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Acts of Contrition: An Exploration of Catholic Guilt and Sensory Pleasure in Kinetic Sculpture

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**ACTS OF CONTRITION: AN EXPLORATION OF CATHOLIC GUILT AND
SENSORY PLEASURE IN KINETIC SCULPTURE**

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A thesis submitted to the University of Maine in partial fulfillment of the requirements
of the degree of Master of Fine Arts in the Department of Intermedia.

The Graduate School

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August 2018

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By Wade Warman

Thesis Advisor: Gene Felice II

An Abstract of the Thesis Presented
in Partial Fulfillment of the Requirements for the
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August 2018

This thesis outlines the formulation of a research-based practice in kinetic sculpture. The primary goal is to investigate how historical and contemporary kinetic sculpture might provide a means for exploring the notion of guilt as seen through the paradigm of the Catholic Church by way of sensory pleasure using Joseph Campbell's Monomyth as a framework. The methodological model upon which this research is based is a hybrid model that combines elements of experimental engineering methodologies (i.e. experimentation, data collection, data analysis, etc.) as well as historical research. The primary outcome is *Acts of Contrition*, a series of five kinetic sculptures that illustrate a physical representation of the Monomyth and have added to a greater understanding of guilt as experienced via Catholic theology by way of sensory pleasure.

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CHAPTER I: INTRODUCTION

Guilt is defined as “both a cognitive and an emotional experience that occurs when a person realizes that he or she has violated a moral standard and is responsible for that violation.”¹ The five senses, (smell, touch, taste, hearing, and sight), are intrinsically tied to feelings of pleasure as part of the human experience. While sensory pleasure is often a positive experience, it also has the capacity to influence feelings of guilt, both as a way to initiate the episode of guilt, as well as to assuage the guilt.² What’s more, Catholicism is the world’s second largest religion with 17.4 percent of the world’s population identifying as Catholic.³ It is often said that guilt plays a central role in Catholicism,⁴ with sensory pleasure being a key aspect of guilt in both the positive and negative sense.⁵ Having grown up Protestant, I have always been fascinated by Catholicism. The ritual and dogma seemed both familiar, and yet also very foreign to me as a child. This curiosity about the symbolism of the rituals have allured me throughout my life, and because of this, has driven me to explore much more deeply some of the ideas via sculpture. The purpose of this research is to understand how kinetic sculpture is used as a vehicle to explore how guilt is seen and used within the Catholic Church, and the role that sensory pleasure plays as an influencing. While there have been studies regarding the various topics of sensory pleasure, guilt, Catholicism, and kinetic sculpture themselves, to the best of my knowledge, no one thus

¹ Daeg de Mott, Dianna K. “Guilt - STAGES OF GUILT DEVELOPMENT.” Statistics In Psychology, Example Of Mean, and Psychology Statistics - JRank Articles, psychology.jrank.org/pages/285/Guilt.html.

² Wise, Jeff. “Breaking the Cycle of Pleasure and Guilt.” CNN, Cable News Network, 26 Jan. 2017, www.cnn.com/2017/01/26/health/pleasure-guilt-partner/index.html.

³ Rizzo, Alessandra. “Muslims ‘Overtake’ Catholics, Become Largest Religion.” National Geographic News, National Geographic, 31 Mar. 2008, news.nationalgeographic.com/news/2008/03/080331-AP-islam-largest.html).

⁴ Demaria, Thomas, and Howard Kassinove. “Predicting Guilt from Irrational Beliefs, Religious Affiliation and Religiosity.” *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, vol. 6, no. 4, 1988, pp. 259–272., doi:10.1007/bf01061292.

⁵ Wise, Jeff. “Breaking the Cycle of Pleasure and Guilt.” CNN, Cable News Network, 26 Jan. 2017, www.cnn.com/2017/01/26/health/pleasure-guilt-partner/index.html.

far has researched the interrelated nature of them in a holistic fashion. That is, I do not know of any research to date that has looked at how my overarching inquiry might possibly be answered. My intent is to research how these elements might coincide with and complement each other. In doing so, I have created a series of kinetic sculptures entitled Acts of Contrition. This research has given rise to a deeper understanding of important sociological, psychological, and theological ideas, questions, and concerns for my creative practice.

CHAPTER II: LITERATURE REVIEW

While the main concern of my research inquiry is to attempt to answer the question of “How does kinetic sculpture provide a means for exploring the notion of guilt as seen through the paradigm of the Catholic Church by way of sensory pleasure”, for clarity sake it is important to break it down into individual components. These separate, yet interrelated components are: what is guilt and how is it derived; how do the senses work; how do humans experience sensory pleasure; does sensory pleasure play a role in the experience of guilt; how does the Catholic Church employ this idea of guilt in its dogma and theology; what key concepts within Catholicism are related to guilt; what is the history of automata and kinetic sculpture; how has the Catholic Church used automata and kinetic sculpture as religious tools; and finally, what is the “Monomyth”?

What Is Guilt And How Is It Derived?

Perhaps the most fundamental of all of these concerns is guilt. Daeg de Mott (2018) defined guilt as “both a cognitive and an emotional experience that occurs when a person realizes that he or she has violated a moral standard and is responsible for that violation.”⁶ Guilt, as an emotion, is not something with which humans are born. Rather, it is a learned emotion, moving through four major stages: infancy, early childhood, middle childhood, and adolescence to adulthood. In infancy, humans feel no guilt because they have no clear sense of separate identity. During early childhood, young children will feel guilt over hurting another person physically, but not emotionally because while they can understand being a separate entity in the physical sense, they do not yet understand other people’s inner selves. In middle childhood, children have the

⁶ Daeg de Mott, Dianna K. “Guilt - STAGES OF GUILT DEVELOPMENT.” *Statistics In Psychology, Example Of Mean, and Psychology Statistics - JRank Articles*, psychology.jrank.org/pages/285/Guilt.html.

potential to begin to understand others' inner states and begin understanding the concept of emotional pain which may be caused by their action or inaction. Finally, according to Daeg de Mott (2018), during adolescence and adulthood, young adults begin to have the potential to grasp abstract concepts of identity and suffering which allows them to feel guilt resulting from general harm, such as oppression, poverty, world hunger, etc.⁷

Daeg de Mott (2018) further states that the notion of guilt can manifest itself in both healthy and unhealthy ways, as it serves as both an indicator and inhibitor of wrongdoing. Healthy guilt, a response to the harming of another individual, is rectified through atonement, such as apologizing or making amends, whereas unhealthy guilt is the unresolved sense of responsibility for other people's pain, and too often it is connected with unresolved needs of the self, regardless of efforts to atone. A statement such as, "You took my book without my permission, please return it," helps create the appropriate sense of awareness and guilt in a developing child for having committed a transgression. However, saying, "Give me my book! You are not to be trusted with anything!" shames the developing child and leads them to internalize feelings of untrustworthiness which can then lead to a debilitating and unhealthy sense of guilt as they become adults later in life.⁸ While there is no hard and fast rule for a productive means of dealing with unhealthy guilt, many healthy and positive avenues of coping are available (i.e. cognitive therapy, self-help manuals, group therapy, religious confession, etc.) The ability to "turn off" guilt, however, is possible. Healthy guilt is at times considered an emotion that is sociologically beneficial, one that does not need assuaging beyond that of atonement and acceptance of one's contrition. However, some people never develop any notion

⁷ Daeg de Mott, Dianna K. "Guilt - STAGES OF GUILT DEVELOPMENT." *Statistics In Psychology, Example Of Mean, and Psychology Statistics - JRank Articles*, psychology.jrank.org/pages/285/Guilt.html.

⁸ Daeg de Mott, Dianna K. "Guilt - STAGES OF GUILT DEVELOPMENT." *Statistics In Psychology, Example Of Mean, and Psychology Statistics - JRank Articles*, psychology.jrank.org/pages/285/Guilt.html.

of guilt, healthy or unhealthy while others may simply choose to deactivate their sense of guilt. According to Daeg de Mott (2018) this can be done in two ways:

1) The person convinces him or herself that the act was not a violation of what is right. 2)

The person reasons that he or she has no control over the events of life and is therefore not responsible for the outcome. With no sense of personal responsibility, there can be no sense of guilt. When guilt is reduced, internal limits on behavior disappear and people can act without remorse.⁹

How Do The Senses Work?

The five senses, (taste, smell, touch, hearing, and sight), are universal traits, and are in part, what makes us human. It is through these senses that we communicate with the outside world, interact with others, and also feel pleasure. Each of the five senses are briefly described below in terms of how they work from a biological perspective.

Taste

Taste, (and smell), belong to our chemical sensing system (chemosensation). The process of tasting begins when molecules released by substances stimulate the taste buds. Taste buds react when saliva mixes with food or drink which then sends signals to the brain for identification of particular tastes.^{10, 11} It is important to note that smell plays a vital role in how humans taste, as we can recognize thousands of smells, but only a few actual tastes¹²:

⁹ Daeg de Mott, Dianna K. "Guilt - STAGES OF GUILT DEVELOPMENT." *Statistics In Psychology, Example Of Mean, and Psychology Statistics - JRank Articles*, psychology.jrank.org/pages/285/Guilt.html.

¹⁰ "Smell & Taste." *American Academy of Otolaryngology-Head and Neck Surgery*, 3 Jan. 2018, www.entnet.org/content/smell-taste.

¹¹ "The Science of Taste: How Does Taste Work, Anyway? | ECPI University." *Ecp.edu*, www.ecpi.edu/blog/science-taste-how-does-taste-work-anyway.

¹² "How Does Our Sense of Taste Work?" *Advances in Pediatrics.*, U.S. National Library of Medicine, 17 Aug. 2016, www.ncbi.nlm.nih.gov/pubmedhealth/PMH0072592/.

- *Sweet*: Sugar and derivatives such as fructose cause the sensation of sweetness. However, other substances like amino acids or alcohols in fruit juices can activate the sensory cells associated with sweetness.
- *Sour*: Lemon juice and other acidic solutions usually result in a sour taste caused by the splitting off of hydrogen ions being dissolved in watery solutions.
- *Salty*: Salt crystal is the chemical basis of this taste. Potassium and magnesium also have been known to cause a salty sensation.
- *Bitter*: The sensory cells that respond to bitterness are affected by about 35 different proteins contained in many different substances. Within the context of evolution, the ability to determine which plants might be poisonous by their bitter taste aided in human survival.
- *Savory*: Savory, or “umami”, is akin to the taste of broth, often because of glutamic acid or aspartic acid. Many different proteins and plants contain these two amino acids. For example, ripe tomatoes and cheese contain a good deal of glutamic acid, while asparagus contains aspartic acid.

Smell

Smell, like taste, relies on chemosensation. The ability to sense smells comes from olfactory sensory neurons, a group of specialized cells found within the nose. These olfactory sensory neurons are connected directly to the brain, and are also the only exposed neurons in the human body. Each of these neurons has one odor receptor that is stimulated by molecules released from substances in our environment. Once the olfactory sensory neurons detect molecules from the environment, they send signals to the brain which then identifies the smell. Substances may stimulate one neuron or a combination of neuron, depending on its composition.

Smells are received by the olfactory sensory neurons in two ways: the nostrils and the roof to the throat. This second pathway is why if a person has a cold, they often cannot smell or taste foods very well.¹³

Touch

The sense of touch is governed by the somatic sensory system, a system of nerve receptors that convey information to the brain when something comes into contact with skin.¹⁴ These receptors are categorized as either being rapidly adapting, (responding to a change in stimulus rapidly) or slowly adapting (responding to a change less quickly). *Rapidly* adapting receptors can sense immediately when something has touched the skin but cannot tell the length of time of the touch, whereas the slowly adapting receptors are skilled at sensing continuous touch but not the moment of touch itself. Mechanoreceptors, thermoreceptors, pain receptors, and proprioceptors comprise the four main types of nerve receptors.¹⁵

- *Mechanoreceptors*: receptors whose function is to detect pressure, vibrations, and texture.
- *Thermoreceptors*: receptors that are capable of detecting temperature.
- *Pain receptors*: receptors that detect pain stimuli.
- *Proprioceptors*: receptors that detect the position of body parts in relation to each other and the surrounding environment.

¹³“Olfactory System - National Library of Medicine - PubMed Health.” *Advances in Pediatrics.*, U.S. National Library of Medicine, www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0025088/.

¹⁴ Cicero, Shannon. “The Sense of Touch.” *HowStuffWorks*, HowStuffWorks, 20 Aug. 2009, health.howstuffworks.com/skin-care/information/anatomy/touching.htm).

¹⁵ “Skin & Sense of Touch | Science Project, Science Lesson.” *Home Science Tools*, 6 Oct. 2017, learningcenter.homesciencetools.com/article/skin-touch/).

When any of these touch receptors are activated, they send the signal along neurons to the spine which then relays the signal to the brain to be interpreted.¹⁶

Hearing

Hearing is experienced through the ear, which is made up of three parts: outer, middle, and inner ear. Each part plays an important role in hearing.¹⁷

- *Outer ear:* Also referred to as the pinna, this is the only visible part of the ear system. Its role is to collect sounds from the environment and allow the sounds to travel into the ear canal.
- *Middle ear:* This section of the ear amplifies sound as it enters the ear canal with the assistance of the eardrum. The eardrum consists of a membrane that separates the outer ear from the middle ear and relays sound vibrations to the inner ear via three bones called ossicles:
 - The malleus (or hammer): is connected to the eardrum.
 - The incus (or anvil): is connected to the malleus.
 - The stapes (or stirrup): is connected to the incus.

The eardrum vibrates when it detects sound waves, and in doing so, engages the ossicles that send the information further into the ear.

- *Inner ear:* After a sound has been amplified by the ossicles, it is sent to the cochlea, a small snail shaped tube located in the inner ear. The cochlea is filled with fluid and has an inner membrane covered in hair cells that move when sound

¹⁶ “How Your Sense of Touch Works.” *Www.plasticitybraincenters.com*, 15 June 2016, www.plasticitybraincenters.com/media/how-your-sense-of-touch-works/.

¹⁷ Newman, Tim. “How Does Hearing Work.” *Ww.medicalnewstoday.com*, 12 Mar. 2018, www.medicalnewstoday.com/articles/321179.php).

causes the fluid to rise and fall. Information regarding the sound is transmitted from the cochlea along the auditory nerve to a part of the brain stem called the medulla which then helps the brain process sound information.

Sight

The sense of sight is the result of light reflecting from objects and entering the eye. Light enters the eye via the cornea, a window-like structure at the front of the eye. The pupil regulates the amount of light and is surrounded by the iris, the colored part of the eye. As the front part of the eye is curved, it bends, or refracts, light. This causes the image of what the eyes see to be projected upside down on the retina. The retina is responsible for turning light into images and signals the brain can interpret through the use of photosensitive cells called rods and cones. Cones are used for daylight vision, and are sensitive to light, but not color, whereas rods are utilized for night vision. The lens, an adjustable disc-like structure, assists in focusing light onto the retina via reflexive response not controlled by the brain. Once the image is focused properly, the light signal is transmitted by way of an electrical signal to the brain via the optic nerve. As the brain receives this information, it adjusts the upside-down image accordingly so that we see properly.¹⁸

How Do Humans Experience Sensory Pleasure?

An essential aspect of the human experience is pleasure. On the outset, the idea of pleasure might seem rather simple. That is, “Having my back rubbed simply *feels* good”, or, “I find interacting with other artists rewarding”. Indeed, one can break down the experience of pleasure into two simple categories: sensory pleasure and “higher” pleasure. Higher pleasure can be described as having come from intellectual or spiritual engagement.¹⁹ Sensory pleasure, on

¹⁸ “The Eyes | Protecting Sight.” *Sightsavers*, 2017, www.sightsavers.org/protecting-sight/the-eyes/.

¹⁹ “Two Pleasures.” *Changingminds.org*, changingminds.org/explanations/emotions/happiness/two_pleasures.htm.

the other hand, is concerned with pleasure directly related to the five senses (hearing, sight, touch, taste, and smell). While higher pleasure is certainly important, I am specifically interested in sensory pleasure as it is often directly related to guilt from a psychological perspective. Despite this rather simple delineation of pleasure into two major categories, the physiological and psychological aspects of experiencing pleasure are complex processes and as such, warrant examination.

To start, dopamine plays an important role in how humans feel pleasure from a neurological standpoint. According to Bergland (2014), starting in the 1950s, research was used to show how dopamine levels increased in the brains of mice and rats when they were injected with addictive drugs such as cocaine or nicotine. As the dopamine levels increase, addictive behaviors are reinforced via a pleasurable reward or merely the anticipation of said reward. These results are no different for humans. Human test subjects experience the thrill of drugs, gambling, or sex and in doing so, exhibit the same dopamine response in their brains as lab rats and mice.²⁰

Berrige (2014) clarifies this: despite the fact that dopamine is an important component in pleasure, it is not the sole cause of pleasure itself. Instead, it is more of an associative system within the brain that helps to allow us to feel sensory pleasure. To the point, when coupled with other various brain systems, dopamine merely assists in our experiencing pleasure. Regardless of the role dopamine plays, pleasure has the ability to activate many deep brain systems either

²⁰ Bergland, Christopher. "The Neuroscience of Pleasure and Addiction." *Psychology Today*, Sussex Publishers, 31 May 2014, www.psychologytoday.com/us/blog/the-athletes-way/201405/the-neuroscience-pleasure-and-addiction.

individually or in groups. That is, systems within the brain can function either independently or in groups in feeling pleasure with or without dopamine.²¹

Pleasure is also complex from a psychological perspective. While there are many different psychological theories as to the nature of pleasure, perhaps one of the more popular frameworks is the Freudian idea of the “pleasure principle”. In Freudian psychoanalysis, the pleasure principle strives to fulfill our most basic and primitive urges, including hunger, thirst, anger, and sex. As Cherry (2017) tells us, the id drives the desire for instant gratification and pleasure. The id is simultaneously one of our most motivating psychological forces while at the same time existing and functioning at the unconscious level. The id consists of our most basic urges. In early childhood, the majority of our behavior is directed by the id. Children act upon these primal urges, such as food, drink, and other forms of pleasure. This pleasure principle directs the id to help ensure survival by ways of addressing these basic necessities as quickly as possible and gives little to no thought as to whether the behavior associated with this pleasure seeking is acceptable or not. As the individual matures, these behaviors become less acceptable. The ego develops so as to reign in the id. The ego assists in making sure the id’s needs are met, but in more socially acceptable ways. In opposition to the pleasure principle of the id, the ego operates through the reality principle, as Freud called it. The reality principle counterbalances the pleasure principle, as it instructs the ego to find ways of fulfilling needs that are not only acceptable, but realistic as well.²² As an example, imagine a very young child who is thirsty. If they see another child drinking water, they might grab the water out of the hand of the other child and begin drinking. Freud’s idea of the pleasure principle states that the id will seek out the

²¹ Berridge, Kent. “Simple Pleasures.” *Monitor on Psychology*, American Psychological Association, Nov. 2004, www.apa.org/science/about/psa/2004/11/berridge.aspx.

²² Cherry, Kendra. “What Is the Pleasure Principle? Review Your Psychology Terms.” *Verywell Mind*, Verywellmind, 14 Mar. 2017, www.verywellmind.com/what-is-the-pleasure-principle-2795472.

most immediate of gratification; however, once the ego has developed, the reality principle will cause the ego to seek out more acceptable means. For example, instead of grabbing another's water, the child will now request a glass for themselves.²³

While this is a common theory of how and why pleasure arises within an individual psychologically speaking, it is not a complete picture. Another idea is that pleasure is heavily influenced by the context of the experience. Paul Bloom (2011) states that, while the sensory nature of pleasure cannot be denied, (i.e. the neurological systems within the human brain, etc.), there is much more to pleasure than simply the sensory aspect. Our expectations of a pleasurable sensory experience greatly influences just how much pleasure we do, in fact, feel. Paul Bloom succinctly tells us:

The enjoyment we get from something is powerfully influenced by what we think that thing really is. This is true for intellectual pleasures, such as the appreciation of paintings and stories, and it is true as well for pleasures that seem simpler and more animalistic, such as the satisfaction of hunger and lust...It gets worse. My favorite recent finding was reported in a working paper called "Can People Distinguish Pâté from Dog Food?" They can't. If you grind up a product called "Turkey & Chicken Formula for Puppies/Active Dogs" in a food processor and garnish it with parsley, people cannot reliably distinguish it from duck liver mousse, pork liver pâté, liverwurst, and Spam. But, of course, if you know what you are eating, dog food and pâté are entirely different taste experiences.²⁴

How Does Sensory Pleasure Play A Role In The Experience Of Guilt?

It would seem that human guilt and pleasure are often associated. Indeed, feelings of guilt are often tied with pleasurable acts. What's more, many times the very act that causes guilt in the first place are found to be more pleasurable *because* of the guilt associated with them. Take, for

²³ Cherry, Kendra. "What Is the Pleasure Principle? Review Your Psychology Terms." *Verywell Mind*, Verywellmind, 14 Mar. 2017, www.verywellmind.com/what-is-the-pleasure-principle-2795472.

²⁴ Bloom, Paul. "What Makes People Feel Pleasure?" CNN, Cable News Network, 28 Aug. 2011, www.cnn.com/2011/OPINION/08/27/bloom.pleasure/index.html.

example, indulging in a pint of ice cream. The anticipation of the flavor and the texture about to be consumed will trigger a massive dopamine response in the brain and just feel *good*. However, once the anticipation has past, and the indulgence of the ice cream is over, another stage occurs: guilt. By no means is this exclusive to ice cream. A myriad of examples can be given that illustrate this cycle: gambling, binge-watching television, shopping sprees, and so on. According to new research, the reason for this ultimate guilt after a pleasurable indulgence is derived from how our minds calculate reward. Researchers have put forth that pleasure-induced guilt arises from the conflict between mutually exclusive goals.²⁵ Using the example of the ice cream, a person has a short-term reward, that of the deliciousness of eating the ice cream. But, this is in conflict with a potential long-term reward: that of feeling that one is in control of their eating. Ideally, one could consume the entire pint of ice cream and still enjoy the idea that they will eat moderately in the future. According to Wise (2017), giving into temptation creates a subconscious re-evaluation. Every action has both a hedonic value (the deliciousness of the ice cream) as well as a more obscure signal value you send to yourself about the type of person you see yourself as being. One doesn't become obese from eating one pint of ice cream alone; rather, obesity results from being the type of person who eats *many* pints of ice cream. Upon eating the final bite of the ice cream, the immediate gratification is over and the person is left with the negative signal they have sent themselves, which is they are the type of individual who does, in fact, eat *many* pints of ice cream.²⁶ Put in simplistic terms, the now (the sensory pleasure), is in conflict with our future idealized self, and guilt arises from this pleasure.

²⁵ Wise, Jeff. "Breaking the Cycle of Pleasure and Guilt." CNN, Cable News Network, 26 Jan. 2017, www.cnn.com/2017/01/26/health/pleasure-guilt-partner/index.html.

²⁶ Wise, Jeff. "Breaking the Cycle of Pleasure and Guilt." CNN, Cable News Network, 26 Jan. 2017, www.cnn.com/2017/01/26/health/pleasure-guilt-partner/index.html.

