html>



Figure 6. *Ibid.*

piece *Tropical Cabinet* which exemplifies the type of biophilic, anti-design that I am aiming for in my own works. *Tropical Cabinet*, (2016, fig. 5) is made from colourful aluminum leaf forms, attached to a wicker wardrobe shell. The exterior of the cabinet looks like a lush, vibrant hyper-jungle where the viewer's eye has a hard time settling on one place. The interior of the piece has curved compartments that don't follow the usual order of dividing space within a wardrobe interior (2016, fig. 6). While Wolston does not directly refer to his designs as biophilic, as a researcher of his work, I believe it falls into this group entirely. Wolston repeatedly uses curved shapes, surface texture, reflection and both natural and vibrant colours within his works. This, added to the celebration of the innate qualities of the chosen material, along with featuring handmade process within each design, further highlights elements labeled elsewhere as biophilic design. Wolston's practice is an inspiration to me, not only because I feel we share the same design principles but also because he celebrates craft making and biophilic design, and brings this celebration to the mainstream.

I feel a connection to these designers because their process is similar to mine; experimenting in the studio and physically testing their concepts with real materials. They work through trial and error, developing embodied knowledge which can be put toward the conceptual aspect of their designs; an important part of their practice that I have admiration for. It excites me to see others making important and aesthetically pleasing works with the same underlying concepts as myself. It is also positive to see other makers who are making a living off of small production, handcrafted, expressive work.

CHAPTER 5:

STUDIO WORK

In the creation of new objects intended for an interior space, I felt it was necessary to fill the requirements of specific functions which are found in daily life. A seat, a surface, a light and a mirror became my basis for the basic practical activities that help support us throughout the day. Beginning with these functions, I could then re-imagine different ways the forms that this group of objects could take. Attempting to narrow in on craft practices, all of which were completely new to my design practice, I researched and tested the methods of making in sewing textiles, rug hooking, ceramics, mosaics, stained glass fabrication, casting resin, casting in soft molds, flocking, paper pulp clay, paper mâché, and forming plastics. It was through this research of material properties and the development of embodied knowledge that I was able to understand how to apply what I was learning and add some imaginative qualities towards new uses of each technique in my design work. Working with this new knowledge, I began the design process from ideation to experimentation in material testing and techniques, to finally arrive at the final prototypes for the exhibition *Wild Things*. The main goal of my designed objects is to break up the 'smooth' and box like qualities of the modern buildings that are found in urbanized spaces. Attempting to dissolve the box with bright colour ranges, different scales of texture, a considerable amount of predetermined and random patterning, and design principles that I borrowed from the natural world. Most of these features are found in each of the objects, where ornamentation is piled upon more ornamentation and maximalism prevails over minimalism. The celebration of hand making is prevalent throughout all of the works created, with the gestures of hand seen through the ornamentation applied to all of the forms. Using both biophilic design effects and the theories of anti-design, my versions of a seat, a surface, a light and a mirror are hyper vivid objects that bestride the realms of the interior and exterior, blurring the distinction between the imaginary and reality.

5.1 OVERVIEW & PROCESS

The objects in my studio work are created as conceptual and even experimental furniture design that appeal directly to the imagination. Armed with my research of the biophilic design effects, the history of anti-design and my post-disciplinary craft approach to making, I began to ideate designs by sketching; allowing my imagination to run wild within the possibilities of structure, support, functioning surfaces, containers of light, and reflective laminates. Moving through selected memories of times in nature, remembering how each experience felt, I ask myself, what it feels like lying in cool grass on a hot summer's day? What does the sunlight's reflection on moving water look like? How can I represent the minuscule visual and tactile textures of flora? And so on and so forth. Using this ideation process, along with allowing myself to distort each craft technique that I have undertaken, I attempt to reduce each aesthetic quality down to its fundamental properties. With these peculiarities in mind, I then begin to contemplate how to recreate natural qualities through the application of craft techniques. The main distinction that I am trying to achieve in this body of work is, applying traditional procedures with 'amateur' technique in unexpected ways, to create a contemporary perspective on the discipline of craft. At the heart of this practice is a love of material exploration and a strong desire to learn about the world and myself and how to express this knowledge.