Interestingly, the idea of an experience or a sensation having guilt associated with it has shown to *increase* our pleasure while we indulge in said sensation or experience. Psychologists have found that guilty feelings about our diet or lifestyle don't appear to help us live a healthier life. Rather, guilt often makes us want to indulge more. This irony may arise for many possible reasons. One idea is that our vices are tempting simply because we know they are bad for us. To illustrate that guilt enhances feelings of pleasure, Kelly Goldsmith at Northwestern University (Robson, 2014), gave volunteers a series of word games. They were first instructed to unscramble a few sentences, some containing words like "remorse" or "sin" or "guilt", while the others contained more neutral terms. For the next stage, they were then:

...given fragments like "E N _ _ _" or "P L _ _ _ _ _" and asked to complete the word. Those who had previously unscrambled the sentences about wrongdoing were subsequently far more likely to fill in the gaps with words associated with desire – such as "enjoy" or "pleasure" – compared to other obvious possibilities, such as "enter" or "pleading". In other words, rather than deflecting thoughts away from sin, the guilty subconscious started to think more lustfully. Importantly, Goldsmith found those feelings translated to real sensory experiences. People primed with guilt said they enjoyed eating sweets in the lab more than others, for instance. The same was true even if Goldsmith subtly reminded them of the consequences on their health; looking at fitness magazines both increased their guilt, and their enjoyment, of the sweets.²⁷

In addition to enhancing attraction to temptation, which ultimately results in guilt, the feeling may also trigger the "what-the-hell" effect. This psychological phenomenon basically states that if an individual has given into temptation once, they might as well give in completely and with abandon. A recent study conducted at University of Canterbury in New Zealand illustrated this effect. The researchers (Kuijer, Boyce & Marshall, 2014) discovered that individuals who associated cake with guilt had less belief in their self-control versus others who

²⁷ Robson, David. "Future - Psychology: Why Does Guilt Increase Pleasure?" BBC, BBC, 30 Dec. 2014, www.bbc.com/future/story/20141219-why-does-guilt-increase-pleasure.

associated cake with something more positive like a birthday party, for instance. Over the course of a three month span they looked at weight loss in the participant group and found the people who felt guilt associations regarding the cake were less successful at losing weight than those who associated cake with positive experiences. This suggested that those with negative associations were more likely to feel a sort of “all-or-nothing” attitude towards the weight loss: that is, once the diet had been deviated from, there was no point in trying to right their course of action, and thus continued to give into their temptations, despite their feelings of guilt.²⁸

How Does The Catholic Church Employ This Idea Of Guilt In Its Dogma And Theology?

While studies conducted at both the University of California at Berkeley and the University of Notre Dame found no evidence that Catholic teenagers experience more guilt than non-Catholic teenagers, other studies have shown that, among religious observers, religion itself was, in fact connected to guilt.^{29, 30} This may come as a surprise to people who are not familiar with the teachings of the Catholic Church. Indeed, the idea of Original Sin is a very important element of Catholic doctrine. Original Sin states that because of Adam, having given into temptation and his subsequent fall from God’s grace, all humans thereafter are “deprived of original holiness and justice”.³¹ That is to say, we, as a species, are divorced from divinity, and must now become baptized so as to help erase this spiritual blemish. This baptism, however, only relieves us of *some* of the burden of Original Sin. Church Doctrine states that because of the loss of divinity from Original Sin, we will sin regardless, and as such, must seek atonement regularly

²⁸ (Kuijjer, Roeline G., et al. “Associating a Prototypical Forbidden Food Item with Guilt or Celebration: Relationships with Indicators of (Un)Healthy Eating and the Moderating Role of Stress and Depressive Symptoms.” *Psychology & Health*, vol. 30, no. 2, 2014, pp. 203-217., doi:10.1080/08870446.2014.960414.

²⁹ Vaisey, Stephen; Smith, Christian (1 January 2008). "Catholic Guilt among U.S. Teenagers: A Research Note". *Review of Religious Research*. 49 (4): 415–426.

³⁰ Demaria, Thomas, and Howard Kassinove. “Predicting Guilt from Irrational Beliefs, Religious Affiliation and Religiosity.” *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, vol. 6, no. 4, 1988, pp. 259-272., doi:10.1007/bf01061292.

³¹ Catholic Church. *Catechism of the Catholic Church*. 2nd ed. Vatican: Libreria Editrice Vaticana, 2012. Print.

through confession. This idea of asking forgiveness for our sins is crucial to the teachings of Catholicism. In fact, the performance of the *Penitential Rite*, a type of confession, begins each Mass. Going further, adherents to Catholicism are required to perform the *Sacrament of Penance* at least once a year for sins deemed serious. This emphasis on the inescapability of the cycle of “sin, confession, and absolution” describes the notion of “Catholic Guilt”. Catholic Guilt, an ingrained guilt from early childhood, has been said to pervade the Catholic’s way of thinking in day-to-day life, and interestingly, might contribute to Obsessive Compulsive Disorders (OCD) in some individuals, as research has shown.^{32 33}

To help reinforce this notion of Catholic Guilt, the Bible itself speaks plainly of succumbing to the temptations of sensory pleasure. Take the subject of sex, for example. Sex and reproduction is one of the most basic biological human needs.³⁴ Without sex, our species would simply become extinct from lack of reproduction. Our drive for sex, and in turn, our desire for sex is one of our humanities’ strongest motivators. While the institution of marriage is allowed, the act of sex outside the bounds of marriage is considered a sin, let alone just the idea of lust or desire. The Bible says:

But because of the temptation to sexual immorality, each man should have his own wife and each woman her own husband.³⁵ Let marriage be held in honor among all, and let the marriage bed be undefiled, for God will judge the sexually immoral and adulterous.³⁶ If a man commits adultery with the wife of his neighbor, both the adulterer and the adulteress shall surely be put to death.³⁷ But

³² Shapiro, Leslie J. “Pathological Guilt: A Persistent Yet Overlooked Treatment Factor in Obsessive Compulsive Disorder.” *American Academy of Clinical Psychiatrists*, Feb. 2011, web.archive.org/web/20121201040951/https://www.aacp.com/Abstract.asp?AID=9322&issue=February%202011&page=C&UID=.

³³ Sica, Claudio, et al. “Religiousness and Obsessive-Compulsive Cognitions and Symptoms in an Italian Population.” *Behaviour Research and Therapy*, vol. 40, no. 7, 2002, pp. 813-823., doi:10.1016/s0005-7967(01)00120-6.

³⁴ “The Biological Need for Sex.” *The Smart Living Network*, 18 Jan. 2008, www.smartlivingnetwork.com/living-healthy/b/the-male-biological-need-for-sex/.

³⁵ 1 Corinthians 7:2, KJV

³⁶ Hebrews 13:4. KJV

³⁷ Leviticus 20:10 KJV

I say to you that everyone who looks at a woman with lustful intent has already committed adultery with her in his heart.³⁸

It can be argued that the scriptural examples point towards addressing excessive or amoral behaviors and not moderate or church approved behaviors. As stated above, the appearance of performing an act or having an experience that will bring guilt increases the pleasure (as describe above). While, at the same time, it reinforces the “sin-confess-absolution” cycle that further entrenches the idea of Catholic Guilt as a way of maintaining adherence to the dogma of the church. Indeed, pleasure is good, but guilty pleasure is “sinfully” good.

What Key Concepts Within Catholicism Are Related To Guilt?

As mentioned above, the Catholic Church utilizes guilt very effectively with the theory of Original Sin. However, this notion is not the only theological concept employed by the Church that concerns the cause of, or solution to, guilt. Indeed, there are many ideas within Catholicism that could be influential in a person experiencing aspects of guilt. Five such concepts are: temptation, Original Sin, confession, atonement, and ascension. These concepts are critical to this research as they form the departure point for the sculptures that comprise the series of work, *Acts of Contrition*.

Temptation

Temptation plays an important role in Catholicism. From a historical perspective, the idea of temptation is one of the key concerns of Christianity, having become part of the theological framework of Catholic dogma as a whole. If one were to view the Bible as an historical document, one of the first recorded acts of a human was the temptation of Eve in the Garden of Eden and the subsequent fall from grace: “And the serpent said unto the woman, ye shall not

³⁸ Matthew 5:28 KJV

surely die: For God doth know that in the day ye eat thereof, then your eyes shall be opened, and ye shall be as gods, knowing good and evil.”³⁹ In fact, according to the Bible, no one, not even Jesus of Nazarene himself, is immune to temptation: “And Jesus, full of the Holy Spirit, returned from the Jordan and was led by the Spirit in the wilderness for forty days, being tempted by the devil.”⁴⁰ Despite its religious importance, only the definition is clearly defined by the Church: “[a]n attraction, either from outside oneself or from within, to act contrary to right reason and the commandments of God.”⁴¹ While the Catechism (the official compendium of Catholic doctrine⁴²) clearly defines temptation, but offers no insight into either how temptation arises or the role it plays in the spiritual lives of Catholics. Rather, these concerns are left to the clergy.

According to Monsignor Charles Pope, temptation arises from three sources: the world, the flesh, and the devil⁴³:

- *Worldly Temptation*: Temptation that occurs from values and priorities that are against the Catholic Church, such as lust for power or money.
- *Temptation of the Flesh*: Temptations that are not necessarily concerned with the physical body, such as in sex, but are rather, associated with a person’s sinful drives. Most notably, are the examples of the Seven Deadly Sins, (Pride, Greed, Lust, Anger, Gluttony, Envy, and Sloth).

³⁹ Genesis 3:2-5, KJV

⁴⁰ Luke 4:1-2, KJV

⁴¹ Catholic Church. Catechism of the Catholic Church. 2nd ed. Vatican: Libreria Editrice Vaticana, 2012. Print.

⁴² Cortes-Sjoberg, Santiago. “What Is the Catechism of the Catholic Church?” USCatholic.org, July 2011, www.uscatholic.org/church/2011/05/what-catechism-catholic-church.

⁴³ Pope, Charles. “What Is Temptation, Why Does God Permit It, and What Are Its Sources?” *Community in Mission*, 27 May 2015, blog.adw.org/2015/03/primer-on-temptation/.

- *Temptation from the Devil:* Temptations that arise from demonic forces external to the believer, forces attempting to manipulate humans into engaging in sinful behavior, such as Eve in the Garden of Eden.⁴⁶

While the Catechism of the Catholic Church offers no officially sanctioned insight into the role temptation plays in the spiritual life of the believer, many clergy offer theological explanations and interpretations. One such idea comes again from Monsignor Charles Pope where he states that temptation is essential to free will, and we must have alternatives to God's will because without the free will of choice, our blind following would render our obedience to God as useless.⁴⁴ Another possible role temptation plays in the lives of Catholics comes from Father Jose Antonio Fortea. Father Fortea states that without temptation, spiritual growth cannot occur by resisting the allure of sin: "...God allows temptation because He knows that much good can come from it if we resist."⁴⁵ Perhaps the most compelling, and obvious role temptation plays is that of the test of worthiness before God. The *Catholic Harbor of Faith and Morals* suggests that God allows temptation to occur so as to give the believer the chance of manifesting their loyalty and proving worthy of divine love.⁴⁶ Going further with this notion of the devout proving their worth to God, the Bible itself reinforces this sentiment with the Book of Tobit stating: "And because thou wast acceptable to God, it was necessary that temptation should prove thee."⁴⁷ and the Epistle of St. James telling us: "Blessed is the man who endures trial, for when he has stood the test he will receive the crown of life which God has promised to those who love him."⁴⁸

⁴⁴ Pope, Charles. "What Is Temptation, Why Does God Permit It, and What Are Its Sources?" *Community in Mission*, 27 May 2015, blog.adw.org/2015/03/primer-on-temptation/.

⁴⁵ Fortea, Fr. "Temptation: Why Does God Allow It? - An Exorcist Responds." *SpiritualDirection.com / Catholic Spiritual Direction*, 23 Aug. 2017, www.spiritualdirection.com/2013/12/26/god-allow-temptation.

⁴⁶ Kempis, Thomas A. "Temptations and the Devils That Tempt." *Our Lady Queen of Angels*, catholicaharboroffaithandmorals.com/Devils%20who%20Tempt.html.

⁴⁷ Edgar, S., Kinney, A. M., & Dumbarton Oaks. (2010). *The Vulgate Bible: Douay-Rheims translation*. Cambridge, Mass: Harvard University Press.

⁴⁸ James 1:12, KJV

Original Sin

Original Sin refers to the Catholic belief that all humans are born into a perpetual state of sin resulting from Adam choosing to partake of the fruit from the Tree of Knowledge of Good and Evil, and therefore losing the grace of original holiness.⁴⁹ This doctrine of Original Sin holds that, because all humans are the offspring of Adam and Eve and because of Adam and Eve's fall from Divine grace, every person who is born into the world is in turn corrupted by their Fall and are powerless to restore themselves except by baptism through the Church.⁵⁰ The result of Original Sin is death and suffering, and concupiscence, (the inclination to commit sinful acts) for all of humanity.

While there is no actual mention of Original Sin explicitly in the Bible, the key scripture from which the idea is based originates from Romans 5:12: "Wherefore, as by one man sin entered into the world, and death by sin; and so death passed upon all men, for that all have sinned."⁵¹ In fact, the first mention of Original Sin did not appear until the second century A.D. with Irenaeus, Bishop of Lyon. He developed the idea that, because all humans are descendants of Adam and Eve, all humans share Adam's guilt. Later, Augustine of Hippo added greatly to the theory in the 5th Century. In defense of the essential practice of baptism in salvation, he clarified the idea that Original Sin occurred not through imitation, but by sexual concupiscence. Augustine felt that sexual concupiscence was present regardless of marriage status, and therefore, everyone born from sexual activity (as opposed to Immaculate Conception), was

⁴⁹ "Catechism of the Catholic Church." Catechism of the Catholic Church | Catholic Culture, 2018, www.catholicculture.org/culture/library/catechism/index.cfm?recnum=1872.

⁵⁰ White, Lesli. "What Does the Bible Really Say About Original Sin?" The Biblical Basis for Being Pro-Choice: Bible, Abortion, Christians, Religion - Beliefnet - Page 2, Beliefnet, Inc. and/or Its Licensors, www.beliefnet.com/faiths/christianity/what-does-the-bible-really-say-about-original-sin.aspx.

⁵¹ Romans 5:12, KJV

tainted with Original Sin and, as a result, doomed to hell unless they received baptism.⁵² Further, he reasoned that because of Adam's divine condemnation and loss of immortality, death and suffering were also the result of his Original Sin.⁵³ His ideas were confirmed, but not codified, with the Second Council of Orange in 529.⁵⁴ Finally, during the Council of Trent (1545-1563), Augustine's theory on Original Sin was officially formalized by the Catholic Church.⁵⁵

Why Original Sin was adopted as part of the official dogma of the Catholic Church is unclear. One possible explanation is to place a sense of overwhelming importance on the ritual of baptism and the socio-political power and control it helps maintain: "Baptism, by imparting the life of Christ's grace, erases original sin and turns a man back towards God..."⁵⁶ That is to say, the ritual of baptism, quite possibly, led to a greater obedience to the Church by its followers. Using eternal damnation as a consequence of Original Sin and baptism being the only remedy for this inherited condition, it is easy to see how this argument might be effective.⁵⁷ Another possible justification given for the adoption of Original Sin by the Catholic Church is the attempt to succinctly answer the philosophical question of "If God is merciful and all loving, why is evil allowed to exist in the world?" Speaking toward this question, the Catechism of the Catholic Church suggests that God himself is not to blame for the evil that takes place in the world, but rather, Adam, is ultimately responsible for humanity's suffering through his actions:

⁵² "Religions - Christianity: Original Sin." *BBC*, BBC, 17 Sept. 2009, www.bbc.co.uk/religion/religions/christianity/beliefs/originalsin_1.shtml.

⁵³ Overstreet, Alfred T. "Origin And History of the Doctrine of Original Sin." *BEGINNING OF THE WORK OF CHARLES G. FINNEY*, www.gospeltruth.net/menbornsinners/mbs03.htm

⁵⁴ A. J. Wallace, R. D. Rusk, *Moral Transformation: The Original Christian Paradigm of Salvation* (New Zealand: Bridgehead, 2011), pp. 284–285.

⁵⁵ "Religions - Christianity: Original Sin." *BBC*, BBC, 17 Sept. 2009, www.bbc.co.uk/religion/religions/christianity/beliefs/originalsin_1.shtml.

⁵⁶ "Catechism of the Catholic Church - The Fall." *Vatican*, www.vatican.va/archive/ccc_css/archive/catechism/p1s2c1p7.htm.

⁵⁷ "Religions - Christianity: Original Sin." *BBC*, BBC, 17 Sept. 2009, www.bbc.co.uk/religion/religions/christianity/beliefs/originalsin_1.shtml.

God did not make death, and he does not delight in the death of the living. . . It was through the devil's envy that death entered the world...By his sin Adam, as the first man, lost the original holiness and justice he had received from God, not only for himself but for all human beings...As a result of original sin, human nature is weakened in its powers, subject to ignorance, suffering and the domination of death, and inclined to sin⁵⁸

One more theory of the use of Original Sin is the legitimization of Jesus having been the Son of God. Jesus, having been born of Immaculate Conception and not through sexual intercourse, would have been free from the taint of Original Sin, and thus, retained the Grace of God that was lost by Adam and Eve.⁵⁹

Confession

Confession is the “acknowledgment or disclosure of sin or sinfulness, especially to a priest to obtain absolution.”⁶⁰ Formally called the *Sacrament of Penance and Reconciliation*, confession allows the devout to obtain absolution for sins committed against God, as confession is the path to forgiveness by God for one’s transgressions after baptism.⁶¹ While the Church believes that all sin is bad, not all sins require the act of confession. Mortal sins necessitate confession, whereas venial sins do not necessarily require this. A venial sin is one that is either less serious in nature, or is a mortal sin committed without complete knowledge by the individual. An example of venial sin includes abusive language.⁶² While venial sins do not require confession, if they become habitual, they eventually morph into mortal sins and thus, confession is needed for full absolution. A mortal sin, on the other hand, is one which will

⁵⁸ “Catechism of the Catholic Church - The Fall.” *Vatican*,
www.vatican.va/archive/ccc_css/archive/catechism/p1s2c1p7.htm.

⁵⁹ “Religions - Christianity: Original Sin.” *BBC*, BBC, 17 Sept. 2009,
www.bbc.co.uk/religion/religions/christianity/beliefs/originalsin_1.shtml.

⁶⁰ “Confession.” *Dictionary.com*, Dictionary.com, www.dictionary.com/browse/confession.

⁶¹ “Confession.” *Home | Catholic Answers*, www.catholic.com/tract/confession.

⁶² “What Is the Difference between Mortal and Venial Sin?” *Catholic Straight Answers*, 23 May 2013,
catholicstraightanswers.com/what-is-the-difference-between-mortal-and-venial-sin/.

destroy the grace of God in one's soul and prevent entrance to heaven. The Bible itself gives some clear examples of what are considered mortal sins with Galatians 5:19 -21: "...lewd conduct, impurity, licentiousness, idolatry, sorcery, hostilities, bickering, jealousy, outbursts of rage, selfish rivalries, dissensions, factions, envy, drunkenness, orgies, and the like.... "In fact, there are three main criteria for a sin to be considered mortal. According the Catechism of the Catholic Church, a sin must: be considered very serious, there must be full knowledge of the sinful nature of the act, and third, the person must be deliberate in their act of sin.⁶³ Additionally, confession must be done at least once a year as decreed in Canon 21 of the Fourth Lateran Council in 1215.⁶⁴ The act itself is relatively straightforward, having been standardized into Catholic theology since the Council of Trent (1545–1563). The process, a very private affair, follows as such⁶⁵:

- The priest greets the believer whereupon they pray the Sign of the Cross.
- The actual confession takes place with the devout telling the priest of their sins.
- The priest gives the confessor acts of penitence to perform, such as reciting specific prayers, etc.
- The priest requests the person to recite the Act of Contrition
- Absolution is given by the priest.
- The priest dismisses the confessor.

The idea of confession is entrenched in the bible and is a cornerstone of the Catholic Church's dogma, having been found in both the Old Testament and New Testament. However,

⁶³ "Catechism of the Catholic Church - IntraText." Vatican, www.vatican.va/archive/ENG0015/_P6C.HTM.

⁶⁴ Leclercq, Henri. "Fourth Lateran Council (1215)." *The Catholic Encyclopedia*. Vol. 9. New York: Robert Appleton Company, 1910. 10 May 2018 <<http://www.newadvent.org/cathen/09018a.htm>>.

⁶⁵ "Confession Step by Step." Cathedral of the Blessed Sacrament, www.altoonacathedral.org/confession-step-by-step/.

the act itself has evolved over time through the manifestation of the ritual and the requirements needed. Perhaps the two most often cited scriptures are Leviticus 19:21-22 from the Old Testament, “And he shall bring his trespass offering unto the LORD, unto the door of the tabernacle of the congregation, even a ram for a trespass offering,” and Matthew 3:6, “And were baptized of him in Jordan, confessing their sins.” While the act of confessing one’s sins has been with the Church from the beginning, doing so only in private did not come about until the 7th century. Prior to that, confession was done publicly, but was not standardized throughout the Catholic world.⁶⁶ Such standardization evolved slowly and unsystematically. In 1215 at the Council of Trent, the requirement of all Catholic followers to confess at least once per year was codified, and later, in 1551 the requirement of exclusively private confession was put forth into canon by the same council.⁶⁷ Little has changed since.

Atonement

Applied to the general Catholic, atonement is the reparation of an offence, usually through an act or performance that outweighs the transgression of the penitent. However, when applied to the actions of Jesus Christ himself, it is defined as the rectification of Original Sin by way of his crucifixion.⁶⁸ Each definition illustrates the importance of righting wrongs, however, the dogmatic implication are significantly different.

While atonement has perhaps less overall significance within the Catholic Church when applied to the individual, it is still very important: it can be said that, from a Catholic perspective, the atonement of an individual is synonymous with penitence. In fact, the definitions are nearly

⁶⁶ “Catechism of the Catholic Church - The Sacrament of Penance and Reconciliation.” Vatican, www.vatican.va/archive/ccc_css/archive/catechism/p2s2c2a4.htm.

⁶⁷ “The Origins of Mandatory Private Confession in the Catholic Church.” Quartermaster of the Barque, 28 May 2014, qmbarque.com/2013/10/30/the-origins-of-mandatory-private-confession-in-the-catholic-church/.

⁶⁸ “Penance-Modern Catholic Dictionary.” Eucharistic Miracle of Bolsena-Orvieto, Italy, www.therealpresence.org/cgi-bin/getdefinition.pl.

identical: Penance is the act of doing a good deed to make up for past wrongs,⁶⁹ compared to atonement being [t]he action of making amends for a wrong or injury.⁷⁰ Indeed, atonement, or penance, is an essential function in the ritual of the Sacrament of Penance. In order for the believer to have a successful confession and be absolved of their personal sins, the priest assigns a penance for the follower to perform.⁷¹ Refusal to perform this penance as assigned, would render the act of confession a failure. As a result, the believer would not be truly absolved, thus putting their soul at risk for damnation.⁷²

As applied to Jesus Christ, the significance cannot be overestimated as the atonement of Jesus via crucifixion is the cornerstone of Catholic theology.⁷³ In the Old Testament, animal sacrifices were used to atone for an individual's sins.⁷⁴ However effective these sacrifices may have been for the individual, these were still not considered sufficient to rectify the transgressions of humanity, in general. That is, animal sacrifice alone could not atone for Original Sin: it had to be a human who was without sin.⁷⁵ In fact, many Christians believe that the crucifixion of Jesus not only rectified Original Sin, but also completely fulfilled one of the most important Old Testament prophecies concerning the coming of the messiah:

All we like sheep have gone astray; we have turned everyone to his own way; and the Lord hath laid on him the iniquity of us all. He was oppressed, and he was afflicted, yet he opened not his mouth: he is brought as a lamb to the

⁶⁹ "Penance - Dictionary Definition." Vocabulary.com, www.vocabulary.com/dictionary/penance.

⁷⁰ "Atonement | Definition of Atonement in English by Oxford Dictionaries." Oxford Dictionaries | English, Oxford Dictionaries, en.oxforddictionaries.com/definition/atonement.

⁷¹ "Christ Our Life." Our Catholic Faith, www.loyolapress.com/our-catholic-faith/sacraments/reconciliation/steps-of-the-sacrament-of-penance-and-reconciliation.

⁷² "Title V. The Sacrament of the Anointing of the Sick (Cann. 998 - 1007)." CHAPTER 3: CONFIRMATION, www.clerus.org/bibliaclerusonline/en/dn4.htm.

⁷³ Park, Edwards Amasa, et al. *The Atonement: Discourses and Treatises*. Forgotten Books, 2015.

⁷⁴ Leviticus 4:35, KJV

⁷⁵ Stetzer, Ed. "A Closer Look: Jesus and Atonement in the Old Testament." *Christian History | Learn the History of Christianity & the Church*, Jan. 2012, www.christianitytoday.com/edstetzer/2012/january/closer-look-jesus-and-atonement-in-old-testament.html.

slaughter, and as a sheep before her shearers is dumb, so he openeth not his mouth.⁷⁶

Indeed, Jesus is referred to as the sacrificial Lamb of God by John the Baptist prior to his crucifixion: “The next day John seeth Jesus coming unto him, and saith, Behold the Lamb of God, which taketh away the sin of the world.”⁷⁷ And subsequent to the crucifixion, Hebrews 9:12 states: “Neither by the blood of goats and calves, but by his own blood he entered in once into the holy place, having obtained eternal redemption for us.”⁷⁸ This is reinforced by the Catechism:

Man's sins, following on original sin, are punishable by death. By sending his own Son in the form of a slave, in the form of a fallen humanity, on account of sin, God made him to be sin who knew no sin, so that in him we might become the righteousness of God⁷⁹

Said another way, by being crucified, Jesus Christ not only atoned for the Original Sin on behalf of humanity, but also fulfilled the Old Testament prophesy of Isaiah.

The idea of atonement is one that precedes Christianity and is itself not exclusive to the Catholic Church. However, the official theological doctrine of atonement is a construct of Catholicism, and as such, has its own history and evolution. As the Church grew as an entity, so did this core idea. Over time there have been three main perspectives within Catholicism: Moral Influence Theory, Ransom Theory, and Satisfaction Theory. Because of the importance of atonement to the core dogma of Catholicism, it is no surprise that deep discussion on the subject began with the codification of the Bible itself during the Council of Nicaea in 325.⁸⁰ While the

⁷⁶ Isaiah 53:6-7, KJV

⁷⁷ John 1:29, KJV

⁷⁸ Hebrews 9:12, KJV

⁷⁹ “Catechism of the Catholic Church - Jesus Died Crucified.” Vatican, www.vatican.va/archive/ccc_css/archive/catechism/p122a4p2.htm.

⁸⁰ Leclercq, Henri. "The First Council of Nicaea." *The Catholic Encyclopedia*. Vol. 11. New York: Robert Appleton Company, 1911. 12 May 2018 <<http://www.newadvent.org/cathen/11044a.htm>>.

matter was certainly discussed and the foundational theories were laid, the interpretation of how the atonement of Christ was to be looked at was left to debate. The earliest of the four main theories to emerge was the Moral Influence theory in the 2nd and 3rd Centuries,⁸¹ which states that the atonement of Christ was intended to lead humanity toward a positive moral change by his example in life and in death (the atonement). The second theory to emerge within Church doctrine was the Ransom Theory, the idea that Jesus gave his life as a payment, or ransom, to Satan in exchange for releasing humanity from Original Sin.⁸² This perspective was dominant from about the 2nd to about the 11th century.⁸³ In the 11th century, Catholic theologian Anselm developed what is known as Satisfaction Theory, a refinement of the Ransom Theory which states that all sin, and especially Original Sin, was a debt owed to God and that the atonement of Christ paid, or satisfied, this affront to God.⁸⁴ This theory is similar to the Ransom Theory in that a debt is paid. However, the key difference is that this debt has been paid to God, and not the Devil. In 1547 at the sixth session of the Council of Trent, it was formally adopted by the Church.⁸⁵ This has stayed the predominant theory, with slight changes over time.

Ascension

The Ascension of Christ refers to the entrance of Jesus, both in body and in spirit, into heaven, having completing the atonement of Original Sin and thus ensuring the salvation of

⁸¹ Franks, Robert S. "A History of the Doctrine of the Work of Christ in Its Ecclesiastical Development." Internet Archive, The Library Shelf, 5 Nov. 2007,

⁸² Robinson, B. A. "The Christian Concept of Atonement: The Ransom Theory." Home Page of the ReligiousTolerance.org Web Site, 16 Oct. 2007, www.religioustolerance.org/chr_atone7.htm.

⁸³ Slick, Matt. "Christian Apologetics & Research Ministry." CARM.org, CARM, 6 June 2017, carm.org/dictionary-ransom-theory.

⁸⁴ Robinson, B. A. "The Christian Concept of Atonement: The Satisfaction Theory." Home Page of the ReligiousTolerance.org Web Site, 13 Apr. 2005, www.religioustolerance.org/chr_atone8.htm.

⁸⁵ Kirsch, Johann Peter. "Council of Trent." The Catholic Encyclopedia. Vol. 15. New York: Robert Appleton Company, 1912. 12 May 2018 <<http://www.newadvent.org/cathen/15030c.htm>>.

humanity.⁸⁶ From a Catholic doctrinal perspective, the Ascension marks Jesus' final condition for divinity, where he unites with God and acts as both God himself and as an intermediary between God and humanity.⁸⁷ According to the Bible, the Ascension either took place during the same day as the Resurrection⁸⁸ or 40 days after.⁸⁹

The Ascension, in the context of Catholicism, is perhaps one of the most important theological events to have occurred in the Bible. For one, moments prior to his ascension Jesus prophesized his second coming.⁹⁰ This is vitally important to the Church. It has served as the cornerstone of Catholic dogma, allowing a strict adherence to either the reward for faithfully serving the tenets of the Church, or suffering the consequences of eternal damnation for those who do not.⁹¹ Another very important aspect of the Ascension is that of the pedagogical nature of Jesus' last interactions with his disciples. As the Ascension was about to occur, Jesus instructed his followers to proselytize his teachings to others, recruiting members to this new religion and establishing the Church: "Go ye therefore, and teach all nations, baptizing them in the name of the Father, and of the Son, and of the Holy Ghost."⁹² To say that this worked would be a vast understatement. As recent as 2013, there were an estimated 1.2 billion Catholics.⁹³ Perhaps the most important aspect of the Ascension is the fact that without the Resurrection and therefore, the Ascension, the Catholic Church and Christianity itself would simply not exist: "And if Christ

⁸⁶ Baker, Kenneth. "Jesus Ascended Into Heaven." *Catholic Education Resource Center*, www.catholiceducation.org/en/culture/catholic-contributions/jesus-ascended-into-heaven.html.

⁸⁷ Poblocki, Rick. "Catholic Q&A: The Ascension of the Lord." *The Station of the Cross Catholic Radio Network*, www.thestationofthecross.com/catholic-qa-the-ascension-of-the-lord/.

⁸⁸ Mark 16:1-19, KJV

⁸⁹ Acts 1:3-9, KJV

⁹⁰ John 14:1-3, KJV

⁹¹ "Catechism of the Catholic Church - 'From Thence He Will Come Again to Judge the Living and the Dead.'" *Vatican*, www.vatican.va/archive/ccc_css/archive/catechism/p1s2c2a7.htm.

⁹² Matthew 28:19, KJV

⁹³ "How Many Roman Catholics Are There in the World?" *BBC News*, BBC, 14 Mar. 2013, www.bbc.com/news/world-21443313.

be not risen, then is our preaching vain, and your faith is also vain.”⁹⁴ In the simplest terms possible, the Bible states that if the resurrection, and ultimately, the Ascension, had not occurred, the entire premise upon which the church is built would be false, causing the faith of the believers to be purely in vain.⁹⁵

Historically speaking, the story of the ascension of Christ is as old as the Bible, and is a core aspect of Catholicism. However, the liturgy of the Feast of the Ascension has evolved over time as one of the most important dates in the Catholic calendar. The Feast of the Ascension is important, in no small part because the holiday formalizes and reinforces the significance of the Ascension to the believer. The Feast, held on the fortieth day after Easter, is one of the Ecumenical feasts, ranking in importance with Easter according to the Catholic calendar. The observance of this feast dates to antiquity: although no evidence is known of its celebration before the 5th century, St. Augustine wrote about it in terms that illustrate it having been, even before his lifetime, of great importance.⁹⁶

Temptation, Original Sin, confession, atonement, and ascension are powerful ideological components used by the Catholic Church as a way to utilize guilt in such a way so as to help ensure the theological adherence of its followers. These concepts have evolved throughout the history of the Church, with each idea acting not only as individual tools for this adherence, but also in concert, further strengthening the Church’s power over the devout.

⁹⁴ 1 Corinthians 15:14, KJV

⁹⁵ Price, Brad "Commentary on 1 Corinthians 15:14". "Living By Faith: Commentary on Romans". <https://www.studylight.org/commentaries/bpc/1-corinthians-15.html>.

⁹⁶ Wynne, John. "Feast of the Ascension." *The Catholic Encyclopedia*. Vol. 1. New York: Robert Appleton Company, 1907. 16 May 2018<<http://www.newadvent.org/cathen/01767b.htm>>.

What Is The History Of Automata And Kinetic Sculpture?

From an art historical perspective, one could argue that all art that contains mechanical movement is kinetic sculpture. However, for the purposes of this research, it is pertinent at this time to differentiate between “kinetic sculpture” and “automata.” Kinetic sculpture is defined as “An art form, such as an assemblage or sculpture, made up of parts designed to be set in motion by an internal mechanism or an external stimulus, such as light or air”⁹⁷ whereas automata is defined as “a mechanical figure or contrivance constructed to act as if by its own motive power; robot.”⁹⁸ This is an important distinction for the purposes of the historical considerations. During the early part of the 20th century, we see a divergence. Kinetic sculpture, looked at from a modern and post-modern perspective, is interested in abstract forms and gestures, whereas automata, regardless of its era, is concerned with the human and animal forms and gestures. In fact, one could logically argue that all automata are kinetic sculpture, whereas not all kinetic sculpture is automata. This distinction is important because, while the two may now seem separate in terms of genre and mechanical behavioral concern, these forms have been employed in the context of religious agenda, regardless of this distinction.

Automata History

The first recorded examples of automata come from ancient Egypt where archeologists have discovered early proto-automata – articulated toys utilizing pull-strings – coming from the XII Dynasty (1900-1800 BCE). While the definition of automata as being “*a mechanical figure or contrivance constructed to act as if by its own motive power; robot*”⁹⁹ has stayed true through

⁹⁷ “Kinetic Sculpture.” *The Free Dictionary*, Farlex, www.thefreedictionary.com/Kinetic+sculpture.

⁹⁸ "automaton". Online Etymology Dictionary. Douglas Harper, Historian. 16 May. 2018.
<[Dictionary.com http://www.dictionary.com/browse/automaton](http://www.dictionary.com/browse/automaton)>.

⁹⁹ "automaton". Online Etymology Dictionary. Douglas Harper, Historian. 16 May. 2018.
<[Dictionary.com http://www.dictionary.com/browse/automaton](http://www.dictionary.com/browse/automaton)>.

the ages, what has changed drastically has been the *intent* for which the pieces have been employed. Throughout the millennia, we can see the context and purposes of automata shift from being used for religious purposes in ancient times, to tools and displays of power for the state/monarchy during the Middle Ages, to sheer entertainment in the Renaissance and pre-Industrial Revolution eras, and finally, to being concerned with conceptual and existential ideas in contemporary automata. Following a discussion of the history of automata and kinetic sculpture as separate genre, I will then look at how the Catholic Church specifically, has used this art form for its own end during the Middle Ages as a way to maintain religious adherence.

Ancient Automata. Ancient Egyptians understood acutely the power of advanced technology and engineering principles, especially in regards to religion. As their understanding of engineering developed, so did their sophistication in employing engineering principles to religion: priests would operate “talking statues” by means of a speaking trumpet hidden from the view of the masses. This not only created a religious spectacle, but likely convinced the religious adherents that the priest in charge of the ceremonies truly did have contact with the Gods themselves.¹⁰⁰

If the ancient Egyptians understood the power of utilizing automata for religious means, it could be said that ancient Greece turned this idea into a booming business, with Hero of Alexandria at the forefront. Hero (10 AD – c. 70 AD) was a mathematician and engineer, perhaps best known for his works on pneumatics and steam, primarily the *aeolipile*, one of the world’s first steam engines. He wrote many books, including *Automata*, a description of machines he designed which enabled mechanical spectacles to be performed in temples by

¹⁰⁰ Chen, Guang-Dah, et al. “The History and Evolution of Kinetic Art.” *International Journal of Social Science and Humanity*, vol. 5, no. 11, 2015, pp. 922–930., doi:10.7763/ijssh.2015.v5.581.

priests as a way of convincing adherents of the validity of their gods. Indeed, his designs, even today, have the ability to create wonder and awe.

One of Hero's designs, that while certainly religious in its intent, was not employed directly by the priesthood or as a functional element of the temple itself (i.e. automatic doors or holy water vending machines), is his *Automatic Theater*. Hero's *Automatic Theater* was used as a sort of reinforcement of the contemporary theological beliefs of the day. As Geduld describes in his book, *Robots, Robots, Robots*¹⁰¹:

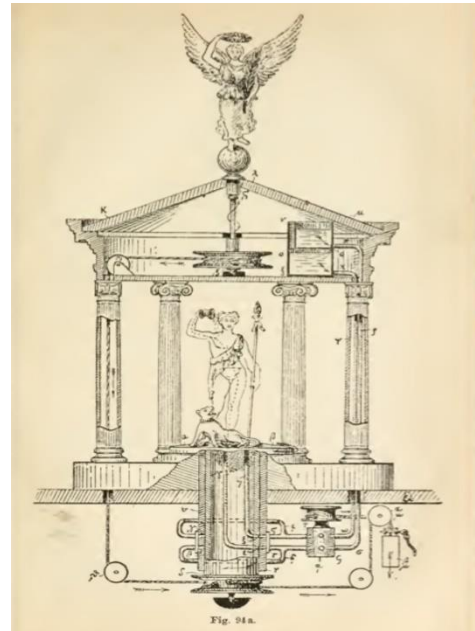


Figure 1: *Automatic Theater*

A platform, fitted with three wheels, bearing the apotheosis of Bacchus, moved by itself upon a firm, horizontal, and smooth surface up to a certain point and then stopped, at which moment the sacrificial flame burst forth from the altar in front of which Bacchus stood. Milk flowed from this thyrsus [ivy-twined staff], and from the goblet he held streamed wine which sprinkled a panther crouched at his feet. Suddenly, festoons appeared all around the base of the platform, and figures representing the Baccantes, to the beating of drums and the clanging of cymbals, danced around the temple within which Bacchus was placed. Then the god turned round to another altar, while a figure of Nike [personifying victory], set on the top of the temple, turned in the same direction... After all these movement had been carried out automatically, the platform returned of its own accord to its starting point. (Automatic Theaters)(Geduld, 1978)

Here we see Hero's automata theater not as a direct tool of spectacle, (unlike the *Drinking Horse*), but more as a tool which would reinforce the prevailing theological mores of ancient Greece and Alexandria. That is, while this wasn't a direct tool of a temple or a priest within a specific religious school, those who would have witnessed it in operation would very

¹⁰¹ Geduld, H. M., and R. Gottesman. *Robots, Robots, Robots*. Little, Brown Et Co., 1978.

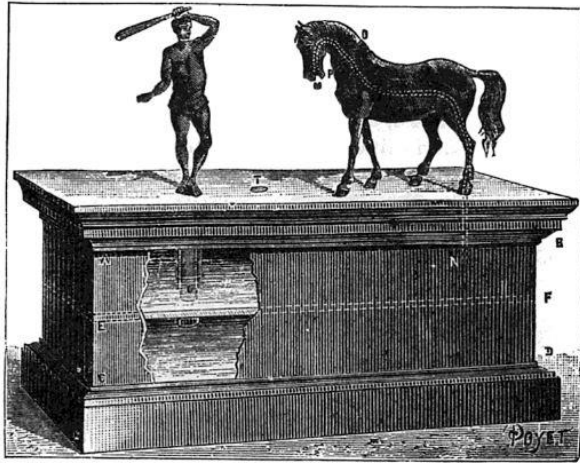


Figure 2: *Drinking Horse*

Greek religions of the time.

Another religious kinetic sculpture credited to Hero is his “Drinking Horse.” Dickerson (2013), describes the automaton’s actions succinctly:

The Drinking Horse consisted of metal priest, cherub, and horse altar piece cast in metal. The priest passes a knife through the throat of the horse but after the knife passes, the cherub appears angry and turns towards the horse, and the horse appears to drink water from a bowl held by the priest. This sculpture mechanically functioned due to a hidden gear and water pressure system located beneath the altar. This system changed the water levels so the horse appeared to drink.¹⁰² (Dickerson, 2013, pg 109)

As the knife went through the horse’s neck it opened and closed a pipe system via gears that not only held the horse’s head in place, but also gave the appearance of the horse drinking water from the priest’s cup. Hero naturally reported that the metal horse drank water due to the power of God, and for a person of his time to have witnessed it; it would be a convincing argument indeed.

¹⁰² Dickerson, Tom. *Religions Fail: Problem & Fix*. Xlibris Corporation, 2013.

Drawing from another *Automatic Theater*-type design, Hero's *Hercules and the Snake* creates a scene that was likely to be very familiar with his audience. One of the benefits of employing a liturgical theme as the center point of the work, Hero and his audience already had a mutual understanding of the story. Indeed, if anything, this familiar religious play will simply reinforce already existing theological belief systems within the viewer. Ambrosetti (2010) tells us:

... in Hero's *Pneumatics* (I, 41), an automaton composed of two figures, entitled *Hercules and the Snake*, is described: when a user lifts an apple (placed between the statue of the archer Hercules and the tree the snake is wrapped around) Hercules shoots with an arrow the snake, which in the meantime begins to hiss. Its operation is relatively simple: the base of the group is divided horizontally into two parts (the top compartment is full of water), connected by a drain hole, where a cork is set. By raising the apple, a double synchronous effect is produced:

1. A chain, connected to the apple, pulls the cork from the hole, causing the gurgling through the various ducts that is similar to a snake hiss
2. A second chain, also connected to the apple, acts on the figure of Hercules, making him stretch and release the string of his bow. ¹⁰³

Of course *Hercules and the Snake* has arguably less spectacle and therefore, a bit less illusory effect compared to the *Drinking Horse* as we have seen, it nonetheless is intended as a religious device to maintain theological adherence and conformity.

Medieval Automata. What began in ancient times as a religious tool slowly transitioned towards the secular in the medieval era in regards to kinetic art. This isn't to say that medieval automata were not employed as tools by organized religion. On the

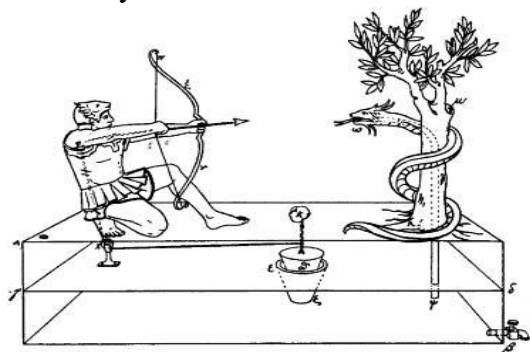


Figure 3: *Hercules and the Snake*

¹⁰³ Tatnall, Arthur. "Wonder, Sorcery, and Technology: Contribute to the History of Medieval Robotics." *History of Computing: Learning from the Past IFIP WG 9.7 International Conference, HC 2010, Held as Part of WCC 2010, Brisbane, Australia, September 20-23, 2010, Proceedings*, Springer Berlin, 2014, pp. 16–25.

contrary, the Catholic Church continued to utilize the power of these kinetic sculptures to their own ends, as we will later see. However, with the increased exposure and understanding of these devices and the mechanical principles at work, the contextual intent of automata slowly became a bit more focused on the power of the state rather than a religious spectacle of the masses. This continuation of divine favor/magic remained a powerful way to influence the masses. In turn, this transition paved the way for the automata to become less a display of power, shifting ever so slightly towards entertainment for the wealthy.



Figure 4: Throne of Emperor Constantine VII

A telling example of the transition away from primarily religious purposes toward those more associated with political power comes from the 10th century Byzantine. The Italian diplomat Liudprand of Cremona writes of the ceremonial throne room of Emperor Constantine VII. In a building used to receive guests of the Emperor, a throne sat flanked by lions that roared and shook their tails. Next to the throne was a life-sized metal tree containing numerous gilt birds which sang. As the diplomat performed his prostration before Constantine VII, he stated that the throne rose to the ceiling with the Emperor sitting on it. Upon descending again, the Emperor returned wearing a different outfit.¹⁰⁴ While the entity controlling the automata might not have been necessarily religious (i.e. an Emperor in this case and not a priest), the intent in employing these automata was the same: bedazzlement, wonder, and awe in the power of the controller.

¹⁰⁴ Truitt, E. R. "Medieval Technology, Indistinguishable from Magic – E R Truitt | Aeon Essays." *Aeon*, Aeon, 16 May 2018, aeon.co/essays/medieval-technology-indistinguishable-from-magic.

Perhaps one of the best illustrations of this transition away from religious intent towards the political is the coronation of King Richard II of England in 1377. As the coronation



Figure 5: Richard II

proceeded and the crown itself was to be bestowed upon Richard, a mechanical golden angel descended from high above and placed the crown upon the young king's head. This mechanical angel was actually the work of London's Worshipful Company of Goldsmiths, and not, of course the work of God.¹⁰⁵ However, depending on the status of the audience at hand, this event was either seen as an act of divinity or a political statement. The uninitiated would have likely seen

this as God's endorsement of the newly crowned King Richard II, thus the perfect balance in the transition from mechanical spectacle being employed as a tool of religion and a tool of the state. The initiated, having been privy to the insider details of what was to happen and who was responsible for the mechanical creation of the coronation spectacle, would have understood that this was a human creation, and one done by the Worshipful Company of Goldsmiths, and as such, understood the statement being one of elite craftsmen and therefore important political maneuvering.¹⁰⁶

In 1414 we see one of the clearest examples of this shift away from use as a religious tool to that of the state utilizing its power, and ultimately, a step toward the realm of entertainment. During a coronation feast for the queen of Ferdinand I of Aragon, automata, the same kind used in religious Mystery Plays, were employed as part of the entertainment. A mechanical Death

¹⁰⁵ Reilly, K. "Iconoclasm and Automata." *Automata and Mimesis on the Stage of Theatre History*, Palgrave Macmillan, 2014, pp. 16–47.

¹⁰⁶ Tharoor, Kanishk. "Mechanical Spectacles." *Los Angeles Review of Books*, 14 May 2015, lareviewofbooks.org/article/mechanical-spectacles/.

figure descended upon the audience from a device called a cloud, (a device used in theater for the arrival of celestial characters such as gods, angels, devils, etc.). While most of the members of the audience were in on the joke, a courtier and jester named Borra had been left unaware of what was about to take place.¹⁰⁷ According to a witness who later wrote about it:

Death threw down a rope, they [fellow guests] tied it around Borra, and Death hanged him. You would not believe the racket that he made, weeping and expressing his terror, and he urinated into his underclothes, and urine fell on the heads of the people below. He was quite convinced he was being carried off to Hell. The king marveled at this and was greatly amused.¹⁰⁸

It would seem that the audience members who were in on the joke would also fully understand that the figure of Death was nothing more than a machine, however, the intent was still clear: that of showing the public, in this case the courtiers, that Ferdinand I was in power. The difference here now being that this display of political power was not to dazzle and create a sense of awe within the viewers, rather, it was to have a laugh and find great amusement for all those in attendance except, perhaps, for poor Borra. While the event was certainly for the entertainment of those in the know, it was abundantly clear to the courtiers who did not know this was an elaborate lark that Ferdinand I had the power to end the lives of his court.

Classic Automata. With the Renaissance and the rise of capitalism in the western world, the manufacture and consumption of luxury goods became increasingly common amongst the wealthy. This, coupled with advancements in math and science helped give rise not only to more complex forms of engineering in general, but specifically, in automata and kinetic sculpture. The classic period of automata, dating from the 16th to the 19th centuries, was concerned with the

¹⁰⁷ Truitt, E. R. "Chapter 5. From Texts to Technology: Mechanical Marvels in Courtly and Public Pageantry." *Medieval Robots: Mechanism, Magic, Nature, and Art*, University of Pennsylvania Press, 2015, pp. 116–140.

¹⁰⁸ Truitt, E. R. "Medieval Technology, Indistinguishable from Magic – E R Truitt | Aeon Essays." *Aeon*, Aeon, 16 May 2018, aeon.co/essays/medieval-technology-indistinguishable-from-magic.

natural movements and gestures of humans and animals, with the subjects being day-to-day tasks such as writing and playing musical instruments. Additionally, we see a shift in the context in which automata were intended for use. The perception that these objects are divinely created or magical in nature, and could therefore be used as tools for religious purposes, continued to transition into the realm of secular entertainment.