For the purposes of this thesis, I am not considering the sustainability of the materials that I am using. While sustainability is an extremely important aspect of design, it placed significant limits on the selection of materials and fell outside the scope of my project. My design goal is to create a purely representational production of biophilic design to be applied to objects and furniture. I feel the sustainable design aspect is a dutiful version of both biophilic design and low environmental impact, also known as *restorative environmental design* (Kellert 2005), but

my aesthetic style is more tied to anti-design where the forms are created with a pop expression and are full of vibrant colour.

5.2 SEAT

My aim is to create a seating experience which involves both a natural aesthetic and a craft technique. I found myself drawn towards the combination of lounging in grass and rug hooking. Lazing around on a grassy surface is one of my favourite summer pastimes and I often long for the experience in the cold winter months. The process of reimagining grass as a craft object, lead me to the idea of latch rug hooking. The traditional scale that is used in rug hooking is usually applying 2-3" lengths of $\frac{1}{8}$ " diameter wool threads or yarn onto a $\frac{1}{4}$ " fabric grid, through the use of a lark's head knot. What this process ends up looking like in most cases is a dense soft surface, and when the appropriate colour of green is applied, it resembles a grassy area (fig. 7). For the design of the seat, I decided to imagine the wool threads as giant plush



Figure 7. Example of latch rug hooking in traditional scale.

cushioning, while the net that the threads would be attached to would create the actual lounge form of the chair. Conceptualizing the process in this way, I arrived at an object that abstracts and exaggerates the feeling of lying in grass.

The frame is made of $\frac{1}{2}$ " steel rod, bent to form with a section bender and manual pipe bending device at certain intervals along the length. Using a jig, that I built from 2" x 4" pine, to hold the bent steel rod curved lengths in their final chair position, I MIG welded the entire grid

structure together then levelled the feet with an angle grinder and smoothed all the welds with a

grinding disk. To keep the visual reference of the net, I chose to colour the steel with a matte black powder coated finish. For the threads, I used the method of prototyping to determine the different shapes and sizes of the plush pieces. I began with blades of grass as a visual



Figure 8. Prototype of gigantic plush threads on grid.

weaving turned out to be very physically demanding and I had to use my entire body weight to pull the threads through the net. I found that the desired plush diameter of each thread became quite difficult to attach side by side upon the grid frame. Nevertheless, this effort was well worth it since what resulted was a very plush, very overgrown looking object (fig. 9).

reference for what the shape of these plush accessories could be. After settling on my favourite shape, I made templates of different diameters and lengths of the thread/blade shape. The fabric was then cut, sewed, and stuffed to create the final thread 'blades'. I produced approximately 70 stuffed threads in three different fabrics and began to map out where they would be attached to the frame (fig. 8). Using a lark's head knot I attached each plush thread onto the frame. This process of