Figure 6: *The Dulcimer Player*



Figure 7: *The Writer*

While there was an explosion of automata design and fabrication at this time throughout Europe, some notable works stand out as exceptional. Pierre Jaquet-Droz (1721-1790) was a Swiss watchmaker who built *The*

Writer in the 1770s. It is one of the most complex of all classic automata using over 6000 parts in its creation. A mechanical boy sits at a desk where he writes with a quill pen upon paper with real ink, occasionally blowing dust off the writing via a bellows system, and moves its head and eyes. One of the most unique aspects of *The Writer* is that it is programmable, allowing it to write 40 letters of text, and can be customized to suit the textual desires of the operator.¹⁰⁹ A German cabinetmaker, David Roentgen, (1743 –1807), created *The Dulcimer Player* for King Louis XVI of France in 1784 whom later gifted to his wife, Marie Antoinette.¹¹⁰ It is a replica

¹⁰⁹ Ugc. “Jaquet-Droz Automata.” Atlas Obscura, Atlas Obscura, 6 June 2014, www.atlasobscura.com/places/jaquet-droz-automata.

¹¹⁰ Nakaya, Rion. “An Automaton of Marie Antoinette, The Dulcimer Player.” The Kid Should See This, 19 June 2017, thekidshouldseethis.com/post/an-automaton-of-marie-antoinette-the-dulcimer-player.

of Antoinette playing the Dulcimer measuring approximately 20-inches tall. Its spring-driven doll sits playing a dulcimer, (a string instrument struck with handheld hammers) while also turning her head and shifting her eyes. It is said that the doll's dress used pieces of a dress actually worn by Antoinette as well as using her real hair.¹¹¹ The player has a repertoire of eight songs. Henri Maillardet, (1745–1830), a Swiss clockmaker, designed and built the *Draughtsman-Writer* around 1800. Spring-activated, the *Draughtsman-Writer* has the largest cam-based memory of any automata of the period, allowing it to create four drawings and write three poems (two in French and one in English). To put the piece's memory capacity into contemporary perspective, the automaton's ability to keep seven images stored via the cam system was calculated as almost 300 kilobits of memory. Prior to being presented to the Franklin Institute in



Figure 8: *The Draughtsman-Writer*

Philadelphia in 1928, the automaton's maker was not known. Upon restoration, however, the device's cam program was conveniently set to write out the words "*written by the automaton of Maillardet*" thus solving the mystery of the designer by itself.¹¹²

These examples stand to show that the intent of many automata was for amusement and entertainment purposes only as the themes were mundane: writing, drawing and instrument playing. Even the example of *The Dulcimer Player*, built for a queen, was not to show off the powers of the church or the state, but to merely entertain the audience. Indeed, of the three

¹¹¹ Young, Lauren. "Watch a Strange Miniature Automaton of Marie Antoinette Play a Dulcimer Music Box." Atlas Obscura, Atlas Obscura, 1 Feb. 2017, www.atlasobscura.com/articles/watch-a-strange-miniature-automaton-of-marie-antonette-play-a-dulcimer-music-box.

¹¹² Norman, Jeremy. "Maillardet's Automaton (Circa 1800)." HistoryofInformation.com, 10 May 2018, www.historyofinformation.com/expanded.php?id=4351.

examples, only *The Dulcimer Player* was specifically designed for nobility: the others were designed to showcase the talents, in a public, albeit elite, audience.

Contemporary Automata. What seems to separate classic automata from contemporary automata appears to be two-fold: theme and complexity of mechanics. While classic automata appear to have been much more concerned with mimicking simple human movement and behaviors, they also seem to have been more complex in regards to their mechanical design. Indeed, with historical automata, the more intricate the design and the closer to simply “acting and moving” like a human, the



Figure 9: *The Last Judgement*

more they were, and are, valued and appreciated. Contemporary automata, with a few exceptions, seem to view the mechanics almost as an afterthought, instead, placing a higher value on more complex themes of the human condition such as interpersonal relationships, the cost of living, and the desire to have just a little time and space for oneself. In fact, in many cases with contemporary automata, the mechanics in and of themselves are almost irrelevant: they are there to perform the most basic function of providing the kinetic movement, and perhaps are not even well made. What is important are the stories, messages, themes, and concepts being conveyed.

As the Industrial Revolution began and mass production allowed for goods to be purchased by more people at a cheaper cost, interest in automata waned. It wasn't until the late 20th century that we see a resurgence in automata with the advent of the Cabaret Mechanical Theater (CMT). The Cabaret Mechanical Theater opened in 1979, originally as a knitwear and

ceramics store by Sue Jackson in Falmouth, Cornwall, England. In 1983, however, Paul Spooner created “*The Last Judgement*” a coin operated skeleton that was displayed at the CMT.

Spooner’s work generated great interest and the CMT began shifting formats, moving to automata, and thus ushered in a new era for automata. Soon, many automata artists from the United Kingdom began making and displaying work at the Cabaret Mechanical Theater.¹¹³ Some notable artists include: Keith Newstead, Carlos Zapata, Peter Markey, (See Appendix B), as well as the aforementioned Spooner. Meanwhile, in the United States we see an equal renewed interest. While this blossoming movement was not centrally located as it was in the UK with Cabaret Mechanical Theater, it was no less robust. Artists like Tom Haney, Dug North, and Thomas Kuntz, (See Appendix B), gave a distinctly American flavor to their work and aesthetic, with the mechanics being hidden from the viewer as one key difference from the UK artists. Additionally, Asia, too, fostered a rebirth in automata interest, namely in Japan and South Korea with such artists as Kazuaki Harada, Naekwan Jeong, and Seung Hang Lee, (See Appendix B), turning this renewed interest in automata into a global resurgence.

Kinetic Sculpture History

In the early 20th century we see a divergence in kinetic forms from the purely humanistic forms and gestures of the automata into what can now be classified as kinetic sculpture. This new genre, while still maintaining its roots and mechanical relationships to automata, became concerned

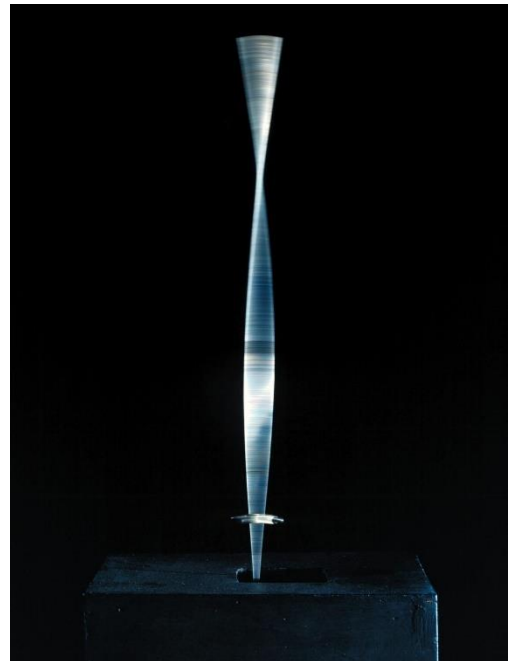


Figure 10: *Standing Wave*

¹¹³ “Mechanical Is Our Middle Name.” *Cabaret Mechanical Theatre*, cabaret.co.uk/.



Figure 11: *Light-Space-Modulator*

with abstract gestural movement, and, more importantly, conceptual concerns having been inspired and employed by the Futurists, Dadaists, and Surrealists of the early part of the century.

While the Futurism movement of the early 20th Century can be credited with the conceptual beginnings of kinetic sculpture, the actual first use of the term “kinetic” in regards to art was in 1920 with Naum Gabo and Antoine Pevsner’s *Realistic Manifesto*. Gabo, trained as an engineer, was one of kinetic sculpture’s earliest pioneers, with the piece

Standing Wave (1919-20, Tate, London), which used a length of wire that rapidly oscillated creating the appearance of solidity. Another early work was Laszlo Moholy-Nagy’s *Light-Space-Modulator* (1922-30, Busch-Reisinger Museum, Harvard University).¹¹⁴

Another important name in early kinetic sculpture is Alexander Calder (1898-1976). Calder is credited with originating the mobile, a kinetic sculpture that utilizes the balancing forces of objects as form and air or human touch as an input for the movement. Like Gabo, Calder received a degree in engineering before turning to art in the 1920’s. It wasn’t until the 1930’s, however, before he began earnestly creating kinetic works. It was during this time that he

¹¹⁴“Kinetic Art (1920s Onwards).” Kinetic Art (1920s Onwards), Encyclopedia of Art History, www.visual-arts-cork.com/history-of-art/kinetic-art.htm.

began creating his famous abstract mobiles. For most of the next twenty years he was the leading voice in kinetic sculpture.¹¹⁵



Figure 12: *The S-Shaped Vine*

Kinetic sculpture continued to grow in popularity and finally came into its own during the Paris exhibition, “Le Mouvement” in 1955. This exhibition included such names as Marcel Duchamp, Calder, and Jean Tinguely. It was the culmination of works of art that were interested in movement, or in the sense of movement, as well as others that physically moved via motor, air, or touch.¹¹⁶

Between 1960 and 1975, kinetic sculpture flourished. Jean Tinguely created his masterpiece *Homage to New York* (1960, Museum of Modern Art, New York) in 1960, a self-destructing sculpture whose “performance” lasted 27 minutes as a nod to the city that continues to rebuild itself over and over again. When the “performance” had finished, audience members were encouraged to take the broken pieces with them as souvenirs. Other important events that lent not only legitimacy, but prominence to the kinetic sculpture genre were the *Le Mouvement II*, (See Appendix B), exhibition at the Rene Gallery in Paris

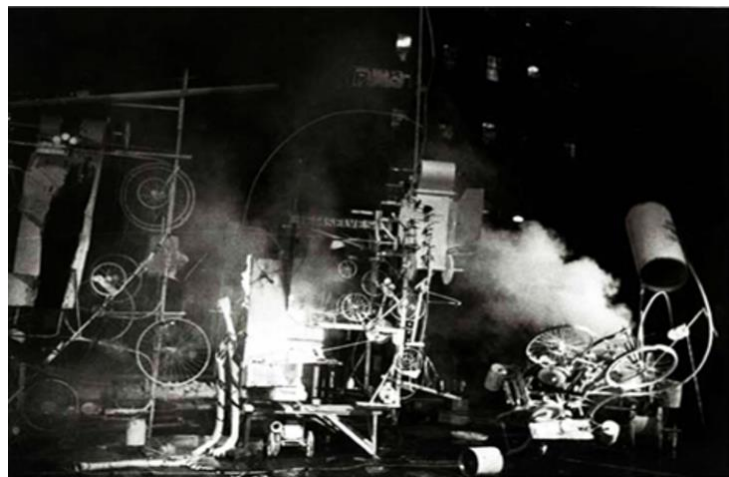


Figure 13: *Homage to New York*

¹¹⁵ Hall, James. “Magnificent Mobiles: the Art of Alexander Calder.” The Guardian, Guardian News and Media, 23 Oct. 2015, www.theguardian.com/artanddesign/2015/oct/23/alexander-calder-sculpture-fine-balance.

¹¹⁶ “Kinetic Sculpture.” ArtHistory.net, Bitter Soup, LLC., 2017, www.arthistory.net/kinetic-art/.

in 1964, *The Responsive Eye*, (See Appendix B), exhibition at the Museum of Modern Art in New York in 1965, as well as the Venice Biennale, the Sao Paulo Biennale and the Paris Biennale also during the 1960s.¹¹⁷

By around 1970, kinetic sculpture evolved into what one might consider four separate, yet related, sub-genre's. The Duchamp influenced Junk Art, which continued with Jean Tinguely. The mobile, starting with Calder and carried on by George Rickey, Pol Bury and Jesus Rafael Soto, (See Appendix B). Light-based art, which was pioneered by Moholy-Nagy and taken further by Nicolas Schoffer, and Luis Tomasello, (See Appendix B). And finally, Op art, a genre made popular by Vasarely and continued by Bridget Riley, (See Appendix B).¹¹⁸ Kinetic sculpture continues to grow and flourish well into the 21st century with such names as Arthur Ganson, Jack Pavlik, and Theo Jansen, (See Appendix B), leading the way forward.

How Has The Catholic Church Used Automata And Kinetic Sculpture As A Religious Tool?

Arthur C. Clarke famously noted “*Any sufficiently advanced technology is indistinguishable from magic.*”¹¹⁹ Indeed, it is no secret that religion, throughout time, understood this concept very well. In ancient times, several different religions vied for the attention of adherents. The priests of the day, having a vested interest in maintaining the socio-religious status quo, were keenly aware of the attraction that spectacle had over people. Naturally, if technology and mechanical designs could convince their followers through mechanical illusion that their god did, in fact, reside within their temple, then the followers, as well as the source of

¹¹⁷ “Kinetic Art (1920s Onwards).” Kinetic Art (1920s Onwards), Encyclopedia of Art History, www.visual-arts-cork.com/history-of-art/kinetic-art.htm.

¹¹⁸ “Kinetic Art (1920s Onwards).” Kinetic Art (1920s Onwards), Encyclopedia of Art History, www.visual-arts-cork.com/history-of-art/kinetic-art.htm.

¹¹⁹ Clarke, Arthur C. *Profiles of the Future; an Inquiry into the Limits of the Possible*. Harper & Row, 1962, pp. 14, 21, 36

political power, would follow. This would serve to prove that their god was alive and “all powerful”.

While Christianity is no stranger to using the wonders of technology and kinetic sculpture as a way to dazzle their congregations, it is also by far not the first to realize the power technological illusion held, and continues to hold, over the populous. In fact, we only have to refer back to Hero of Alexandria to see that this practice of using automata and kinetic work as a religious tool predates Christianity by hundreds of years.

Perhaps the most relevant example of Hero’s designs to this research, were his “Magic Jugs”. In addition to his many designs, he also created several trick jars and jugs that, through internal plumbing, siphons and air holes, one could pour either water or wine from the same vessel depending on how they operated the device. Interestingly, in the Gospel of John we have a possible description of this very same vessel being used to entertain the family of Jesus:

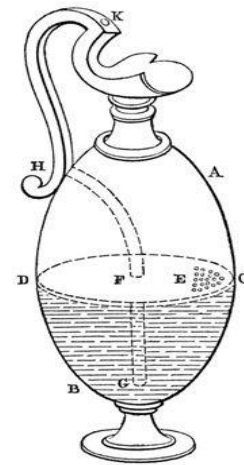


Figure 14: Hero’s Magic Jug

Jesus said unto them, ‘Fill the water-pots with water.’ And they filled them up to the brim. And he said unto them, ‘Draw out now, and take it to the governor of the feast.’ And they took it. When the ruler of the feast had tasted the water that was made wine, and knew not whence it came from (but the servants which drew the water knew). The governor of the feast called the bridegroom ... and said ... you have kept the good wine until now.¹²⁰

Turning water into wine was the first recorded miracle performed by Jesus. Yet there is a distinct possibility that it was one of Hero’s trick-jugs.¹²¹ In fact, we have a description of the

¹²⁰ John 2:10, KJV

¹²¹ Ellis, Ralph. “Hero of Alexandria and His Magical Jars.” *The Heretic Magazine*, 28 Aug. 2015, thehereticmagazine.com/hero-of-alexandria-and-his-magical-jars/.

design and operation of this device from Hero himself. In his treatise on siphons, entitled '*A Vessel from which Wine or Water may be made to flow, separately or mixed*', Hero describes how

A jar can be made ... in such a way that, when wine and water are poured into it, it shall discharge at one time pure water, at another time unmixed wine, and, again, a mixture of the two. We may ... pour out wine for some, wine and water for others, and mere water for those whom we wish to jest with.

Unlike the other examples above, Hero built these magical jars and jugs to simply entertain the aristocracy and not necessarily for religious purposes: it was simply a joke device for the host of a party.¹²² However, given the documented cases of the Catholic Church co-opting numerous components from other religions and events, it would seem plausible that the Church used an account of this trick as a key element of their belief system. Thus, it is entirely possible that the Catholic Church had begun using kinetic sculptures and automata for their own means very early in its history.

While Hero of Alexandria was perhaps the primary figure in using kinetic art as a tool for religion in antiquity, the Catholic Church certainly made efficient and effective use of kinetic sculptures as a way to illustrate the divinity within the Church. Indeed, the Church has, throughout its history, understood the power of spectacle as a way of creating a sense of the divine so as to ensure adherence to dogma, while maintaining the socio-religious status quo. This idea of incorporating the mechanical with the divine within the Catholic Church truly reached its peak during the Middle Ages. Despite the fact that kinetic sculpture was more commonplace than in prior eras, and therefore understood to have been designed by a human and not God, there was still a good deal of theological wonder left in the minds of the people. That is, during

¹²² Ellis, Ralph. *King Jesus*. 99th ed., Edfu Books, 2013.

the Middle Ages, the theological power of kinetic sculpture was transitioning from purely divine, as it was in Hero of Alexandria's era, to simply mechanical engineering and nothing more, as we understand it today. As Jessica Riskin states in *Machines in the Garden*:

Mechanization is often taken as an index of modernization. But automaton icons had a medieval impetus in a tradition of imagery in which the tangible, visible, earthly representations of Christian lore and doctrine were pushed ever farther. The icons were representations in motion, inspirited statues: they were mechanical and divine. Rolling their eyes, moving their lips, gesturing, and grimacing, these automata dramatized the intimate, corporeal relation between representation and divinity, icon and saint. As this relation became increasingly fraught, the machinery took on new meanings... whether and how religious images blurred the boundary between image and deity.¹²³

Perhaps one of the best examples of the Catholic Church using automata as a way to illustrate the divinity to be found in both the figurative and literal sense, is the Rood of Grace, a mechanical crucified Jesus in Boxley Abbey in Kent, England. The year in which it was fabricated is unknown, but by 1412 the Abbey was referred to as “the Abbey of the Rood of Grace”.¹²⁴ According to tradition, the device arrived at the Abbey on the back of a horse and therefore, was regarded as a miracle. Prior to being allowed to witness the Rood, one was required to undergo a test of purity whereupon the devotee could witness the device in operation. From accounts given about the Rood's operations, it could turn its head, cry tears, foam at the mouth, and make facial expressions.¹²⁵ In 1538, as part of a countrywide act to take possession of Catholic buildings, the Abbey was seized by the government and with this religious purge, John Hilsey, Bishop of Rochester denounced the Rood as a fraud on February 12, 1538 by exposing its mechanical innards and then destroying it. The remains were eventually burned in

¹²³ Riskin, Jessica. “Machines in the Garden.” *Nature Engaged*, pp. 16–28., doi:10.1057/9780230338029.0019.

¹²⁴ Ersby. “The Rood of Boxley.” Ersby, 11 Aug. 2013, ersby.blogspot.com/2013/08/the-rood-of-boxley.html.
“The Eyes | Protecting Sight.” Sightsavers, 2017, www.sightsavers.org/protecting-sight/the-eyes/.

¹²⁵ Reilly, K. *Automata and Mimesis on the Stage of Theatre History*. Palgrave Macmillan, 2014. p 20; 23.

London along with other Catholic paraphernalia.¹²⁶ What makes the Rood of Grace important was the fact that, while it was likely known to the public to be a mechanical device and not divine, its origins as described by the Church, were miraculous. By the divine intervention of God, the Abbey came into possession of a wondrous mechanical religious device, illustrating the divinity of the church, and thus still maintaining the power that these devices held as religious objects.

A prominent designer of devotional kinetic sculpture during the middle decades of the seventeenth century was the polymath Athanasius Kircher, (1602-1680). Among the many devices Kircher designed was a hydraulic automaton that featured the scene of Jesus Christ walking on the water to rescue Peter from drowning. The operation of the automaton worked via magnetism: a strong magnet was placed in Peter's chest and Christ's outstretched hands were fashioned from steel. Both figures floated in a small pool of water by way of cork and would be drawn together. To make the actions seem more life-like, the Christ figure was flexible and could bend in the midsection as he "reached" to save Peter.¹²⁷ The important aspect of this Christ Helping Peter device isn't so much the mechanics, but rather, the intent. Indeed, the mechanics are quite simple, even by the standards of the 1600s. But the important thing is, again, the intent of the piece itself: Kircher understood that the visual spectacle of a mechanical Jesus would inspire devotion among people if it were more natural in its movements and behaviors, making it therefore, more effective as a tool of the church.

In 1562, the Crown Prince of Spain, Don Carlos, fell down a set of stairs and fell gravely ill. His father, King Phillip II sought help in hopes of curing his son. While all of the leading

¹²⁶ Hutchinson, Robert. *Thomas Cromwell: the Rise and Fall of Henry VIII's Most Notorious Minister*. Thomas Dunne Books, 2014., pp. 162-163.

¹²⁷ Riskin, Jessica. "Machines in the Garden." *Nature Engaged*, pp. 16–28., doi:10.1057/9780230338029.0019.



Figure 15: Turriano's Monk

remedies of the day were tried, including bleeding, purging and drilling, nothing worked.

Distraught, the King enlisted the help of a relic in the form of a local priest who had died nearly 100 years earlier. Phillip II then made a pact with God, that if his

son recovered, he would repay God with a miracle of his own.¹²⁸ The Prince recovered, and to cover his portion of the divine bargain, the King commissioned Juanelo Turriano, a 16th-century Spanish clockmaker to create a mechanical monk.¹²⁹ The monk automaton, a spring-driven device, walks in a square, flagellates his chest with his right hand, raises and lowers a rosary and cross with his left, turns and nods his head, as well as rolls his eyes. Occasionally, he even brings the cross to his lips so as to kiss it.¹³⁰ Again, this transition from the automata being seen as possessed by divine spirit and shifting towards the general understanding that it is a human created machine is apparent: King Phillip II made no secret that he commissioned a well-known clock maker to design and fabricate the piece. That he did this is really inconsequential. The power behind this particular automaton is the veneration of the long dead priest by the King, and the use of automata as a way of illustrating publically, the power and the glory of prayer in the Catholic God.

¹²⁸ "A Clockwork Miracle | Radiolab | WNYC Studios." Wnycstudios, Radiolab, 14 June 2011, www.wnycstudios.org/story/140632-clockwork-miracle.

¹²⁹ Davis, Lauren. "This 450-Year-Old Clockwork Monk Is Fully Operational." io9, io9.Gizmodo.com, 16 Dec. 2015, io9.gizmodo.com/5956937/this-450-year-old-clockwork-monk-is-fully-operational.

¹³⁰ King, Elizabeth. "Clockwork Prayer: A Sixteenth-Century Mechanical Monk." Clockwork Prayer: Introduction, Elizabeth King, 2002, blackbird.vcu.edu/v1n1/nonfiction/king_e/prayer_introduction.htm.

Catholicism has a long history of using kinetic art as a tool for furthering their theological and political agenda of the Church. What began as a way to legitimize the “miracles” of Jesus, and thus, the Church itself, evolved into mechanical spectacle of supposedly divine origin, and finally as a way of showing veneration for the answering of prayers by the powerful elite. As stated above, Catholicism by no means has a monopoly in its use of kinetic art as a tool for influencing followers. In fact, the stories found in Christianity are much more universal than it appears, as described in the following section, “What is the Monomyth?”

What Is The Monomyth?

On the surface, it may seem highly unlikely that different religions throughout the world would have much, if anything in common. Indeed, theological differences are often at the heart of the conflict and political strife we as a planet face today. However, when we look a bit closer than the surface, we see that religions share many of the same stories and myths, even if some of the specifics are distinct. To contextualize these tales, Campbell (1949) uses direct comparative examples found in religions throughout the world, including Christianity, Buddhism, Islam, Shintoism, etc. The point in doing so is to illustrate that, while there are certainly some very important differences between the world’s religions, there is an underlying thread that is common to human belief, this monomyth. That is to say, we all have our theological differences for sure, however, underneath this lies a commonality in the core stories that connects us on a spiritual level.