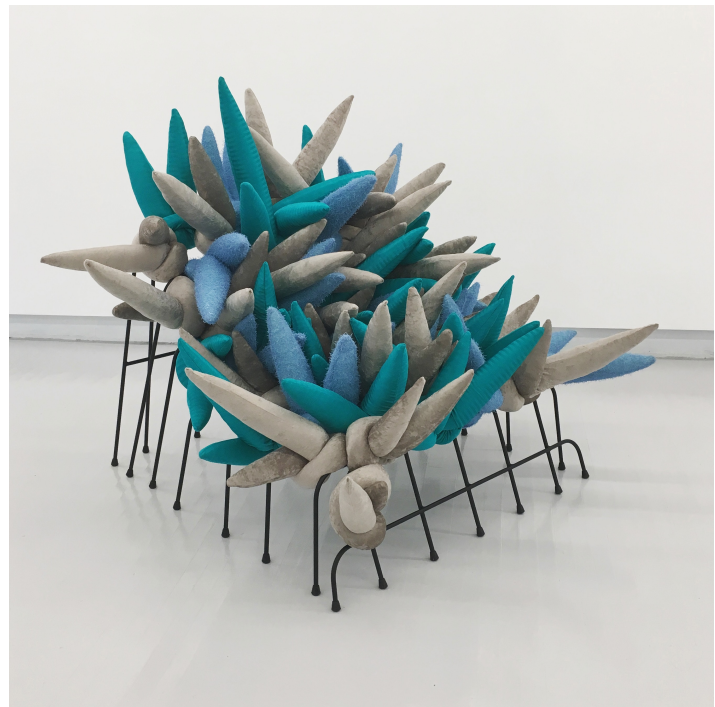


Figure 9. The completed chair.

The biophilic effect that I was working toward was to create a sensory experience of information richness applied through the moving patterned parts. These plush parts can be placed to adapt to the posture of the participant. I was also attempting to create a visual and tactile texture through the chosen textiles that would also add the element of bright colours. The first fabric I chose was a vibrant emerald green with an embossed pattern. I felt the shininess of the spandex mixed with the green within the fabric held the property of 'coolness'. The other fabrics were also chosen for their tactile qualities and how they matched with the green spandex and the overall concept of the grass. To create more variation I made sure to add different lengths and thicknesses in the design of the plush threads, creating 3 different diameters of 'blades'.

Upon completion of the chair, the first thing I did was sit upon it. Interaction with the chair is quite amusing. At first glance it looks like it is a dangerous object with all of the thread / blades looking exactly like spikes facing the direction where you enter the chair to sit. It is a very active experience, and after the initial apprehension, sitting amongst the plush threads, the chair becomes alive, and feels as if you are sitting within another living being. The participant must arrange each thread to settle into the cushions, to find the correct position of comfort specific to themselves. And once settled, the chair becomes a very comfortable seat.

5.3 SURFACE

My intent for a surface started with a corner piece of stacked shelves. I chose the shelves to look like they were growing out of the walls, like a kind of fungal mold (fig.10). To mimic the folds and crevices that occur within mold, I chose paper pulp for its readily shaping qualities. Starting with a wooden armature, I covered it with strips of paper mâché to create the overall form of the piece. After achieving enough layers of paper to form a solid structure, I then applied paper pulp clay of my own making onto the hard paper surface. In my ideation of



Figure 10. Completed black mold shelf.

incorporating biophilic design effects into my designs, I strove to include organic texture and the aura of natural growth. When including the aspect of anti-design into this piece, I wanted the texture to have an overall luxurious feel. Although the final surface of the paper pulp did have quite a bit of texture to it, it was still reading somewhat flat. It became apparent that even more texture was needed

to achieve the visual fuzziness of mold that I was after. During my research of Wendell Castle's work, I noticed that he had flocked a few of his earlier works, pieces that were created around the same time that the anti-design movement was happening in Italy. I thought it would be a nice homage to the era when anti-design had begun to use this material. Plus it was a craft technique that I had not tried my hand at yet. Flock consists of tiny cut up synthetic textile fibers, of either nylon or rayon, that are applied with glue or acrylic paint to the object's surface (fig. 11). I chose to apply the flock with acrylic paint since it would add further depth through my control



Figure 11. Close up of blue flocked shelf surface.

over the colour behind the flocked fibers. Aware that flock fibers would attract debris from what was put on the shelves top surface, I designed a smooth top layer of resin to sit on the surface of the shelves. I made sure to add dye to the resin itself to again add more depth.

It was my intent to create an abstract shelf object which creates interest in the space that it is installed in. The biophilic design principles implemented in this design, are biomorphic shapes, varying in details, texture and layers of colour. The lumpy, fuzzy surface of the shelves add to the informational richness, and due to the numerous curved lines and curves in each piece, the viewer's eye is less likely to settle in one spot. There is also the variation in visual and tactile texture within the design of the shelves. Having both a hard, smooth and shiny texture next to one that is soft, rugged, and matte allows for curious consideration in regard to what the object is made of. This meditation upon the materials, paired with the application in which they were activated, giving the participant a focal point to begin with, then allowing their minds to wander while their gaze roams over the surface of the design.

5.4 LIGHT

For the design of my light I chose to use clay. Ceramic is naturally heat resistant since through the firing process the material becomes vitrified and is unable to burn, making it perfect



Figure 12. The ceramic stacked cones shapes with cut-outs.

for housing lights. The lamp design consists of two lines of numerous stacked lamp shades, all of which have patterns cut-out of their surfaces (fig. 12). Each stacked line of cones appears to be sprouting from the lamp's base. Each cone has a different cut-out pattern and colour applied to the clay. To effectively showcase the handmade qualities that I am arguing for in my thesis, I chose the fabrication method of soft slab ceramics as I believe that through this method of making you can visually see the hand working in

the clay. As craft advocate Glenn Adamson suggests, “clay is useful because of its unrivalled ability to capture the artist's experience of making: it records every touch, however slight” (Adamson 2010, 31). To follow in this mindset, all of the cut-out patterns I applied to each cone were created spontaneously, without any calculation into the placement of the design on the cones. As I worked with the clay, I found it to be challenging at first, as it is a more fragile material than I am used to working with. At one point, I had 18 hours of work all break and crumble in my hands as I was trying to clean up the greenware from a couple days prior. However, through the embodied knowledge that I had learnt in this failure, I was able to continue in my cone production, changing the process accordingly. I corrected the issue by adding more wall thickness and shaping the slab into a cone shape right away, rather than allowing any time to pass before shaping the slab of clay.

This light design showcases patterned wholes. Through the accumulation of shapes, all of the parts become a unified whole. From afar, the contour of the light design has a specific silhouette, that as you move closer, it reveals even more factors of the design. The details in the cut-out patterns when stacked upon the details of other cones, each a different colour, creates an abundance of information richness (fig. 13).

Another biophilic effect that can be described within this design is complex order, which is ‘controlled variety’. The viewer finds it stimulating yet not chaotic. Since the structure of the light is following a line and the shape of the conical shades themselves are a simple, our brains can organize the information quite easily. This simplicity in the foundation of the light, allowed me to apply ornamentation upon



Figure 13. Detail of light design.

ornamentation, much in the style of anti-design, without causing too much visual commotion. My aim is to create a perfect amount of visual detail for this piece to remain interesting yet staying within the boundaries of a calm and peaceful feeling. The way in which this is achieved is through showcasing graceful structure through the overall figure of the design. The soft curve found in one of the coned lines, stimulates the balance and tension of gravity that the coned shapes seem to be defying. Attempting this design to perform the function of lighting as well as defining the space in which it is placed, in a compelling and engaging fashion.

5.5 MIRROR

For my mirror design, my aim was to create a visual representation of water. By creating a curved standing form made up of a mosaic texture on one side and a smooth full mirror on the other, I hope to represent both the smooth and choppy qualities of water (fig. 14 & 15). I am



Figure 14. Smooth mirror side.



Figure 15. Mosaic mirror side.

interested in the metaphysical properties of a mirror, in the way that it can truly affect the space in which they are placed by refracting and, in this case, bending both light and the surroundings occurring around it. With the use of broken pieces of mirror imbedded in the surface of the



Figure 16. The refracted light that the mirror design creates within the space.

mirror's curved form, my aim is to reflect the light that is cast in the interior space and bounce it off in many other directions. With this technique, I aim to affect the interest and mood of the room, and at the same time visually increase its spatial properties. Using the fabrication techniques of forming flexible plywood and mirrored acrylic to create a soft curved shape, then apply pieces of broken mirror in mosaic style upon the back surface, my aim was to abstractly mimic a wave of water and the reflective qualities which can occur in motion with sunlight upon its surface (fig. 16).