These collective stories are referred to by Joseph Campbell (1949) in his book, *The Hero with a Thousand Faces as the Monomyth or Hero’s Journey*.¹³¹ The Hero’s Journey is divided into three acts: departure, initiation, and return, with each of the acts being comprised of a series

¹³¹ Campbell, Joseph. *The Hero with a Thousand Faces*. Pantheon Books, 1949.

of 17 stages, (5 for the departure, 6 for initiation, and 6 for the return act). In brief, the 17 stages are framed within each act and described as follows¹³²:

Departure: The Separation Of The Hero From The Normal World.

1. *The Call to Adventure*: The hero begins in a normal situation and is given information or is tempted to head off into the unknown.
2. *Refusal/ Acceptance of the Call*: The hero may initially refuse the quest, but ultimately accepts the challenge of the call or temptation.
3. *Supernatural Aid*: Some sort of assistance is given to the hero to aid in their quest
4. *Crossing the First Threshold*: In this stage, the hero crosses the point of no return.
5. *Belly of the Whale*: The hero encounters the dangers of the quest.

Initiation: The Main Portion Of The Story, Trials Are Faced And Overcome.

1. *The Road of Trials*: The hero is no longer home, and is faced with hurdles and trials.
2. *The Meeting with the Goddess*: During the quest, the hero may encounter a powerful female goddess-type figure who aids him in some way.
3. *The Woman As Temptress*: A woman figure may appear to the hero as a temptress attempting to stymie his efforts.
4. *Atonement with the Father*: A father-figure is encountered who must be beaten or whose approval must be earned in some way and their relationship must be reconciled in some way.

¹³²“Campbell's 'Hero's Journey' Monomyth.” *Changingminds.org*, Changing Minds, changingminds.org/disciplines/storytelling/plots/hero_journey/hero_journey.htm.

5. *Apotheosis*: After successfully facing trials and reconciling with the father-figure, the hero becomes ready for more difficult challenges the quest may bring.
6. *The Ultimate Boon*: The goal of the journey is achieved, either after a battle or a particularly hard trial.

Return: The Hero Returns To The Mundane Of His Home In Triumph.

1. *Refusal of the Return*: Having reached the ultimate goal, the hero finds that they wish to remain in the place in which they triumphed.
2. *The Magic Flight*: The hero rushes home with the prize obtained from his quest.
3. *Rescue from Without*: The hero is rescued from his plight in some sort of divine intervention.
4. *The Crossing of the Return Threshold*: The hero returns home.
5. *Master of Two Worlds*: The journey is complete, and the hero now has the ability to pass between the mundane world and the supernatural world.
6. *Freedom to Live*: The hero is now free to live life as they choose.

The stories Campbell uses to illustrate the Monomyth sometimes contains all 17 stages, but not always.¹³³ The *Journey's Stages* may be avoided, repeated, or shifted depending on the story being played out. This Monomyth is of particular importance to my research as the resulting body of work, *Acts of Contrition*, gives an example of this idea embodied in kinetic sculptural form: if desired, the viewer, by interacting with the sculptures of *Acts of Contrition* can experience for themselves a re-telling of the Hero's Journey. As such, my research has

¹³³ Vogler, Christopher. *The Writer's Journey: Mythic Structure for Writers*. Michael Wiese Productions, 2007, p. 4.

primarily focused on five stages in particular: The Call to Adventure, Crossing the First Threshold, Belly of the Whale, Atonement with the Father, and Freedom to Live.

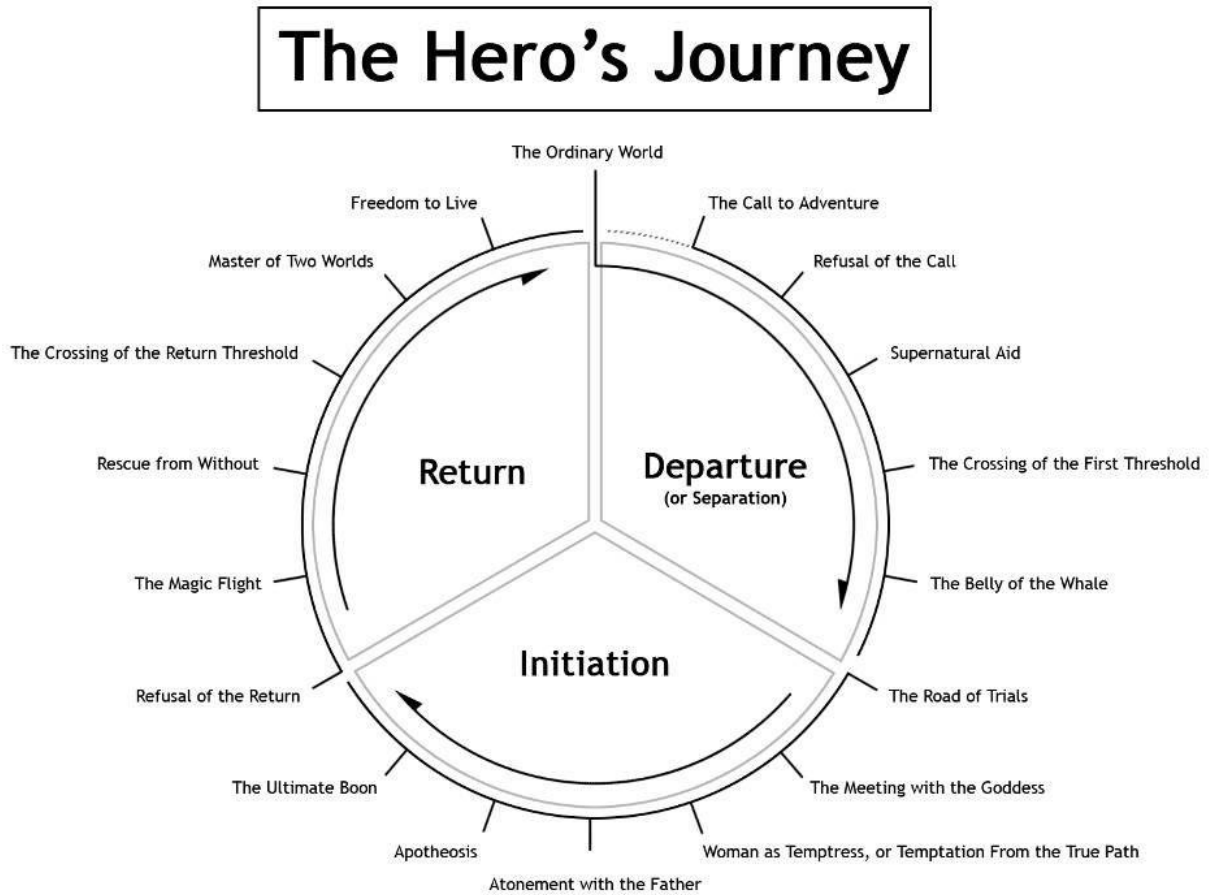


Figure 16: The Hero's Journey Cycle

The Call to Adventure. The adventure can begin innocently and by chance as a passing phenomenon grabs the hero's attention and tempts them into action.¹³⁴ The hero, existing in mundane circumstances, learns of a boon or treasure of incalculable value. This treasure, however, need not be monetary. In fact, it is often knowledge that is the prize. The fact that the settings begin in mundane circumstances acts as a point of empathy between the viewer and the hero: they too come from the worldly, and thus develop a camaraderie with the hero. The call to action is always to a supernatural place, an un-worldly realm that is foreign and perhaps

¹³⁴ Campbell, Joseph. *The Hero with a Thousand Faces*. Princeton University Press, 2004, p. 53.

dangerous, not only to the hero, but the viewer as well. The call itself gives the viewer tension: will the hero (viewer) accept the call to action? Will they take the leap, despite the implied danger that is alluded to in the call itself?¹³⁵ Regardless of the hesitation on the part of the hero, ultimately the call to action, the temptation will become too great and the journey will begin, either in solitude, or assistance of an unworldly being.

Crossing the First Threshold. The crossing of the threshold is the point of no return. What is done (more often than not a physical act in itself) cannot be undone. This crossing also includes passing the “threshold guardian”. These guardians bind the world in all directions and limit the experience and personal reference of the hero. Beyond the guardian is darkness, danger, and the unknown. The guardian is quite dangerous, deadly even, yet for both the hero and the viewer, should they be competent and courageous, this danger dissipates.¹³⁶ Regardless of the physicality of this act on the part of the hero, it is a highly symbolic act at the same time. While this moment is often incredibly frightening, it is also liberating: the bliss of ignorance and the safety of the home is left behind. The hero turns to face a new world fraught with peril and risk, but also with great rewards if the hero perseveres.¹³⁷ It is a life-defining event for the hero, often the first active decision of responsibility and independence.

Belly of the Whale. The hero (and the viewer) enters the danger zone perhaps immediately after the first threshold, or perhaps after a bit of traveling.¹³⁸ The passing of the guardian and the first threshold is symbolized as a “belly of a whale”. This need not be a physical location for the hero (or viewer), but can be a situation or state of being in which danger

¹³⁵ “The Call to Adventure.” *Changingminds.org*,
changingminds.org/disciplines/storytelling/plots/hero_journey/call_adventure.htm.

¹³⁶ Campbell, Joseph. *The Hero with a Thousand Faces*. Princeton University Press, 2004, p. 71

¹³⁷ “Crossing of the First Threshold.” *Changingminds.org*, Changing Minds,
changingminds.org/disciplines/storytelling/plots/hero_journey/first_threshold.htm.

¹³⁸ “Entering the Belly of the Whale.” *Changingminds.org*, Changing Minds,
changingminds.org/disciplines/storytelling/plots/hero_journey/enter_whale.htm.

is ever present. The hero, instead of vanquishing his foes, real or otherwise, is swallowed into the unknown and appears to have met with death. Instead of passing outward to a physical realm, the hero turns spiritually inwards towards themselves to be born again.¹³⁹

Atonement with the Father. The hero very well may come up against a father figure who must be persuaded or beaten, or whose approval must be met. This father figure may be a god or immortal of some kind, or something symbolic, such as an ideal or concept. The father represents ultimate power over the hero. However, if the hero can achieve the approval of the father, he becomes seemingly divine. Ultimately, regardless of how the father manifests, a reconciliation or atonement between the hero and the father must take place.¹⁴⁰ Atonement consists of the abandonment of the monster that is thought to be God and the monster thought to be Sin. To do this, it is necessary for the hero (and viewer) to lose attachment to the ego itself and have faith that the father is benevolent and merciful. If the hero can do this, the fear of the monster that is “God” and “Sin” fades. The problem the hero faces in meeting the father is to open his soul beyond the fear of the father to the degree that the hero (and viewer) will be ready to comprehend how the horrors that exist in the world are validated in the majesty of Being. The hero transcends mortality momentarily, and in doing so, atonement between the two occurs.¹⁴¹

Freedom to Live. Finally, having conquered both inner and outer demons, the hero (and viewer) can now live life as they see fit. This new life can take many paths, with this hard fought wisdom often leading the way. Freedom to live also means freedom from emotions that distract the hero, such as fear, anxiety, and hope; emotions that distract from the moment of “now”. To quote Joseph Campbell: "The hero is the champion of things becoming, not of things become,

¹³⁹ Campbell, Joseph. *The Hero with a Thousand Faces*. Princeton University Press, 2004, p. 83.

¹⁴⁰ “Atonement with the Father.” *Changingminds.org*, Changing Minds, changingminds.org/disciplines/storytelling/plots/hero_journey/atonement_father.htm.

¹⁴¹ Campbell, Joseph. *The Hero with a Thousand Faces*. Princeton University Press, 2004, p. 120.

because he is. ‘Before Abraham was, I AM.’”¹⁴² The hero (and viewer) can simply *be*. They understand that they too are timeless, they too are part of, and also, the full embodiment of God and therefore have the freedom to live as they truly see fit.¹⁴³

As illustrated above, guilt, and its related components, as seen through the Catholic Church form the foundation of not only this thesis, but also of the series of kinetic sculptures titled *Acts of Contrition*. Additionally, the five senses each play an important role in this endeavor, as each of the five sculptures utilize the senses as a secondary concern. What’s more, Campbell’s Monomyth serves to act as a framework that allows the viewer to experience a physical retelling of the Hero’s Journey. Historical examples of automata and kinetic sculpture serve to show precedent for *Acts of Contrition*. This deeper understanding of how these disparate elements relate answers the question “*How does kinetic sculpture provide a means for exploring the notion of guilt as seen through the paradigm of the Catholic Church by way of sensory pleasure?*”

¹⁴² Campbell, Joseph. *The Hero with a Thousand Faces*. Princeton University Press, 2004, p. 225.

¹⁴³ “Freedom to Live.” *Changingminds.org*, Changing Minds, changingminds.org/disciplines/storytelling/plots/hero_journey/freedom_live.htm.

CHAPTER III: METHODOLOGY AND METHODS

Methodology

The methodology that I use for my artistic research is one based on fluidity and adaptation. It is a hybrid methodology that takes from experimental engineering, social sciences, and historical textual based forms of research. Due to the kinetic nature of my creative work, this makes very good sense. Perhaps if I were simply building machines for industrial applications, only engineering methodology would be appropriate, especially in regard to numerical and physical data. However, this is not the case. The creative work that I do is kinetic sculpture, and as such, also requires investigation and exploration into more subjective information such as opinions, emotions, and states of being. Because of this added component, qualitative methodologies are essential if I want more robust and complete forms of information that allow for a richer experience.

The fact that I rely heavily on the above methodologies isn't to say that there is a hard and fast rule toward applying these methodologies. Indeed, I do not necessarily use the same approach the same way every time. Depending on the project, I could very well start with using experimental based methodology at first, move to historical research, then shift exclusively to qualitative methodologies. Or perhaps on another project I could bounce back and forth between the three. Again, the advantage of this hybrid methodology is its fluidity and adaptability, not rigidity. What's more, by allowing a certain amount of permeability, I am able to include other types of methodologies if necessary. Adaptability is one of the main strengths of this hybrid methodology.

Methods/Tools

Methods

The methods I employ in my artistic research are an amalgamation of disparate sources and styles. Of these different methods, I will describe a few that are most commonly employed in my research: academic text-based research, experimental and intuitive trial-and-error, and verbal feedback from viewers.

The most typical method would be a traditional academic text-based research method. This type of method entails reading varied primary and secondary source materials, articles, books, websites, dictionaries, and encyclopedias. (Smith, personal communication, Oct. 14, 2015). These sources need not necessarily be academic. Some very important ideas and information have come from tabloid news and comedy websites as a way to inform and explore over-arching issues such as humor and the “human condition”. One such website is Cracked.com. The basic format of Cracked is a series of “list” articles that outline various aspects of what might be considered the “human condition” in a humorous way. A few notable examples of recent articles are “6 Bizarre Lies Hollywood Tells When They Base a Movie on You”, “The 6 Best Ways to Meet People (Don’t Work As Advertised)”, and “5 Ways Creative Peoples’ Brains Mess with Their Heads”. Of course the articles are not meant to be treated as scientific research per se, but many of the articles do in fact reference scientific research to back up the points made in the articles. For example, the article “6 Horrifying Things the Nutrition Industry Won’t Tell You”, includes a link to the full text of a study performed by the Mayo Clinic.

Possibly the most used method, and therefore easiest to describe is intuitive trial and error rapid-prototyping/experimentation. As there are numerous, perhaps even near infinite solutions

to just about any mechanical issue, trial-and-error experimentation is “good for problems where you have multiple chances” to get the solution.”¹⁴⁴ This is a very important as it allows a way in which to determine successful approaches versus unsuccessful approaches without wasting valuable time and resources. Just as it sounds, I use inexpensive materials (i.e. scrap plywood) with rapid practice tools (i.e. laser cutters) to experiment, test, and refine both components and systems as a whole. Sometimes the results are successful on the first attempt, other times it takes many tries. However, the notion of “fail fast, fail cheap”¹⁴⁵ is important because, while material costs are certainly a factor in any creative research, the more precious resource at play here is time.

Feedback is sometimes the most efficient and appropriate method in which to inform the research/creative directions. This allows me to beta-test not just physical prototypes, but also different perspectives on conceptual ideas. This not only strengthens the process, but may also move it in a new direction. This feedback can take the shape of either individual or group conversations. These can be done in a more structured group setting (i.e. classroom) or also as an individual one-on-one conversation. The importance of the conversational feedback is to elicit insight from individuals who may be unfamiliar with the project or research, and who can therefore give unique insight as to problems or concerns that might otherwise be overlooked. Feedback is often a way of obtaining primary source material for research, be it art history (i.e. artists’ works), technical (a sort of first-hand instruction from master-crafts makers or a user’s beta-test experience), or professional (strategies and “anecdotal wisdom” regarding their

¹⁴⁴ “The Use of Trial and Error To Solve Problems | IT Training and Consulting – Exforsys.” IT Training and Consulting Exforsys, 20 July 2006, www.exforsys.com/career-center/problem-solving/the-use-of-trial-and-error-to-solve-problems.html.

¹⁴⁵ Steiner, Lorie. “Fail Often. Fail Fast. Fail Cheap.” Business View Magazine, Made with FlippingBook, 9 Apr. 2017, www.businessviewmagazine.com/fail-often-fail-fast-fail-cheap/.

successes and failures). Feedback is also elicited from emerging and established automata and kinetic artists. These conversations range from the historical and technical to the conceptual. Whenever possible, the conversational feedback is conducted in person, and by email when not. The reason for eliciting feedback from these individuals is to take advantage of the level of in-depth expertise they bring to the conversation. That is, they are chosen because they have established reputations within the artistic community as experts at automata, kinetic sculpture, or both.

While these are just a few methods, they are only the most frequently used. Other methods are utilized, as the situation requires. Indeed, while I am very comfortable and fluent in the methods described above, I feel that fluency is less advantageous to my creative process than adaptation. This isn't to say that fluency isn't important. On the contrary, it is vital to effective and efficient research to have mastered a particular method or methods. However, to be able to quickly adapt new methods (whatever form they might take), I feel has, ultimately, benefitted my research. This allows me to speak not only a new "language" as it were, but also to incorporate new methods and find novel ways to refine approaches to existing common methods.

It is important to note at this time that the above methods are separated only for ease of description and clarity of understanding. In reality, these different methods are all used fluidly throughout my research/practice as a gestalt whole. None have a greater importance than the other. In fact, their strength lies in the cumulative effect: taken as a singular, holistic approach, these (and other less frequently used) methods combine to form a unique hybrid method. For brevity, I will not go into detail here as to how the methods work together, rather, I have described in detail how this is the case in the section titled, *Application of Tools in the Research/Creative Process (Step-By-Step Process)* (See page 62).

Tools, Materials, and Application

Using Kris Mason's (n.d.) definition of tools and materials - "[t]ools are things that do something, be they objects or processes; whereas materials are things themselves that do not necessarily have a use or process attached to them"¹⁴⁶ - I have listed both the tools and the materials I use in order to help achieve my desired goals and objectives (in no particular order of importance):

Tools:

- Formal interviews
- Textbooks
- Technical manuals
- How-to websites
- Formal and informal conversations/critiques/interviews
- Dictionaries
- Chance encounters/random discoveries
- Power Tools (i.e. laser cutter, wood working tools, 3D printers, etc.)
- Trial and error experimentation
- Electronics components
- Writing instruments (pencil, pen, computer)
- Documentation devices (camera, video, etc.)

¹⁴⁶ Mason, Kris. *Getting to Know: from There to Here*. 2014.

Materials

- Wood
- Steel
- Fabric
- Adhesives
- Found objects
- Paint/Wood stain
- Paper
- Slip casting agent
- PLA
- Glass

Application of Tools in the Research/Creative Process (Step-By-Step Process)

While not always the case, often the application of tools and methods in my research/creative process is very linear in nature. That is, generally speaking, these applications form a “step-by-step” process that rarely deviates in its structure and flow. Below, I have outlined and described the general steps in this process. It should be noted here that while this is a typical “step-by-step” process, this is by no means a concrete requirement for my research. In fact, this process is merely the most typical. Other project-specific processes might include other steps not listed (such as seeking out chance encounters or searching for found objects), or perhaps might omit certain steps as called for (for example, orthogonal drawings may not be necessary at times). The idea behind this list is to illustrate a typical application of the tools used in the research/creative process, and not to establish a hard and fast recipe.

1. *Research using texts, conversations, websites, dictionaries, chance encounters, etc.*

This is perhaps the least initially focused of all the steps, as it tends to serve the preliminary ideation/inspiration stage. That is, this initial ideation/inspiration can come from anywhere. Readings, both academic and non-academic, often serve to bring up key words or concepts that in turn lead to other research topics.

Conversations with friends, mentors, other artists or viewers often produce an initial idea or perhaps help foster an existing idea into a more robust evolution that leads to further, more pointed research. Websites allow a sort of “compare-and-contrast” element: they allow me to see what has already been done in some cases, as well to see if an idea might be unique in others. In addition, websites contain a great deal of source information for both technical and conceptual ideas, which often lead to more focused research and use. Dictionaries, by their very nature, are a rich source of not only interesting words, but also help in establishing historical and cultural contexts with which to expand the beginning research further. The definitions and etymology of words often lead to ideas of how a kinetic sculpture might embody a particular word, such as “tantalize”. Chance encounters are just that: random occurrences that contain interesting elements that in turn lead to more exploration, consideration, and of course, further pointed research. These chance encounters can occur in many different ways: seeing something on the ground as I walk, an advertisement, a piece of news, a snippet of overheard conversation, people-watching, etc. It is important to keep in mind that during this stage, many questions and ideas arise. Some of these “seeds” of research lead nowhere, and others lead to further, deeper research, and thus generate the subsequent steps in my research/creative practice.

2. *Take notes/ask questions using writing implements.* As mentioned above, if the initial research/ideation/ideas are worth pursuing, they lead to many questions and inquiries. At this stage it is vitally important to document these questions and ideas (both essential and tangential) as they serve to winnow irrelevant information, magnify important gaps of information, and help direct the future flow of research. Some of these questions include: “Is there available and adequate information with which to move forward with this line of research?” “Has this idea already been done? If so, how can I make my idea unique and not derivative?” “How much will it cost to implement?” Of course, more specific questions are asked for each particular project. These general questions serve to illustrate some of the more global questions that are essential to every piece regardless of theme, content or form. In addition, taking notes at this stage also includes making observations and insights. These can be anything from rough measurements of an object to jotting down my own and other people’s reactions to ideas and concepts. These notes need not be all that pointed, however, they do at least begin to corral the research/creative process towards an executable project with a tentative goal in mind.
3. *Create initial sketches using pencil and paper.* If the notes and questions from the prior step show promise, are feasible, and give a clear(er) direction for continued research, the next step is to begin sketching with pencil and paper. As I work primarily in three-dimensional kinetic sculpture, these initial sketches are essential. The sketches allow the beginning of a visual idea to form, not just technically, but aesthetically as well. Indeed, the technical often influences the aesthetic aspects and vice versa. Like with the notes/questions step, these initial steps need not be neat,

orderly, or even accurate. Indeed, they serve to simply get visual ideas onto paper in a rapid, low-cost fashion that will allow the next step to be worthwhile.

4. *Conduct conversational feedback sessions with colleagues, friends, and professionals.* While this step-by-step process is in itself very linear, it should be mentioned that throughout the process I attempt at every stage to elicit feedback from other people. That said, I am singling out feedback here as its own particular step at this point as I feel this is perhaps the most important feedback period: if I have progressed through steps 1-3 and am satisfied, this period of critiques becomes the “gate-keeper” for continued research. These feedback sessions do this in two ways: 1) if I present my materials and findings to others and they are generally found lacking merit, then I return to previous steps or begin again altogether, and 2) by eliciting feedback, the possibility arises that I may be required to take a different direction with the research at hand. Sometimes this direction is similar (i.e. a small change in scale perhaps), and other times it may be a vastly different direction entirely (i.e. the same theme might be used, but the aesthetic and technical basis shifts significantly). Again, it must be said that I seek out feedback throughout the entire process; however, during this stage in particular I have found the use of feedback perhaps bearing the most weight.
5. *Create orthogonal drawings using pencil and paper, then computer software.* Upon completion and collection of sufficient feedback in the previous step, I then turn towards the actual fabrication portion of the research/creative process. Orthogonal drawings using pencil and paper, and subsequently computer software, form the foundation of the entire fabrication process from this point on. The orthogonal

drawings allow a low-cost, semi-rapid, mathematically accurate way in which to plan the physical and technical designs resulting from all prior research. If done correctly, this step allows the following steps to progress more rapidly and efficiently. What's more, because of the nature of this step, it helps expose errors that were perhaps missed in prior steps that can be easily corrected in a quick, inexpensive way before committing to the purchase of costly material and time spent on fabrication. For example, often the initial dimensions will not account for secondary components, or due to an aesthetic change, the resulting design must be re-drawn with new components and dimensions.