The biophilic design principles used in this design are patterned details, natural forms, reflected light, as well as curiosity and mystery. The biophilic design effect of mystery characterizes a place where an individual feels compelled to move forward to find out what is around the corner; it is the partially revealed view ahead. With the design of the mirror's overall curved overall shape, the reflections in the sections of mirrored mosaic can be seen at certain angles while the rest is obscured by the remainder of the mirror itself. This obstruction causes enticement when something moves past the reflections and only a glimmer of movement is witnessed from the point of view of the participant. A section of the object's surface is covered in mirrored acrylic that bends along the same line as the entire form.

One outer edge fulfills the practical function of being able to view oneself without any inconsistencies, while the rest of the curved form alters the images viewed at various angles. The piece's curved sections of mirror distort the space and the things surrounding it, producing a delightful 'fun house' mirror effect expanding and contracting the reflections depending on the viewing angles. The backside displays varying shades of broken mirror in a randomly patterned mosaic effect. The patterning was created by pure intuition, placed and filled by hand. This reflective pattern of pieces of mirror, all different shapes and sizes, creates much variety and detail complexity and when surrounded in natural light, can be perceived as ever changing. This possibility allows for mystery to be invoked through the form of the object itself.

The designs that I arrived at through my personal exploration of biophilic design and anti-design in a post-disciplinary approach have allowed me to freely apply my imagination and delve into possibilities I will continue to explore well into the future. With the parameters of both craft techniques and the principles that exist in biophilic design, I ideated my version of what an exaggerated fabrication of faux nature could become through the medium of furniture.

CHAPTER 6:

CONCLUSION

I came to the Interdisciplinary Graduate Program at OCAD U to experiment with new materials and techniques of making and I am pleased that I followed through with that desire. Associating with my practice at a post-disciplinary craft level, allowed me to understand and appreciate my making from the angle of personal expression, which has left me feeling more connected to it more than ever. In a way, I was able to focus on the sensation of awe that comes with learning how to manipulate a new material through a new process, rather than being strict with the final outcome. In addition to this exploration of materialities and processes, I was able to address the problem of how to break up the normative of modern design ideologies by way of integrating an anti-design approach to biophilic design. It was here where I got to try my hand at adding more to a design and apply flamboyance rather than the usual reductive refinement used in streamlining a design; a constituent of modernism. This became the most inspiring component of my thesis, allowing space for myself to muse on the playful side of my practice. Focusing on the sensation of delight, in regard to indoor well-being, I designed objects that could help promote and sustain imagination in our daily lives. Questioning the forms of our current atmosphere of objects —the objects that follow economics over emotion and in my opinion, end up feeling flat or hollow—my aim was to create a certain quality within my designs that could feel like language with texture and layers, while remaining light and amusing. Although I am still understanding the true effects of the design objects that I have created, from my own perspective I feel that I have been successful in disrupting the established tropes found within furniture design. The qualities of materialities, form, function and imagination all coming together through the expression of my hands are evidence towards new ideologies that are possible within the design of our everyday objects. This interdisciplinary research is now available to carry forward into the future in both my practice and the field of furniture design.

In trying to answer my overarching research question of how a human centric and nature inspired aesthetic for our objects could possibly affect the rectilinear spaces in which we dwell within urban centers, I feel that I have only begun to touch on this subject. The objects that I have created were produced in speculation for the market and whether the narratives that they hold could have any effect on the psychological well-being of their users, remains to be seen. The one thing that I can definitively state is the presence of my *Wild Things* brings a smile to the face of their viewer, a pleasant phenomenon that I have witnessed firsthand. Since gathering data from participants was not part of this particular study, I cannot give an actual definitive, valid answer to the question of my design's effect's on an individual's psyche. This is one area that I could see this research extending into future projects, through participant observation and survey. While emotions and psychological well-being are extremely hard factors to measure, I am curious if interaction with my designs could continue to create a sense of delight from the participants and how long this sensation could be extended over prolonged use of the objects.

There is also the limiting factor which arises in the logistics of production in this handmade, labour intensive work. The small batch economic model could never compete with mass production, as the increased labour in hand crafted, bespoke items translates to increased costs. With the integral starting point of my research being an argument against mass production and putting forth a call towards more handcrafted creations, there either has to be a shift in how we accumulate products or have the intent to display these designs in public space rather than individual homes. I personally have no interest in creating for large batch production and would much rather keep a studio based small batch production model. I am a believer, like Adamson, in fewer, better things rather than cheap disposable things. Another positive aspect for the use of biophilic ornamentation, since the visuals of nature, it seems, never go out of style, and hopefully my objects would not be considered a passing trend. A potential possibility is designing these type of biophilic objects for public spaces where they can be enjoyed by more

than one individual at a time, thereby justifying the higher price point. Either way, I am aware that my designs cannot necessarily replace the readily available machine fabricated objects that exist at a lower price rate. This of course exists as part of a larger discussion of the value and corruption that exist within the economics of our made goods. A discussion that I have not examined within this paper.

THE FUTURE OF BIOPHILIC DESIGN

The exciting prospect that I have taken away from my research is the idea of biophilic design spreading across disciplines and being more openly incorporated into furniture and object design. It seems that the conversations of biophilic objects at the moment predominately exist in hospice or office space settings and are mainly concerned with integration of live plant life within the designs. The part of my research that I am enthusiastic to add to this base of knowledge, is the idea of biophilia as ornamentation — or indirect experiences of nature— and recognizing the importance that the aesthetics of our objects have on our psyches, especially pertaining to positive feelings. While I have shown through my case studies that ornamental biophilic design does in fact exist in the field, it is more the point of labeling it as such. As more evidence is gathered towards the possible outcomes of integrating the aesthetics of biophilic design into our interior spaces, I believe that we can allow for this type of design to become more mainstream in modern culture. The assimilation of such an occurrence could only mean us benefitting positively from receiving more impressions of nature back into our urban lives.

6.1 POST-SCRIPT

Upon installing my designs in my thesis exhibition *Wild Things*, I was able to view them as a group for the first time which was an illuminating moment. Not only was I able to experience these biophilic designs within a similar type of space that I was arguing deserved a biophilic presence, but I also got to witness their full characters begin to emerge with some space around them (compared to my modest studio). The gallery where the exhibition was installed, is a rectangular room painted white with only one window at the very front entrance. It easily fits into the description of an urban type of dwelling that informs the impression of being inside a box. During my stay at the gallery, the juxtaposition of my designs against the white walls surrounding them, allowed for the true playfulness of each design to come into being.

The best surprise was precisely how my mirror design reacted to sunlight hitting the surface of the mosaic mirror pieces. I had intended for the mirrored material to reflect the light onto it's surroundings but I was not expecting it to work with such intensity. Even the coloured



Figure 17. The light reflection during 'magic hour'.

mirror pieces were reflecting their specific colours onto the floor and walls around it. The likeness of the pattern from the mosaic surface would move and stretch across the floor and walls with the movement of the sun. And at the moment when the sun was setting, a moment that I

lovingly coined magic hour (fig. 17), when it hit the surfaces of the broken mirror and

the light was refracted with such bright luminosity; it presented the mirror as bewitching. This occurrence truly became a moment of awe and solidified the biophilic design effects that I aimed to integrate into the aesthetics of my designs.

Each object had a character that was unique to its figure which affected each viewer in a similar fashion. The chair brought smiles to the faces of its onlookers and even laughter to its participants. The shelves induced curiosity through their materiality and compelled the action of touch. While the light brought amusement through the theatrics of form, colour, pattern and light all embodied into one object. I believe that through the personality that each object exudes, is where the strength of my thesis questions (and the beginning of the answers) shine through. The handmade quality and the saturation of my labour and love being integrated into each design is what makes each unique. What best to intermix with these qualities than the impression of the natural world, a place where an individual can experience veneration.

Even after the exhibition was over and I began to invite these objects back to my home and other residences, all urban spaces that do not have many square feet, it reminded me why I started down this path. Where a reminder of the natural can exist even in the darkest corner of a space which may not receive much sunlight, there is a trace of the benefits of what nature can offer us. A reflection of the uneven beauty which nature provides. A twist, a sparkle, or even just a simple pattern to help break up the walls of which we can sometimes feel confined. Even the glimmer of our human nature being presented to our spirits, which I believe the handmade can genuinely provide, also becomes a reminder to the natural world that lies outside our walls. I sincerely hope that this type of object becomes more readily adopted by mainstream culture, so that these soft and slight occurrences can be felt and perhaps help to provoke the openness of the possible, along with the positive effects of the natural, in our daily lives.