6. *Fabricate elements/pieces using power tools and/or electronics components.* If the orthogonal drawings from the previous step are sound and accurate, this becomes the most straightforward step of all. (However, on some level there is always a questioning and reconsidering eye as things begin to be unfold. In this case, actual physicality allows for a continual deepening of understanding of how the physical object is a manifestation of my vision.) By creating detailed, accurate orthogonal drawings, I am then allowed to, in a sense “follow the directions”. That is, the orthogonal drawings tells me to “cut this material to X length”, or “fasten that joint at Y distance”, or “terminate this wire at Z point”. I simply follow the plans carefully laid out to completion. Barring any relevant feedback that might influence this step, it is simply a technical step: put the actual pieces together.
7. *Document work using camera, etc.* When completion of the research/creative process has occurred, the documentation step begins. Documentation of the work is essential for a variety of reasons. It is important as a way to show individuals and groups from

afar the work produced without having to incur expensive shipping costs. Also, if done correctly, the documentation step adds to a living narrative of an overall picture of my personal body of work. And perhaps most important, it gives a visual record of a piece, complete with what aspects were successful and what were not successful.

While the completion of this stage does not in itself naturally lead to the final step of feedback, it does allow some degree of distance and perspective to occur which does in turn, allow for further instances of feedback.

8. *Feedback.* While on the surface, a final feedback session might seem irrelevant, it is in fact quite illuminating. It not only allows a final “live” testing of the piece; it also affords the chance to hone and refine speaking points for artist presentations and discussions. In addition, this step allows both physical and mental note taking.

CHAPTER IV: ACTS OF CONTRITION

For my Intermedia MFA Thesis research project, I have created a body of work, titled *Acts of Contrition*, consisting of five kinetic sculptures that address and seek to answer the question of “*How might kinetic sculpture explore the notion of guilt as viewed through the paradigm of the Catholic Church by way of sensory pleasure using Joseph Campbell’s Monomyth as a framework?*” These individual pieces serve as singular explorations into various aspects of this question, while at the same time acting together much like chapters of a book.

Context

In terms of personal work, *Acts of Contrition* is a continuation and deepening of previously explored themes, such as guilt, religion, and sensory pleasure. While many of my prior pieces have key elements of these concerns, *Acts of Contrition* has allowed me to address these thematic and conceptual concerns in a cohesive, holistic approach. Additionally, from an aesthetic perspective, each piece shares common visual and tactile traits so as to maintain a cohesive thread with earlier work. For example, the use of wood and wood working techniques, electronics, and fabrication processes will share a commonality with prior pieces but also create a unique look to each. Finally, the use of kinetics is shared by all pieces, again connecting and furthering this personal artistic concentration.

In relation to works by other artists, *Acts of Contrition* derives inspiration from many artists, while at the same time diverging enough functionally and aesthetically so as to avoid being derivative or lacking originality. Some notable artists who have provided inspiration and visual commentary in line with the conceptual aspects of my work:

- *Jeffery Vallance*: His treatment of taking mundane objects found within popular culture and recontextualizing them as religious artefacts has served as a useful model with which to include both the element of humor and theology in my work.¹⁴⁷



Figure 17: *Vladimir Lenin Relics of the USSR*

- *Jake and Dinos Chapman*: Their approach to dark humor and religion have illustrated effective and profound ways to use humor as an effective vehicle for my conceptual interests.¹⁴⁸



Figure 18: *The Sum of All Evil*

¹⁴⁷ Vallance, Jeffrey. *Relics & reliquaries*. Grand Central Press, 2008.

¹⁴⁸ Chapman, Jake, and Dinos Chapman. "Jake & Dinos Chapman." *Jake & Dinos Chapman*, jakeanddinoschapman.com/.

- *Paul Spooner*: His use of subtle humor to make commentary on the human condition and popular culture through the medium of kinetic sculpture has served as both a conceptual and a technical reference point for my artistic research.¹⁴⁹



Figure 19: *Answering Machine*

Details

While each piece is clearly individual and can be viewed/experienced by themselves, there are common elements to each of the five pieces. The sculptures are all kinetic in some manner. Each piece has, as the primary concern, a concept that in some way is related to the idea of “Catholic Guilt”. Every sculpture has a secondary reference to one of the five senses. Each of the works contain a tertiary reference to a non-Catholic religion. All five sculptures act as one of the specific stages within the greater Monomyth or “Hero’s Journey” cycle. Aesthetically, each of the five works are black lacquered wood with one white element that references the particular sense.

¹⁴⁹ “Paul Spooner.” *Cabaret Mechanical Theater*, Cabaret Mechanical Theater, 2018, cabaret.co.uk/artists/paul-spooner/.

Temptation

Temptation is a sculpture that allows the viewer to watch a video of a woman sensually eating a fruit through a small peephole door. As the viewer slides the door of the peephole open, audio of the biblical scripture of Eve's temptation begins playing. When the viewer closes the peephole, the audio stops. *Temptation* explores Christianity's first recorded instance of personal temptation found in the Bible and the guilt that resulted thereof, using taste as the sensory subtext and Japanese Torii as a tertiary religion reference.



Figure 20: *Temptation*

In researching the concept of temptation within the Catholic Church, I found that the theme was, as I had suspected, prevalent.

Throughout the Bible there are many instances of both major and minor figures experiencing temptation, including Jesus

himself. This certainly allowed for

fertile ground with which to begin developing ideas for kinetic sculpture. However, despite the myriad of examples, I needed to ensure that whatever inspiration I used as a starting point was not only appropriate to the concept of temptation, but also allowed the piece to work in conjunction with the overall body of work, *Acts of Contrition*. This concern was coupled with the added constraint of using the sense of taste as a secondary element to the piece. As a result of these two limitations, the specific source of inspiration narrowed greatly. After many discussions with colleagues, it became clear that the Temptation of Eve in the book of Genesis was the

natural choice. This still left room for interpretation: how might the story of the Temptation of Eve be embodied as a kinetic sculpture?

Throughout the ideation process, I toyed with several ideas that either seemed not intuitive enough or necessitated a piece that would result in too large of a scale. One such example being a sort of kineograph, a type of motion picture viewing machine that works like an automated flip-book.¹⁵⁰ This kineograph idea did bear fruit, however, in that the idea of voyeurism and the temptation to look or watch something forbidden continued to surface again and again in the ideation process. This idea of voyeurism led me to think a great deal about X-rated movies and the history of pornography in the United States, having recently visited New York City's Times Square. As a child growing up in the 1980's, Times Square was considered a red-light district, having a great number of adult bookshops and theaters. One feature in particular that I found fascinating was the peep show, a coin (or dollar) operated machine that allowed the voyeur to watch sexual acts being performed by individuals, couples, or groups.¹⁵¹ As the money is deposited, a screen retracts whereupon the customer is able to view the activity for a limited time. After the allotted time is finished, the screen returns to block the view. I felt that this mechanism, a screen or a door that hides a possibly "sinful" act from view, would help embody the concept of temptation. However, instead of pornography being what is seen, an abstract video narrative based upon the Temptation of Eve is displayed. Additionally, as the viewer succumbs to the temptation to look through the peephole, a reading of Genesis 3:3 – 3:5, plays on the speakers, further reinforcing the idea of temptation from the lens of Catholicism.

¹⁵⁰ "Fliptomania Inc." *History of Flipbooks & Moving Image - Fliptomania*, fliptomania.com/did-you-know/.

¹⁵¹ Carlson, Jen. "7 Things We Learned From A Times Square Peep Show Girl." *Gothamist*, 12 Apr. 2013, gothamist.com/2013/04/12/5_things_we_learned_from_a_times_sq.php.

When the viewer finally releases the peephole door, the recording stops playing, and the scene is once again hidden from sight, waiting for the next viewer to be enticed.

In exploring ideas of how to incorporate each of the five senses as a secondary concern for a kinetic sculpture, I quickly realized just how difficult this would be for the sense of taste. Some major concerns immediately came into focus, both conceptual and mechanical. The first being if it were possible to create a sculpture that would allow people to taste something in a sanitary fashion. While there are many ways in which to do this effectively, none proved reasonable in terms of time, mechanics, or economics while also addressing the sanitation issue. Another concern was, instead of having some sort of mouthpiece that served as the actuator, dispensing something the viewer could eat, such as candy. This did not work either. Through this process, it seemed that if the conceptual aspect worked (i.e. an apple to parallel the scripture of Eve), a suitable mechanical action that would allow the viewer to actually eat the food was not feasible; and if a mechanical system was feasible, it was not conceptually congruent to the idea of Temptation (i.e. communion wafers).

Ultimately, after much discussion with colleagues, I realized that as long as an overt visual or audio reference were present, something easily identifiable with taste, I could address the sensory concern without worrying about sanitation or conceptual incongruities. The result was an abstract visual narrative done through video that relied heavily on representations of eating. In my research, I came across many instances of food and eating within the Bible. Some of these were not relevant to the idea of temptation: the Last Supper, Jesus feeding the 5000, etc. But two in particular were: the temptation of Eve by the Serpent, and the temptation of Christ by the Devil to turn stone into bread. I felt that either of these biblical scenes could work very well as a stand-alone departure point for the sculpture. However, when I looked at the piece as one

part of a larger cohesive body of work, the decision became clear that the temptation of Eve and not the temptation of Christ was the appropriate choice because of the numerous references to Original Sin found in the other works.

The video itself is rather straightforward. It consists of black and white imagery, with each scene being a composite of three different shots overlaid on one another. The opening scene shows an apple on a table that is then grasped by a woman. She then slowly and sensuously bites into the apple and eats part of it. Upon finishing the bite, she then slowly sets the apple back on the table and the video loops back to the beginning. Throughout the video, the focus is always on the apple, with the woman being a key secondary figure. Using camera angles, close-ups, and editing, the apple (read sense of taste) is in every scene. I felt that this treatment of the act of eating an apple would convey not only the sense of taste (apples are one of the most popular fruits in the United States¹⁵²), but be conceptually appropriate to the piece itself as well as the overall body of work.

As a tertiary concern that helps unite each piece, I felt it important to include within each sculpture a reference to a non-Catholic religion that would be conceptually appropriate as Campbell's Monomyth plays significantly in my research. While some of the references are perhaps overt, others, like *Temptation* are subtle, perhaps even unnoticeable to the average viewer. With *Temptation* I wanted a reference that would perhaps telegraph to the viewer that they were entering into a different realm, leaving the mundane (worldly) behind and emerging into the divine. In researching ideas I discovered Torii. In Japanese Shintoism, Torii are gateways that delineate the transition from the profane to a sacred space. These gates are designed in various ways. However, they usually consist of two vertical posts topped by a

¹⁵² "Apple Facts." Great Plant Escape - Flower Parts, extension.illinois.edu/apples/facts.cfm.

slightly curved rectangular crossbeam extending between the posts and a second crossbeam below the first. Torii are predominantly found at Shinto temples and shrines, however, it is not uncommon to find them at the entrance to a Buddhist temple as well.¹⁵³ Within the video itself, the opening and closing scenes both show a table of sorts. Looking closer, the table bears the fruit and takes the uncanny form of a Torii gate with the slightly curved top crossbeam as the table top. By taking the fruit from the Torii-like table, the woman in the video leads not only herself, but also the viewer, into a symbolic realm of divine theater: that of Eve succumbing to the Temptation of the Serpent as told in the Bible. As the Eve character returns the fruit to the top of the Torii-like table, the viewer departs the divine along with her and returns to the profane world, paralleling the notion of entering and exiting a Shinto Torii.

Overall, I feel *Temptation* was fairly successful. Conceptually, I wanted to convey a sense of temptation to the viewer through the lens of Catholicism, include as a feature the sensory perception of taste, and link the sculpture to a Shinto Torii. Additionally, throughout the series, *Acts of Contrition*, I also wanted the sculptures in and of themselves to be not only gestural (as opposed to overtly narrative), but for the viewer to intuitively understand how to interact with them. In terms of temptation as seen through the Catholic Church, how it manifest itself was both a success in one regard, and less so in another. The use of the peephole, the video, the accompanying audio all pointed directly toward this concept. However, this also made the piece extremely narrative, leaving little to no room for a gestural quality. Regarding the sense of taste, I feel that, considering the difficulty in creating the opportunity for taste to somehow be included in a kinetic sculpture, I was rather successful. The visual symbol of an apple being eaten is something that nearly anyone can understand due to the popularity of the fruit in the

¹⁵³ “Torii.” *Encyclopaedia Britannica*, Encyclopædia Britannica, Inc., 21 Oct. 2015, www.britannica.com/topic/torii.

United States. What's more, choosing to use the apple itself as the focal point of the video, as opposed to the Eve character, I feel, further reinforces this sensory reference quite successfully. The use of the Torii-like table as a reference to a non-Catholic religion is perhaps the least successful aspect of the piece. It remains to be seen if the average viewer will pick this element from the over-all experience and understand the theological implications that accompany the use of the Torii-like table within the video. That said, it is my assumption that very few, if any, viewer will notice this detail, and even fewer will make the theological connection. Those that do, however, will gain a richer, deeper understanding of how the piece itself fits into the overall body and in turn, how it relates to the idea of Catholic guilt and the Monomyth. Operationally speaking, the intuitive aspect of the viewer's interaction is very apparent. Inherently, the viewer will see the peephole door handle and understand that it is meant to be opened and looked through. This is especially apparent when the full body of work is displayed.

Original Sin

Original Sin is a reliquary of sorts that invites the viewer to light a candle that will heat a thermocouple (electronic temperature measurement device). When a temperature threshold has been reached, an electronic blower will extinguish the flame until the candle burns down too far. *Original Sin* looks at the idea of the initial retribution brought by God onto humanity for partaking of the fruit of the Tree of the Knowledge of Good and Evil, with smell as the sensory subtext and Theosophical perspectives on the role of Lucifer as a tertiary religious reference.

One of the interesting things I discovered while researching the concept of Original Sin was that the Catholic Church believes that all humans are born with Original Sin and cannot rectify this without baptism. Without baptism, the Church states that the person, regardless of their circumstances, will suffer eternal damnation in Hell. Until recently, this included newborn

babies.¹⁵⁴ That is, a newborn, who has not the capacity to commit an intentional sin, would still be doomed to Hell if they were not baptized. This idea of extreme punishment suffered because of the acts of another human struck me as incredibly bizarre and absurd, comically tragic even. While I understand the need, theologically speaking, in somehow explaining why there is such evil allowed in a world that was supposedly created by a loving and just God, I felt that the absurdity, the tragically comedic nature of the dogma itself was a strong departure point in developing the sculpture.

During the development stage of *Original Sin*, I considered using the sense of taste as a



Figure 21: *Original Sin*

secondary concern, especially so because of the story of Eve succumbing to temptation by way of eating a fruit. However, the mechanical and sanitation concerns with somehow incorporating taste, proved to be difficult, and ultimately, not appropriate for this particular concept. Rather, what continued to arise in conversations with colleagues was this absurd

idea of punishment by God. This punishment, damnation, not only directed the mechanical behavior of the piece, but also allowed an easy entry point for the secondary concern of using smell as the sensory element, as smoke and fire are often used to describe what Hell will be like

¹⁵⁴ Newsome, Matthew A.C. "Let the Children Come to Me." *Catholic Answers*, CatholicAnswers.com, 1 Oct. 2007, www.catholic.com/magazine/print-edition/let-the-children-come-to-me.

by Catholicism. What's more, the idea that the desire to become God-like or enlightened, having been one of the greatest sin's committed by humans, seemed even more absurd to me.

This research, and my personal interpretations thereof, culminated in the design of a sculpture that was at once austere and also darkly humorous. The viewer is presented with a simple black lacquered reliquary of sorts with a lone white candle in the interior. As the viewer lights the candle, the sculpture detects the flame and blows out the candle as punishment for this sin of seeking "illumination". Regardless of how many times the candle is lit and has not burned down too far, *Original Sin* will punish the viewer by blowing out the flame again and again for eternity.

Upon deciding how the sculpture would behave mechanically, I realized that the natural choice of a sensory reference was that of smell. If Catholic dogma is to be believed, the unbaptized person who dies is condemned to Hell. In the history of Christianity, Hell is depicted as a place where fires burn eternal and the damned suffer terribly in lakes of fire and brimstone. The smell of Sulphur is ever present and unending. These punishments, according to popular depictions, is what awaits the unbaptized upon death because of Original Sin. The idea of incurring the wrath of God in the context of the sensory perception is even more appropriately addressed in the Bible with Psalms 37:20: "But the wicked shall perish; And the enemies of the Lord, like the splendor of the meadows, shall vanish. Into smoke they shall vanish away."¹⁵⁵ This passage, Psalms 37:20, gave me a direct reference from the Bible that would reinforce the punishment-type behavior of the sculpture: every time the viewer seeks "illumination" and lights the candle, the sculpture, taking on the role of an angry God, punishes the viewer by blowing out

¹⁵⁵ Psalms 37:20, KJV

the flame. As the flame is extinguished, the smell of smoke permeates the air as a sensory reinforcement of the conceptual concerns of *Original Sin*.

The act of humanity knowing Good and Evil, and thereby becoming god-like, has forever been considered the Original Sin within Catholicism. In Genesis, not only were Adam and Eve punished for this act, but the Serpent who tempted Eve, was also punished.¹⁵⁶ Because of the role played in having brought the knowledge of Good and Evil to humanity, the serpent has become synonymous with the devil.¹⁵⁷ Over time, the Devil became synonymous with Lucifer, the bringer of light.¹⁵⁸ Thus, we find that Lucifer is the devil and is also the serpent from the Book of Genesis, and God has therefore punished not just humanity because of the desire for enlightenment, but also Lucifer for having given them the idea of becoming God-like.¹⁵⁹ This vilification of Lucifer, the Light Bringer or giver of enlightenment, has continued for over 2000 years within the Catholic Church.¹⁶⁰ However, Lucifer should not be considered as evil. According to Theosophy, a form of Western Esotericism, knowledge about the Divine comes from personal meditations and one's own inner nature and not from books, teachers, churches, etc. Through this personal meditation, Theosophy believes that it is possible for a human being to reach a divine state.¹⁶¹ Rather, Lucifer/The Serpent should be revered:

It is but natural . . . to view *Satan*, the Serpent of Genesis, as the real creator and benefactor, the Father of Spiritual mankind. For it is he who was the "Harbinger of Light," bright radiant Lucifer, who opened the eyes of the automaton *created* by Jehovah, as alleged; and he who was the first to whisper: "in the day ye eat

¹⁵⁶ Genesis 3:14-24, KJV

¹⁵⁷ Hendel, Ronald. "Was The Snake In The Garden Of Eden Satan?" The Huffington Post, TheHuffingtonPost.com, 7 Dec. 2017, www.huffingtonpost.com/ronald-hendel/was-the-snake-in-the-garden-of-eden-satan_b_1900973.html.

¹⁵⁸ Rhodes, Ron. "How Did Lucifer Fall and Become Satan?" Christianity.com, Salem Web Network, 22 Oct. 2007, www.christianity.com/theology/theological-faq/how-did-lucifer-fall-and-become-satan-11557519.html.

¹⁵⁹ Genesis 3:14, KJV

¹⁶⁰ "Catechism of the Catholic Church - The Fall." Vatican, www.vatican.va/archive/ccc_css/archive/catechism/p1s2c1p7.htm.

¹⁶¹ Sender, Pablo D. "What Is Theosophy?" The Influence of Buddha on World History, Dec. 2007, www.katinkahesselink.net/other/sender-theosophy.htm.

thereof ye shall be as Elohim, knowing good and evil” – can only be regarded in the light of a Savior. An “adversary” to Jehovah the “*personating* spirit,” he still remains in esoteric truth the ever-loving “Messenger” (the angel), the Seraphim and Cherubim who both *knew* well, and *loved* still more, and who conferred on us spiritual, instead of physical immortality...¹⁶²

Thus we see that, instead of being a character of evil, Lucifer, in fact, is an agent of enlightenment, much like Prometheus in Greek mythology, who is vilified and punished for having given the gift of “light” (enlightenment) to humanity. This vilification of Lucifer, the Light Bringer has continued over and over for more than 2000 years within the Catholic Church.

Using Theosophy’s sympathetic views towards Lucifer’s role in human enlightenment as a conceptual framework, I wanted to give the viewer a sense of the continuing retribution he receives at the hand of the Catholic Church. In lighting the candle in *Original Sin*, the desire for “illumination” is temporarily successful each time. However, it always results in the sculpture blowing the flame out, again and again, in an eternal act of punishment. In interacting with the sculpture, the viewer takes on the role of Lucifer, attempting to bring light to humanity, only to be stymied and punished by the unseen hand of God that lies within the mechanics of the sculpture itself.

In terms of how *Original Sin* achieved its intended goals, I feel that it was rather successful. One aspect, that of the intuitive interaction, I feel has been arguably the most effective. That is, as it is intended to be displayed fully, the viewer sees a box of matches on one side of the piece, a candle with a burned wick inside the work, and spent matches on the other side of the sculpture. This visual cue is easily understood and thus far, viewers have shown no difficulty in understanding the point of interaction. Concerning the gestural verses the narrative

¹⁶² Blavatsky, H. P., et al. “The Secret Doctrine.” *The Secret Doctrine*, Jeremy P. Tarcher/Penguin, New York, 2009, pp. 243–243.

nature of the kinetic behavior, depending on the perspective, this aspect can be seen as either very successful, or not at all. If looked at as the smoke from the extinguished candle, the very nature of smoke is ethereal and formless, it is the essence of the gesture of air currents carrying carbon particles. However, if we look at the action/reaction behavior of the piece, that of lighting the candle/blowing out the candle, we see that it sort of falls within the scope of a one-liner joke: it only takes one or two observations on the part of a viewer to understand that if they light the candle, the sculpture itself will blow out the flame again and again with no real deviation of mechanical behavior. As far as conveying a sense of the concept of Original Sin in the context of Catholicism, I think it is much more successful when viewed in conjunction with the link to the non-Catholic religious concern of how Theosophy views the role of Lucifer in the theological development of humankind. That is, I personally feel that it is impossible to divorce the idea of Original Sin from the entity that is Lucifer. This symbiosis between the two concepts, I feel has been a great triumph. That said, I am not certain that the general audience will be well versed on the character of Lucifer in the Bible, let alone from the theological perspective of Theosophy. However, certain groups, including specific fraternal organizations, will immediately and intuitively understand the statement without a moment's hesitation. Finally, the sensory concern of the smell in the extinguishing of the candle and the religious references to punishment and burning, this aspect was a major accomplishment. As the candle is blown out by the sculpture, the whiff of smoke emanates directly towards the viewer. The smoke is neither too little, nor too great, and instinctively, anyone with a familiarity of the smell of extinguished candles understands the action that has occurred. This sensory experience serves to strongly reinforce the concept of the piece itself: Original Sin and the punishment of God as embodied as a kinetic sculpture.

Confession

Confession is a device that allows the participant to “confess” their sins and receive



Figure 22: *Confession*

absolution. The participant “confesses” by writing their sins in a bed of white sand using a wooden stylus. Upon returning the stylus to its holder, vibrating motors re-level the sand, wiping away their confession and thereby absolving

them of their sins. *Confession* explores the idea of guilt and absolution of guilt, with touch as the sensory subtext, and Zen gardens as a tertiary comparative religion reference.

The act of confession in the Catholic Church is a very formal affair. Despite no two confessions being alike, (the sins that I may commit will never be the same sins that another person commits, however similar), the ritual of confession is the same throughout Catholicism. Certain key steps must be taken by specific individuals with specific roles in order for the confession to be considered valid. For example: the confessor must verbally communicate their transgressions, perform penance by verbalizing various prayers, and recite the Act of Contrition. The ritual is then completed when an ordained priest gives absolution. In thinking about this ritual, embodied as a kinetic sculpture, a few questions came to mind: What if the person confessing did not have to verbally communicate their confession? What if the person choosing to confess did not want to say or even know the Act of Contrition prayer? Could there be a different player (material) other than a human priest who could receive the confession and in doing so, also absolve the person of their sins?