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APPENDIX B — GLOSSARY:

Amateur craft — an inexperienced person who is unskilled in a particular activity regarding hand-making. Also known as a DIY (Do It Yourself).

Art-object — I use the term ‘art-object’ to describe the works that I have created within my practice. Art-objects I believe to be a balance of craft, art and design respectively. While I could just as easily use the terms ‘functional-sculpture’, ‘evocative-design’ or ‘metaphorical-craft’ to be the reference to the types of objects that I am creating in my practice, I choose to use the term ‘art-object’ because of its history of use in the Arts and Craft movement along with describing objects that belong to the domain of the decorative arts.

Biophilic Object — An object whose form and aesthetics mimic qualities from the natural world.

Embodied / Haptic Knowledge -- Embodied knowledge refers to the skills and information that our bodies understand and remember as a result of sensory experience and practice.

Handmade / Hand-making — The process of using your hands as tools, as well as using one’s hands to navigate the tools and push the materials through the machines.

Hand Feel — A term used in the disciplines working with the material of textiles or fiber that refers to the fabric’s quality or characteristics—such as softness, firmness, drapability, or fineness—perceived by touch.

Nature / Natural -- There are two extreme connotations of nature. One is that nature is only that which can be classified as a living organism unaffected by anthropogenic impacts on the environment – a narrow perspective of nature (reminiscent of conventional hands-off environmental preservation) that ultimately no longer exists because nearly everything on Earth has been and will continue to be impacted at least indirectly by humans. Additionally, this idea of nature essentially excludes everything from the sun and moon, pet fish, home gardens and urban parks, to humans and the billions of living organisms that make up the biome of the human gut. Alternatively, it could be argued that everything, including all that humans design and make, is natural and a part of nature because they are each extensions of our phenotype.

This perspective inevitably includes everything from paperback books and plastic chairs, to chlorinated swimming pools and asphalt roadways (Terrapin Bright Green 2014, 8). Since I am arguing for the ‘natural’ against the built environment, when referring to nature or the natural I am referencing the former of these two definitions.

Smooth / Smoothness — My definition of the ‘the smooth’ as been adopted by the theories of Byung-Chul Han who is a philosopher and cultural theorist. Han states that, “Smoothness is the signature of the present time...Beyond its aesthetic effect, it reflect a general social imperative... One that does not ask to be interpreted, to be deciphered, or to be reflected upon” (Han 2018, 1-2). I perceive the mass-produced products of modernity to be linked to this definition and it is this concept I am referring to when speaking of ‘smooth’ or ‘smoothness’.

Workmanship of Risk — A coin term by woodworker David Pye that describes hand craft as, “workmanship using any kind of technique or apparatus, in which the quality of the result is not predetermined, but depends on the judgement, dexterity, and care which the maker exercises as he works. The essential idea is that the quality of the result is continuously as risk during the process of making” (Pye 1995, 20). Workmanship of risk opposes the idea of “workmanship of certainty” where production becomes automated and reliable.

APPENDIX C — EXHIBITION ~ *WILD THINGS*:



Figure 18. Didactic panel at exhibition entrance.



Figure 19. Wall stamp design.



Figure 20. Wall stamp design.



Figure 21. View of *Wild Things* exhibition.



Figure 22. View of chair and shelves.



Figure 23. Black mold shelf.



Figure 24. Ice blue mold shelf.



Figure 25. Blue mold shelf.



Figure 26. View of blue shelf and bead fountain.



Figure 27. Bead fountain.



Figure 28. Confetti light.



Figure 29. View of bead fountain and confetti light.



Figure 30. View of Gemini mirror, smooth side.



Figure 31. View of Gemini mirror, mosaic side.