Concerning the way in which a confession is given, I wanted to create a piece that allowed for gesture to be a key aspect. Each person's handwriting, perhaps the most ubiquitous form of non-verbal communication, is unique to that person.¹⁶³ Handwriting, like individual sins, will never be the same, no matter how similar it may seem¹⁶⁴. While the same could perhaps be said about verbal communication, the act of writing is far more physically gestural.

In terms of being required to recite the Acts of Contrition prayer as a completion to one's confession, I was interested in a less religious, perhaps even mundane approach to completing the act of confession. The need to punctuate what has been told to a priest, almost as a reinforcement of one's guilt, feels superfluous to me. The act of returning the stylus to its receptacle is not only a non-dogmatic closure to the confession, but also becomes a physical act of finality, a closing of a loop of sorts. This isn't to say that a person could not simply walk away without returning the stylus to its holder. They certainly could. But in doing so, they would not receive their absolution and the sin would remain written in the sand. As a result, the individual would not be forgiven their sins. However, when the viewer does complete this ritual, the vibrating motors engage and they are no longer burdened by their sins. Adherence to dogma and memorization of a religious chant (prayer), are wholly unnecessary.

The behavior of sand as a material, shifting and impermanent in its form yet allowing marks to momentarily be made upon it, felt like a perfect medium with which to act as an agent of absolution. That is, the white sand, visually referencing "purity" like that of the priest, could receive the sins, and yet never really "remember" them nor share them with another person.

¹⁶³ Goldbaum, Ellen. "Research Shows Court Everyone's Handwriting Different." *Daily University Science News, UniSci*, 30 May 2002, www.cedar.buffalo.edu/pub_docs/article106a.html.

¹⁶⁴ Romm, Cari. "Why Your Handwriting Keeps Changing, Even in Adulthood." *The Cut*, New York Media, 23 Sept. 2016, www.thecut.com/2016/09/why-your-handwriting-keeps-changing-even-in-adulthood.html.

(According to Canon Law, priests are forbidden from repeating confessions they receive,¹⁶⁵ however, it would be naïve to think it has never happens.) These sins would eventually be forgotten over time due to the nature of the materiality of sand: slight vibrations over time would eventually distort the viewer's marks in the sand until the writing was no longer intelligible. The sin each viewer confesses is in a very real sense wiped away as the sand itself takes the role of the priest, all without fear of their privacy being betrayed.

In Catholicism, confession is performed verbally. The person engaging in the ritual speaks their sins to a priest, they perform penance by saying various prayers, and they recite the Act of Contrition before receiving their absolution, which itself is spoken by the priest. It would stand to reason that because of the use of voice that the sensory concern for *Confession* would manifest as auditory. In fact, this was my original intent. During the ideation process, I initially planned on using the viewer's voice to activate the stylus as a way to mark the sand. This idea, however, continued to run into various issues. Primarily, how to mechanically achieve the desired effect of a stylus marking sand in a way that was controlled by voice and also shared the same visual austerity with the other works in the series. This direction proved untenable, not just mechanically, but aesthetically as well. The design did not function very well, nor did it share the same visual characteristics with other pieces included in *Acts of Contrition*. Simply put, the use of voice as the sensory element for the sculpture would not work.

In speaking with colleagues, I eventually came to the realization that the idea of confession was, in essence, one of communication: verbally communicating one's transgressions and then receiving, via verbal communication, a forgiveness for said transgressions. What if one were able to communicate the sin via writing instead of being spoken? What if the sensory

¹⁶⁵ Caridi, Cathy. "Can a Priest Ever Reveal What Is Said in Confession?" *Canon Law Made Easy*, 4 Dec. 2008, canonlawmadeeasy.com/2008/12/04/can-a-priest-ever-reveal-what-is-said-in-confession/.

concern shifted from the verbal/auditory to the written/touch? Could I maintain the other elements that were critical to the work, elements such as gestural movements, aesthetic cohesion, and mechanical success? The answer to these questions was a resounding, yes. By shifting the sensory concern to that of touch, I was able to easily retain the use of sand, maintain a more austere aesthetic shared by the other pieces and allow perhaps the most gestural form of communication to exist within the sculpture, that of handwriting.

As a sculpture, *Confession* melds the form of the Zen garden with the Catholic act of confessing one's sins. Japanese Zen gardens, or karesansui, are intended to offer the viewer a meditative and contemplative experience. These gardens are usually fabricated using gravel and rocks to evoke emptiness via abstraction, though it is not uncommon to find examples that utilize plants and water.¹⁶⁶ This meditative experience is known to help re-center the individual mentally and emotionally by bringing a sense of peace, tranquility, and connectedness to one's surroundings and to other people. The act of confession can be said to parallel the benefits of meditation through visiting a Zen garden. The act of re-centering oneself with God and the Church via confession is said to be one of the benefits of confession. According to the Catechism: "*Sin is before all else an offense against God, a rupture of communion with him. At the same time it damages communion with the Church. For this reason conversion entails both God's forgiveness and reconciliation with the Church.*"¹⁶⁷ Thus, while the intent may be from different religious perspectives, the result is still the re-centering of the individual to the theological beliefs they hold and communities to which they belong.

¹⁶⁶ Deziel, Chris. "What Is the Purpose of a Japanese Zen Garden?" *Home Guides / SF Gate*, 21 Nov. 2017, homeguides.sfgate.com/purpose-japanese-zen-garden-84717.html.

¹⁶⁷ Marcel. "21 Reasons To Go To Confession & Why Catholics Confess Sins To Priests." *Aggie Catholic Blog*, St. Mary's Catholic Center, 24 Mar. 2015, www.aggiecatholicblog.org/2015/03/21-reasons-to-go-to-confession-why-catholics-confess-sins-to-priests/.

In the ideation and design phase of *Confession* I continually came back to the image of the sands of time and the shifting sands of a desert as a way of abstract, gestural erasure. While these two images were not conceptually relevant to the overall idea of guilt as seen through the Catholic Church, I felt there was an opportunity to somehow use the impermanence of fine sand as a way to illustrate the concept of confession. What's more, in my research, I felt that the parallels between the re-centering nature of meditative Zen gardens with that of re-centering oneself with God and the Church via confession, a powerful and synergistic intersection. The contemplation of the viewer is two-fold: they are allowed to ponder their sins they confess, while at the same time being given an opportunity to engage meditatively with the physicality of the material. By marking the sand, in a similar fashion to how Zen gardens are tended, the viewer can then attend to their inner turmoil, quietly, privately, and contemplatively with absolution being given upon their completion of the confession/meditation.

In regard to *Confession*, I feel that it is perhaps one of the more successful pieces within the series. Simply by using the materiality of the white sand, the most common comment made by viewers is that it reminds them of Zen gardens. There is no mistaking this aspect. Interestingly, when the white sand was replaced by sand of a different color, black or tan for example, viewers commented far less on the parallels to Zen gardens. This obvious parallel, however, proved to be a double edged sword, in that, the sense of performing an alternative to the ritual of Catholic confession seemed to get a little lost. This was made apparent by viewers often drawing pictures or shapes in the sand, as opposed to writing textual messages of transgression. This isn't to say that confessions weren't made. In fact, when a viewer took the time to discover the title, they intuitively understood the purpose. The decision to incorporate touch as the sensory concern also proved to accomplish my intended goal. Indeed, the sculpture

itself cannot and will not work without the viewer touching it, and doing so in a very gestural way. That is, it is an active touch, not a passive touch like simply placing one's hands on a surface. The viewer must remove the stylus, write their sin, and physically return the stylus to its receptacle in order for the piece to work. Additionally, by virtue of attaching the silver chain to the stylus, viewers mentioned that it reminded them of writing utensils often found in post offices and therefore intuitively understood the stylus to be just that: an object to hold within one's hand like a pencil.

Atonement

Atonement is a device that allows the participant to meditatively and contemplatively atone for their sins. The viewer places their hands upon the carved handprints in the sculpture's lower chamber. As they do, lights shine on two rotating prisms that are partially hidden from view. As these prisms rotate, they periodically shine their light upon a third rotating prism that is exposed to the viewer. From time to time, the third prism will cast light upon a hidden light

sensor causing a bell to ring. Each time the piece is engaged, the direction of the three prisms and the speed in which they rotate is random. That is, the pattern of light and the timing of bell chiming will be different every time the sculpture is engaged. *Atonement*



Figure 23: *Atonement*

looks at the idea of atonement of

one's sins with hearing as a sensory secondary concern, and the Japanese Buddhist ceremony of Joya no Kane as a comparative theological parallel as its tertiary examination.

The idea of atonement in the Catholic Church can be considered from two perspectives: the mundane (worldly) and the divine. Looked at in a worldly view, atonement is the act of making amends for one's individual sins, such as returning a stolen item. Looking at the concept from the divine perspective, it is the act of Jesus offering himself to be crucified so as to rectify the Original Sin perpetrated by Adam. Regardless of whether the perspective is from the mundane or from divine point of view, atonement arises from an internal personal desire to rectify transgressions. That is to say, the person (or deity) who is engaging in atonement, must have meditated on the exact nature of the wrong committed, and internalize the desire to make right whatever harm was committed. Thus, the causal relationship here from a Catholic perspective is: a sin is committed, the person (or deity) meditates upon the sin itself, and atonement is undertaken as the resulting action from the meditations. This isn't to say that such meditations are instantaneous. Perhaps an individual must think of how their sin was a transgression for quite some time before they are willing to move forward with the act of personal atonement. In the case of Jesus and Original Sin, the length of time between the two events is thought to be hundreds if not thousands, of years.

In researching Catholic ideas of atonement, the delay between the act of sin and the act of atonement became of great interest to me. I found it fascinating that some people will confess and atone for transgressions nearly immediately, whereas other times even a small slight takes years or even decades to redress. Regardless, a meditation on the wrongs committed is necessary for atonement itself to occur. I wanted to investigate how a kinetic sculpture might allow the viewer to meditate on their transgressions, no matter how great or small, and come to terms with

the culmination of the cycle of sin and therefore atone, in some way. Of particular importance to the idea of personal meditation on one's sins is the way in which the viewer interacts with *Atonement* as well as the randomization of the prisms speed and rotational direction. The viewer who wishes to operate the sculpture is required to place their hands upon the hand-prints carved into the lower chamber: the piece works only when the viewer has done this. If they remove their hands, the sculpture stops immediately. That is, there is no pre-programmed time of operation. The viewer can engage with the piece for as long as they feel necessary. This could be for one second, one hour, or one day. There is no minimum or maximum time that is required of the viewer, just like that of making the decision to make amends for a sin. The randomness of the prisms speed and rotational direction illustrates to the most attentive of viewers that each sin is unique unto the person who desires to atone. While the mechanical behavior is ultimately similar each and every time (light is refracted via prisms rotating and a bell chimes when the light hits the light sensor), the pattern will never be the same twice, regardless of whether or not the viewer notices the subtle differences of each interaction. The same can be said of one's personal sins: one can commit a similar sin over and over (i.e. a habitual liar), but each and every sin is unique and different in both scope and circumstance. Our sins are as unique as the patterns of light created by *Atonement*.

Specific sounds, like a bell or a buzzer, often denote the end of a time period or an event in some way, a timer of sorts. An alarm rings to wake us up after a certain time, a bell chimes to denote a meal is ready to be served, or a buzzer is sounded at the end of a sporting event. Other times, a phrase or a word is spoken to denote the end of an event or action: saying "goodbye" as a way of formalizing the end of a friendly conversation, using the word Amen to denote the completion of a prayer, or perhaps simply uttering the word "stop" as a way of signaling the end

of an event. In the Catholic ritual of confession, this too is often the case. The individual who confesses their sins in the hopes of receiving absolution must formally vocalize an act of atonement (formally called penance in the Catholic Church), as a way of denoting the completion of the confession ritual.

Upon confessing their sins to a priest, the individual who is to receive absolution is tasked with performing an act of atonement. These atonements are usually required to be performed prior to the person exiting the church, depending on the severity of the sin confessed.¹⁶⁸ A great number of these atonements are the recitation of specific prayers, like Hail Mary's or Our Fathers. At the completion of these atonements, the absolution received during confession is complete, and the person who participated in the ritual of confession is now considered to be rectified in the eyes of God.

Despite the obvious differences in theological perspectives these verbal atonements (prayers) act much in the same way that meditation bells work: they assist in helping the individual to focus their minds and intentions in a religious manner.¹⁶⁹ One example is that meditation bells are often used as an indication that the meditation is finished, like that of the word "amen" as a way to end one's prayer. Another example of meditation bells mirroring spoken prayers is the way in which each assists the individual in achieving a deeper religious experience. These parallels allowed a natural departure point for the sensory concern of hearing to be incorporated in *Atonement*.

As the viewer initially engages with the sculpture, the first aspect they notice is the tactile and the visual: they lay their hands in the appropriate location to begin (tactile), and the prisms

¹⁶⁸ McNamara, Edward. "Appropriate Penances." *The Process of Beatification and Canonization*, Eternal Word Television Network, 2 Sept. 2008, www.ewtn.com/library/liturgy/zlitur235.htm.

¹⁶⁹ "The Meaning and Function of the Meditation Bell." *Mindworks*, 26 May 2018, mindworks.org/meditation-knowledge/the-meaning-and-function-of-the-meditation-bell/.

light up and spin (visual). However, as they begin to contemplate the experience, and with that, what they wish to atone for, a bell chimes. If the viewer continues to engage, they hear a second, a third, a fourth chime, and so on. These chimes do not sound at regular intervals, however. By virtue of their randomness, these chimes could sound very rapidly or alternatively take many seconds or minutes between each sound. This irregular timing of the bells assists the viewer in their contemplation. If the timing of the bell chimes were at regular intervals, the viewer would more easily be able to tune them out as a sort of white noise, and would lead to a less dynamic engagement. However, the disparate periods between each chime, tells the viewer to pay attention, not only to the sculpture itself, but their thoughts and concerns for which they seek atonement.

The parallels between the use of meditation bells and vocal prayer discussed above, allows a natural introduction for referencing a non-Catholic religion as a tertiary for *Atonement*. The sculpture itself is focused on the Catholic notion of atonement of one's sins. However, as one might assume, Catholicism is not the only religion with rituals concerning atonement. The Japanese Buddhism gives a vivid example of coupling the idea of atonement with the use of meditation bells.

Joya no Kane is a Japanese Buddhist ceremony heavily influenced by Shintoism held on December 31st each year. The ceremony is a way for followers to purify the self of sins accumulated throughout the year. Large bells are struck 108 times in order to atone for the person's sins with the number 108 corresponding to the 108 sins humankind is thought to have in Buddhism. The timing of the ceremony lies in the belief that the spirits of gods and ancestors return in both midsummer and midwinter. This midwinter ritual is a time of purification and that

is thought to not only atone for sins, but to also revive one's connection with spirits at the first shrine visit of the year.¹⁷⁰

With Joya no Kane, the focus is on the ringing of the bells and the sounds they create. This ritual uses the sound of bells as a way of signaling the conclusion of sins accumulated throughout the year, and to announce the spiritual renewal of the believers. Likewise, with Catholic atonement, the focus is on the spoken prayer and the words uttered. The prayers spoken act as a signifier of the conclusion of sins accumulated between confessions, and to denote that the believer is once again renewed spiritually.

I feel *Atonement* is perhaps the most successful piece in *Acts of Contrition*. Perhaps the aspect that I am most please with is the gestural behavior of the sculpture. By creating a randomness to the chiming of the bells via the light shone from the prisms, I feel that the piece was rendered much less narrative. That is, the experience is different for each viewer, and not a “one-and-done” experience. The same viewer can interact with the piece a thousand times, and the patterns of light and the timing of the bell chimes will never be the same. Intuitively speaking, I feel that the point of engagement was very rewarding. The carved handprints immediately tell the viewer that in order to engage with the sculpture, they must place their hands in the space. Thus far, there has been no misunderstanding by viewers on how to operate the sculpture, and dozens of people have interacted with the piece. Perhaps the least successful aspect of *Atonement* is the reference to the Japanese Buddhist ceremony of Joya no Kane. The issue, I noted, is that many people simply do not have the foundational knowledge of Japanese Buddhism. That is to say, while they may understand the sound of bells as a meditation/prayer/atonement device, to date I have not spoken with a viewer who has direct

¹⁷⁰ Kane, Joya no. “Doutaku (Ancient Bells) Part 2.” *Nihonbunka.com*, Shinto- The Faith of Japan, 28 Apr. 2003, www.nihonbunka.com/shinto/blog/archives/000012.html.

knowledge of the specific ceremony being referenced. The use of hearing as sensory concern has been slightly problematic. As a result of the randomness of the sculpture's behavior in creating the bell chime, some viewers disengage with the piece before the piece has a chance to make the sound. This could be due to the randomness of the prism's behavior simply not allowing for a chime soon enough for the viewer to hear it. When the chime is sounded sooner for a viewer, they tend to engage much longer with the piece than if the sound does not occur quickly. What's more, if the viewer has prior knowledge of the bell being a focal component to the piece, they seem to be more patient with their engagement. Finally, I feel the piece decently conveyed the Catholic concept of atonement. In speaking with viewers, a majority stated that the piece, whether because of aesthetics (i.e. physical form) or because of mechanical behavior (beams of light causing a bell to ring at random times), gave them an opportunity to contemplate something they wish to atone for.

Ascension

Ascension is a sculpture that dips a Crucifix-shaped bubble wand into a bath of liquid bubble solution and then rotates the Crucifix back to an upright position. When the Crucifix becomes properly oriented, a fan blows bubbles at the viewer. Ascension examines the idea of Jesus' Ascension as the rectification of Original Sin, with sight as the sensory subtext and the Kaaba of Islam as a tertiary comparative religion reference.

In the Catholic Church, it is believed that Original Sin could only have been rectified by the atonement of Christ.¹⁷¹ The final act in the atonement is the Ascension of Christ, where Jesus is taken, by way of a cloud, into heaven to sit at the right hand of God.¹⁷² The Catholic Church

¹⁷¹ "Religions - Christianity: Original Sin." BBC, BBC, 17 Sept. 2009, www.bbc.co.uk/religion/religions/christianity/beliefs/originalsin_1.shtml.

¹⁷² Acts 1:9, KJV

also states that we are born with Original Sin, despite the atonement of Christ, and therefore must undergo baptism in order to be cleansed of Original Sin, once and for all, or face eternal damnation.¹⁷³ These two notions are intertwined and dogmatically inseparable. Ascension addresses these twin concerns as they relate in Catholicism.

Ascension as a sculpture serves as a proxy religious experience for the viewer. The viewer is allowed the benefit of being freed from the taint of Original Sin by simply observing the sculpture in action. Indeed, the mechanics of the sculpture allows the viewer to not only experience a vicarious baptism by way of the bubble wand being submerged in the liquid-soap solution, but can also witness the re-enactment of the Ascension of Christ, the final act of the atonement of Jesus. Each time the Crucifix wand is submerged into the liquid bubble solution, the viewer shares a type of baptism experience with the sculpture. In a sense, the observer visually and symbolically receives baptism, and in doing so, becomes cleansed of the taint of Original Sin. Perhaps more importantly, the viewer can witness the re-enactment of the Ascension of Christ as described in scripture.¹⁷⁴ After remaining for three seconds in the liquid bubble solution, the Crucifix wand arises whereupon air blows into the Crucifix wand creating bubbles. These bubbles emerge cloudlike from the Crucifix and float gently through the air just as Christ did as he ascended into Heaven. Should the viewer be touched by these “holy soap bubbles”, so much the better: Jesus has ascended, and his Holy Spirit (bubbles) have anointed the viewer, further cleansing them of their Original Sin.

The atonement of Christ culminated in the Ascension, thereby redeeming humanity for Original Sin once and for all. It was this final act where Jesus truly came to be considered not

¹⁷³ Martignoni, John. “To Explain Infant Baptism You Must Explain Original Sin.” Catholic Answers, Catholic Answers, 1 Feb. 2005, www.catholic.com/magazine/print-edition/to-explain-infant-baptism-you-must-explain-original-sin.

¹⁷⁴ Acts 1:9, KJV

only Holy, but an aspect of God himself. According to the Bible, the ascension of Christ was experienced by the apostles visually:

And when he had spoken these things, while they beheld, he was taken up; and a cloud received him out of their sight. And while they looked stedfastly toward heaven as he went up, behold, two men stood by them in white apparel; Which also said, Ye men of Galilee, why stand ye gazing up into heaven? this same Jesus, which is taken up from you into heaven, shall so come in like manner as ye have seen him go into heaven.¹⁷⁵

This sensory concern, sight, is the main element of the passage describing the Ascension of Christ. The Apostles could no longer touch Jesus. There is no evidence within the scriptures stating that they could hear a sound made by his ascent into Heaven. They certainly did not taste (eat) him literally. Additionally, nowhere in the Bible is there any reference to how Jesus might have smelled as he ascended into Heaven. We only know that he was seen rising to Heaven in a cloud.

The bubbles created by Ascension, by virtue of their materiality, are purely visual. If bubbles are touched, they pop and are no longer. Soap bubbles are silent, making no discernable sound audible by the normal human ear. They are not meant to be tasted, and indeed, if one were to try to taste them, the bubble itself would likely pop well before



Figure 24: *Ascension*

the person could discern the flavor. Bubbles have no noticeable smell as there is simply not

¹⁷⁵ Acts 1:9-11, KJV

enough liquid soap to make an olfactory impression on the viewer. The purpose of bubbles is merely to be seen, and in turn, allow the viewer the ability to witness a representation of the Ascension of Christ as told in the Bible.

The Kaaba is a small shrine in the Great Mosque in Mecca considered to be the most sacred spot on earth according to Muslims. The cube-shaped shrine is approximately 50' x 35' x 40' in dimensions. The interior consists of nothing save for three pillars supporting the roof, and silver and gold lamps. For the majority of the year it is covered by the kiswah, a large black cloth.¹⁷⁶ In the eastern corner of the Kaaba is the "Black Stone of Mecca". According to legend, the Black Stone was originally pure white and was given to Adam upon expulsion from Eden as a way to cleanse his, and humanity's, sins, resulting in its black color.¹⁷⁷ The composition of the Black Stone is not fully known, as the caretakers refuse to allow any scientific testing to be done. However, theories about the stone range from basalt, agate, or even a meteorite that may have been worshiped by pre-Muslim Arabian pagans.¹⁷⁸

Like the Kaaba, *Ascension* is black in color and the predominant shape is that of a cube. The interior of the sculpture itself houses a minimal number of components, however these components, like the Kaaba, are essential. Without these components, the box is merely that: a box. These electronic components are the very essence of the sculpture, just as the Black Stone of Mecca is to the Kaaba. Indeed, each object's respective internal objects are of vital importance. Looking closer, however, we can see even greater parallels between the Black Stone of Mecca and the Catholic notion of ascension within the sculpture. Both the Ascension of Christ

¹⁷⁶ "Ka'bah." *Encyclopaedia Britannica*, Encyclopædia Britannica, Inc., 27 Apr. 2018, www.britannica.com/topic/Kabah-shrine-Mecca-Saudi-Arabia.

¹⁷⁷ Crystal, Ellie. "Black Stone of Mecca." *Indian Language - Sanskrit - Crystalinks*, Crystalinks.com, www.crystalinks.com/blackstoneofmecca.html.

¹⁷⁸ Hill, Bryan. "The Kaaba Black Stone: A Holy Stone from Outer Space?" *Ancient Origins*, Ancient Origins, 24 Aug. 2015, www.ancient-origins.net/artifacts-other-artifacts/kaaba-black-stone-holy-stone-outer-space-003661.

and the Black Stone of Mecca suggest some sort of cosmic flight. That is, Jesus is said to have been lifted up into the heavens, whereas the Black Stone of Mecca descended from the heavens as a meteorite. Both serve the same purpose: to cleanse the sin of Adam. In this fashion, the sculpture *Ascension* serves to illustrate this parallel. The viewer experiences the symbolic spiritual lightness of Christ's ascent: the delicate floating of bubbles that can be substituted visually for the cloud of Jesus's ascent. However, the viewer also sees the physical descent of the Black Stone of Mecca as the same bubbles fall to Earth with the pull of gravity. Regardless of theological perspective, these divine bubbles serve the same purpose: they are a sculptural and physical representation of the cleansing of Adam's sin, the Original Sin.

In some ways, *Ascension* was rather unsuccessful. Depending on the focus of the viewer, the gestural aspect is either non-existent, or is fully present. If the viewer is focused on the bubbles alone, then it could be said that these bubbles are nothing *but* gestural. That is, they are never the same in form, pattern, trajectory or lifespan. However, if the focus is on the full machine and not exclusively on the bubbles, the gestural aspect is significantly weakened: it is a machine that performs the same action again and again and again. The Crucifix wand is submerged for three seconds before rotating upright, and bubbles are blown towards the viewer, again and again. Additionally, the aspect of sight is a bit less than fully rewarding. Certainly the viewer will engage visually with the bubbles, but what of their desire to attempt to catch a bubble? What if the viewer understands the symbolic nature of the bubbles and understands that these bubbles could, however metaphorically, baptize or cleanse them of their sins? Does the sight remain the main sensory concern? Or does it now shift for the viewer to that of touch? While I do not feel it loses the aspect of sight entirely, it has the potential to at least shift, perhaps significantly, and therefore renders the goal less fruitful than I would hope. The viewer is

encouraged to look at, but not touch, the sculpture. That is, the piece operates regardless of whether or not a viewer interacts with it. What's more, the tertiary religious reference to the Islamic site Kaaba and the Black Stone of Mecca is perhaps the most subtle of all of the sculptures in the body of work. Indeed, if the viewer is not fairly well versed in Islamic culture, this aspect might very well be overlooked even more than other subtle religious references used in the other sculptures. Further, to more fully experience the piece as intended, the viewer would necessarily need to have knowledge of not only the possible origins of the Black Stone of Mecca, but to also have the understanding of the significance of the object in relation to the Original Sin of Adam. This isn't to say that perhaps some viewers would not see this parallel. However, this tertiary religious reference is not nearly as overt as with other pieces within the series. Perhaps the most successful goal of *Ascension* is how it interprets the Catholic theological concept of ascension. While the overt reference and the mechanical behavior may perhaps take away from the goal of the gestural, it is a great success in illustrating Catholic ideas of the Ascension of Christ. So long as the viewer has even a passing familiarity with the story of Jesus ascending into Heaven, they will understand the conceptual theme of the sculpture.

How Does *Acts Of Contrition* Work Together As A Whole?

Joseph Campbell's Monomyth is of particular importance to my research as the resulting body of work, *Acts of Contrition*, gives an example of the Hero's Journey, embodied in kinetic sculptural form. Taken as a complete body of work, *Acts of Contrition* follows the arc of the Hero's Journey being broken into the three acts outlined by Campbell: Departure, Initiation, and Return. These sculptures, taken by themselves, each serve as physical illustrations of specific stages the Hero's Journey: The Call to Adventure, Crossing the First Threshold, Belly of the Whale, Atonement with the Father, and Freedom to Live.

Act 1: Departure

The Call to Adventure: *Temptation*. Assuming the role of the Hero by engaging with the work, the viewer begins their journey from the mundane world into the world of divinity via the Catholic paradigm. As they slide the peephole door open, they witness the temptation of Eve as she partakes of the Fruit of the Tree of knowledge of Good and Evil. In engaging with the sculpture, the viewer becomes a proxy of Eve: they have been tempted to not only look behind the peephole door, but to also make the journey of the Hero in the hopes of receiving the treasure that lies at the end of the journey. In this case, the realization of one's own Christhood. They continue on, despite whatever physical or spiritual danger may lie ahead.

Crossing the First Threshold: *Original Sin*. The Hero (viewer) now comes to the first threshold, the invitation to light the candle of Original Sin. Once lit, the act of lighting the candle cannot be taken back by the Hero (viewer). In doing so, they face the Guardian of the first threshold: the wrath of God for disobeying his orders. As the candle is lit, the sculpture, acting as God's agent for punishment, blows it out. Indeed, a punishment was suffered, however the promised death of the light was merely symbolic with the extinguished flame. The Hero (viewer) has not actually died having lit the candle, but instead crosses the threshold from the darkness of ignorance into the light of understanding one's own divinity.

Belly of the Whale: *Confession*. Having passed the first threshold, the Hero (viewer) has been metaphorically been met with death through the extinguishing of the candle flame. Their transgression against God is in the foreground and demanding attention. The Hero (viewer) is in the belly of the whale. In order to escape this dangerous place and move forward on their journey, they must turn not outward, but inward into their deepest selves. The physical light of the candle is no longer sufficient. Rather, they must shed spiritual light upon their flaws and

write them upon the bed of sand. By engaging with Confession, the Hero (viewer) relinquishes those things that are human and imperfect and therefore becomes re-born whereupon they are once more allowed to continue their pursuit of the treasure that lies ahead.

Act 2: Initiation

Atonement with the Father: Atonement. The Hero (viewer), having purged themselves of their imperfections or their flaws through writing in the sand, now engages with Atonement, and in doing so, faces the Father himself. By placing their hands onto the handprints, the Hero (viewer) finally abandons the monster that is the God of the Church and Original Sin, and in doing so, receives a new light, one that cannot be extinguished by anyone but themselves. With this light comes the realization that divorce from our own divinity by way of Original Sin, as the Church would have us believe, is impossible. The Father, the true God, is not a separate entity outside of ourselves, but is within each of us.¹⁷⁹ The viewer has placed their faith at the mercy of the Father only to realize that it is their own mercy they are to receive, and to give in turn. With each chime of the bell, the Hero (viewer) is reminded of how their sin is not a sin against the Catholic God, but a sin against the Hero (viewer) themselves. To transgress against another is to transgress against oneself, as we are all divine, we are all God. The hero (viewer) has now successfully reconciled their divinity and atoned with the Father. The treasure of Godhood is finally theirs.

Act 3: Return

Freedom to Live: Ascension. Having overcome the trials of the journey, the Hero (viewer) can now live life as they see fit, both as a human and as a God, as engagement with Ascension fully reinforces. The Ascension of Christ, as illustrated by the sculpture, is the final

¹⁷⁹ John 10:34, KJV

act of reconciliation with God for Original Sin, according to Catholicism. The Hero (viewer) knows that, while the sculpture is but a representation of this Catholic idea, they also fully understand that the Catholic idea itself is but a mere representation of the oneness of being God and human simultaneously. Christ was not only human but also God, as the Church states, but then, so too is the Hero (viewer). The Hero (viewer) has fully and completely come to know the wisdom that, with their divinity, with their new understanding regarding Godhood, they are truly immortal: “Jesus said unto them, Verily, verily, I say unto you, Before Abraham was, I AM.”¹⁸⁰

It is very important to note that, while each sculpture in *Acts of Contrition* are necessary for the body of work to serve as a physical representation of the Hero’s Journey, none of them are sufficient enough by themselves. That is, each sculpture by itself creates a “necessary but not sufficient” condition. A necessary condition is one that must be satisfied for a statement to be true, *but that does not in and of itself make it true*.¹⁸¹ For example, if one were to open a television and remove a resistor, making the picture not appear properly, one might assume that the resistor is the source of “pictureness”. However, this only proves that the resistor is *necessary* for pictureness. This resistor is not in itself *sufficient*.¹⁸² A sufficient condition, on the other hand, is a one that must be satisfied for a statement to be true and *without which the statement cannot be true*.¹⁸³ Using grades on a college test, we can illustrate an example of a sufficient condition. Let’s say that the range of points in order to get an A+ is between 95-100 points. If one were to score a 97, we could say that this grade is *sufficient* to earn the A+. In fact,

¹⁸⁰ John 8:58, KJV

¹⁸¹ “Necessary Condition.” Dictionary.com, Dictionary.com, 2005, www.dictionary.com/browse/necessary-condition.

¹⁸² Pjeby. “Necessary, But Not Sufficient.” LessWrong 2.0, LessWrong.com, 23 Mar. 2010, www.lesswrong.com/posts/4DLinGRkYKX2Lovtv/necessary-but-not-sufficient.

¹⁸³ “Sufficient Condition.” Dictionary.com, Dictionary.com, 2018, www.dictionary.com/browse/sufficient-condition.

any score of 95 or above is sufficient. (Note, receiving a 95, the lowest score one could receive and still earn the A+, is another example of a *necessary* condition.)¹⁸⁴

If we were to take one of the sculptures by itself and present it as a full example of the Hero's Journey, it would fail in this endeavor, as each individual sculpture illustrates a single stage of the Monomyth, but not the entire cycle of the Monomyth itself. Additionally, if we remove one or more works from the series and attempt to present it as a full example of the Monomyth, this endeavor would fail as well, just like the example above of removing the resistor from the television. All five sculptures *must* be present in order for there to be *sufficient* conditions present that would allow one to say “*Acts of Contrition* is a representation of Joseph Campbell's Monomyth presented as a body of kinetic sculptures.” Each sculpture is *necessary* to for us to achieve this condition and anything less than the full body is not *sufficient*.

What Is The Engagement Of The Work?

While the initial engagement of the work will be the University of Maine's Intermedia MFA Thesis Exhibition, Without Borders, *Acts of Contrition* will also find a wider audience through other means. Due to its accessibility, the pieces appear on my personal artist website as a way to reach the broadest audience possible. Furthermore, it is my intention that some, if not all, of the work produced will be placed in exhibitions outside of the University of Maine throughout the United States and globally.

Final Thoughts

Guilt is an incredibly powerful emotion. It has the ability to influence the actions of an individual in both positive and negative ways. Feelings of guilt are often accompanied by one or many sensory experiences. We sometimes feel guilt for having seen something we shouldn't

¹⁸⁴ “Necessary vs. Sufficient Conditions.” *Department of Philosophy*, University of Wisconsin-Madison, 2018, philosophy.wisc.edu/hausman/341/Skill/nec-suf.htm.

have, having eaten too much of a delicious food, or having engaged in forbidden behaviors that simply felt good. This power that guilt holds upon the individual has not been lost on religious institutions. Catholicism has used this emotion for over 2000 years as a way of ensuring strict adherence to dogma so as to maintain the status quo. However, Catholicism is far from unique in this aspect. Religions the world over not only understand these deep notions of guilt, but they also share many other stories that illustrate a commonality between seemingly disparate religions as Campbell describes with the Monomyth. This above research, and in turn the resulting body of sculptural work that arose via Acts of Contrition, has attempted to address the question of how might Catholic guilt be explored by way of the five senses. By engaging in the work, viewers are encouraged to meditate on this question and to also experience a physical representation of the Hero's Journey, where, hopefully, as they complete their experience, they have come to a greater understanding not only about Catholic guilt, but of themselves as well.

CHAPTER V: PORTFOLIO REVIEW

Anima

According to Carl Jung, anima is one of the two primary anthropomorphic archetypes of the unconscious mind, with animus being the other. In the unconscious of a man, the anima finds

expression as a feminine inner personality, whereas in the unconscious of a woman it is expressed as animus, the masculine inner personality.¹⁸⁵

In this work, the viewer is presented with a dark rectangular box. On the interior field of the piece, a series of eleven black gears rotate and, in doing so cause 99 white feathers to very slowly and gently move back and forth, caressing the leather field in a hypnotic motion. As Jung viewed anima as being a source of creativity and gentleness, *Anima* conveys a soft, caressing dream-like gesture as

the main focal point via the feathers, while also retaining a secondary material reference to the very analytic and “hard” male animus encapsulating the piece by way of the hardwood enclosure.



Figure 25: *Anima*

That Little Voice

During the early to mid-part of 2017, I became interested in the idea of “Imposter Syndrome”, the inability to fully recognize personal achievements leading to the fear that others will eventually unmask them as a fraud.¹⁸⁶ Numerous conversations with friends and colleagues

¹⁸⁵ “The Jungian Model of the Psyche.” *Journal Psyche*, journalpsyche.org/jungian-model-psyche/.

¹⁸⁶ Weir, Kirsten. “Feel Like a Fraud?” *Monitor on Psychology*, American Psychological Association, Nov. 2013, www.apa.org/gradpsych/2013/11/fraud.aspx.

revealed that this condition was far more common than one would think. In fact, studies have shown that 40 percent of all successful people have experienced Imposter Syndrome.² These conversations gave rise to *That Little Voice*, a kinetic sculpture that examines Imposter Syndrome through the lens of dark humor.



Figure 26: *That Little Voice*

Operationally, *That Little Voice* presents the viewer with a wooden box that has a small and articulated hand pointing at them. On

the top of the box there is a push-button that flashes red, inviting the viewer to press it. When they do, a motor turns and causes the hand to “wag its finger”. As the finger wags at the viewer, a voice plays one of seven random phrases meant to convey a sense of what the internal monologue of Imposter Syndrome sounds like, (“I’m very disappointed with you!”, “Who do you think you are?”, “You’ll never amount to anything!”, etc.).

Apotheosis

Arguably, American culture worships the idea of “The Celebrity” better than any nation on earth. People are famous for simply being famous. We need not contribute any lasting achievement to attain fame any longer, rather, our status is often quantified by the number of Facebook “Likes” and Twitter re-tweets. This notion of celebrity worship and the parallels with Catholic Saint Veneration greatly intrigues me. *Apotheosis* combines traditional printmaking techniques with digital technology, creating a series of seven pseudo-religious icons dedicated to the veneration of American celebrity via Twitter usage. The rules set for determining the particular celebrities is as follows:

- Dead at least 5 years
- Made at least 1 million (or equivalent adjusted for inflation) in one year while alive
- American Born
- Considered a sex symbol
- Top 15 highest earning dead celebrities according to Forbes Magazine

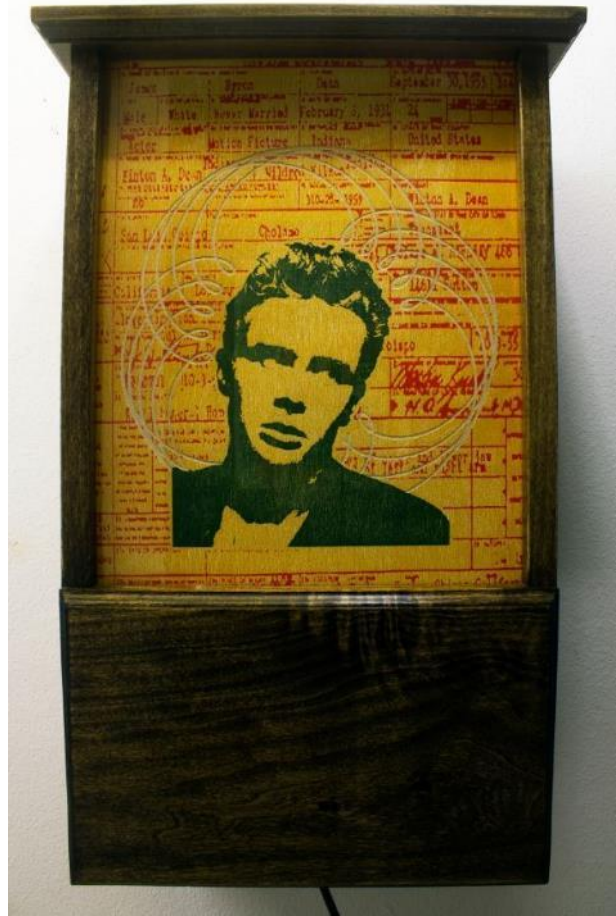


Figure 27: *Apotheosis, James Dean*

Each celebrity is then "paired" with a specific Catholic saint that reflects important aspects of the particular celebrity. For example, Elizabeth Taylor and St. Gelgulf of Rome, the patron saint of unhappy marriages. The color schemes for the celebrities' prints are based upon colors found in depictions of the saints that have been paired with selected celebrities. Additionally, each print includes important imagery from the celebrity's life to serve as their personal "icon". For example, displayed in the background of James Dean's image is his death certificate. Using an on-line Spirograph to design the nimbuses, the age and year of death of each celebrity created the shape of each halo. The nimbuses are etched directly onto each print via laser cutters that allow light transmission. Custom frames house Raspberry Pi micro-computers which track Twitter for specific hashtags (i.e. #JamesDean). Each time the particular hashtag is used anywhere on Twitter, a series of LEDs behind the print glows, illuminating the nimbus of the celebrity, allowing the viewer to witness the veneration of these American Celebrity Saints in real time.



Figure 28: *Apotheosis, Elizabeth Taylor*

Frequent Thoughts

Unless we look closely at and consider critically our memories, they would appear to be the same each time we remember. However, under much closer inspection, we begin to realize that these memories are in fact ever so slightly different each time they are remembered, and that they will continue to change as time goes on. The result is that even though the memory or mental image seems very much the same, we will *never actually have the same memory twice in our lives*. In 2012, researchers at Northwestern University showed that memories became

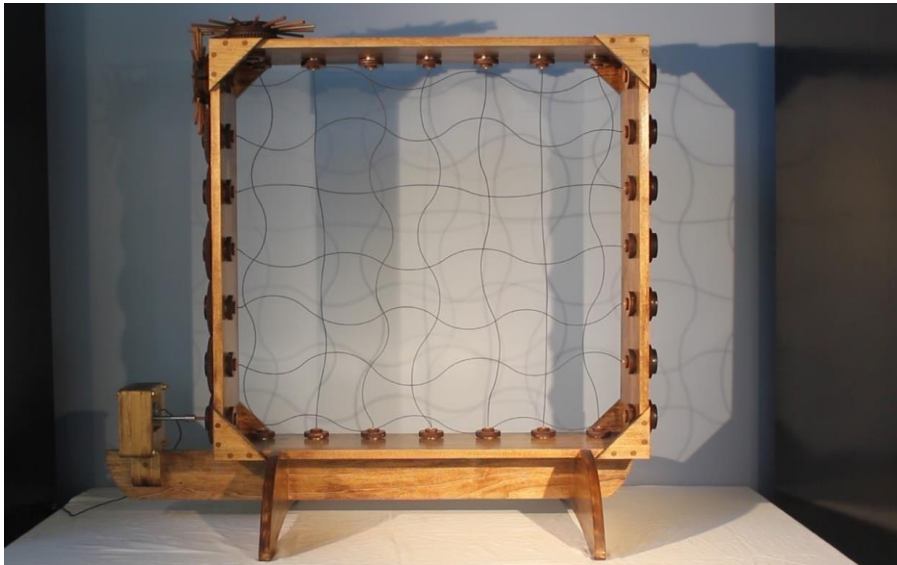


Figure 29: *Frequent Thoughts*

increasingly distorted as time passes and in response to how often we retrieved a specific memory.¹⁸⁷ *Frequent Thought* consists of a 44” x 41” x 26” wooden frame that supports a total of 14 sinusoidal shaped wires, (seven

horizontal, and seven vertical), all driven by a 2 rpm motor. These wires are connected to gears that number in teeth from 52 to 60. The purpose of the different numbers of teeth is to create a sense of movement that is at once slow, as well as not quite a one-to-one ratio. That is to say, one turn of the first gear (50 teeth) will turn the next gear (58 teeth) almost one revolution, but not quite. The importance of this is that the patterns created from the wires and their shadows will

¹⁸⁷ Paul, Marla. "News." *Your Memory Is like the Telephone Game: Northwestern University*. Northwestern University, 19 Sept. 2012. Web. 15 Aug. 2016.

always be quite similar, but the exact pattern will not repeat itself for a very long time. In fact, for all intents and purposes, the pattern will never actually repeat itself as it would take over 4400 years to finally repeat a single pattern. This results in a pattern that *will never repeat in anyone's lifetime*, much like how memories work. Like our memories, the patterns created by the sinusoidal wires of *Frequent Thoughts* will forever look the same at each glance, but will never actually be the same, no matter how familiar the viewer might be with the piece.

Love Machine

For some, perhaps many people even, love and marriage is truly a gamble: some win the jackpot right away with their first spin (they fall in love, marry, and live happily ever after with the first person they date), others seem to take a few tries, but eventually win. Others try and try, but never seem to win. And, there are some who have no interest whatsoever. *Love Machine*, is a kinetic sculpture in the form of a slot machine that helps to discover just how to what degree people are willing to gamble on love, illustrating the idea that “Love is a Gamble”.

Like all slot machines, the viewer is encouraged to place a coin in the coin slot and pull the handle. Upon pulling the handle, the reels spin, resulting in either



Figure 30: *Love Machine*

zero, one, two, or all three reels revealing the jackpot symbol. Depending on the number of jackpot symbols, different results occur: zero jackpot symbols results in the slot machine saying in a robotic voice “It’s not you, it’s me. Let’s just be friends”. One symbol offers the viewer a little hope with the slot machine voice saying, “I had a great time. Let’s do this again”. Two symbols give the statement “I think I’m falling for you”. Hitting the jackpot results in the slot machine declaring its love for the winner with a marriage proposal along with a ring being dispensed from the prize slot in the front.

Deus Ex Machina

Hard core followers of Apple products seem to worship their devices and are fiercely loyal, almost to the point of religious fanaticism.¹⁸⁸ This idea, that electromechanical devices might in some way be the source of veneration, intrigues me. While this idea of worshipping electronic devices is certainly not a universal trait, I feel it is ripe with opportunity to ask the question, “If we worship our devices, shouldn’t they at least bless us in return?” *Deus Ex Machina* answers this question by doing just that: blessing the viewer as they venerate the machine itself.

The viewer is presented with an altar-like box set low to the ground. A

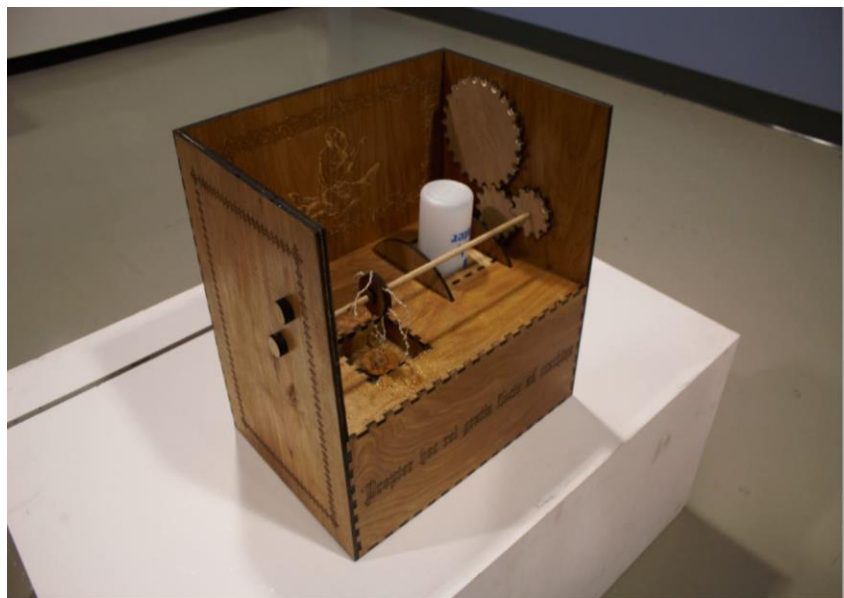


Figure 31: *Deus Ex Machina*

¹⁸⁸ Osborne, Charlie. “Anthropologist 'Confirms' Apple Is a Religion.” *ZDNet*, ZDNet, 4 Dec. 2015, www.zdnet.com/article/anthropologist-confirms-apple-is-a-religion/.

large plastic container filled with holy water feeds a cistern via hydrostatic pressure set in the base of the piece. The viewer kneels on a small pillow and turns the hand crank on the side. Turning the crank then forces a disk with seven knotted strings to spin, which then splashes the participant with holy water, thus “blessing” the viewer.

Morning Routine

The ritual of pouring coffee and adding cream and sugar is essential to my entire day. It signals the beginning of the day and allows me to focus on what lies ahead. In fact, perhaps the machine I use most in life is my coffee pot. Technology and machines, for the most part, make life easier and more enjoyable. However, this is not always the case.

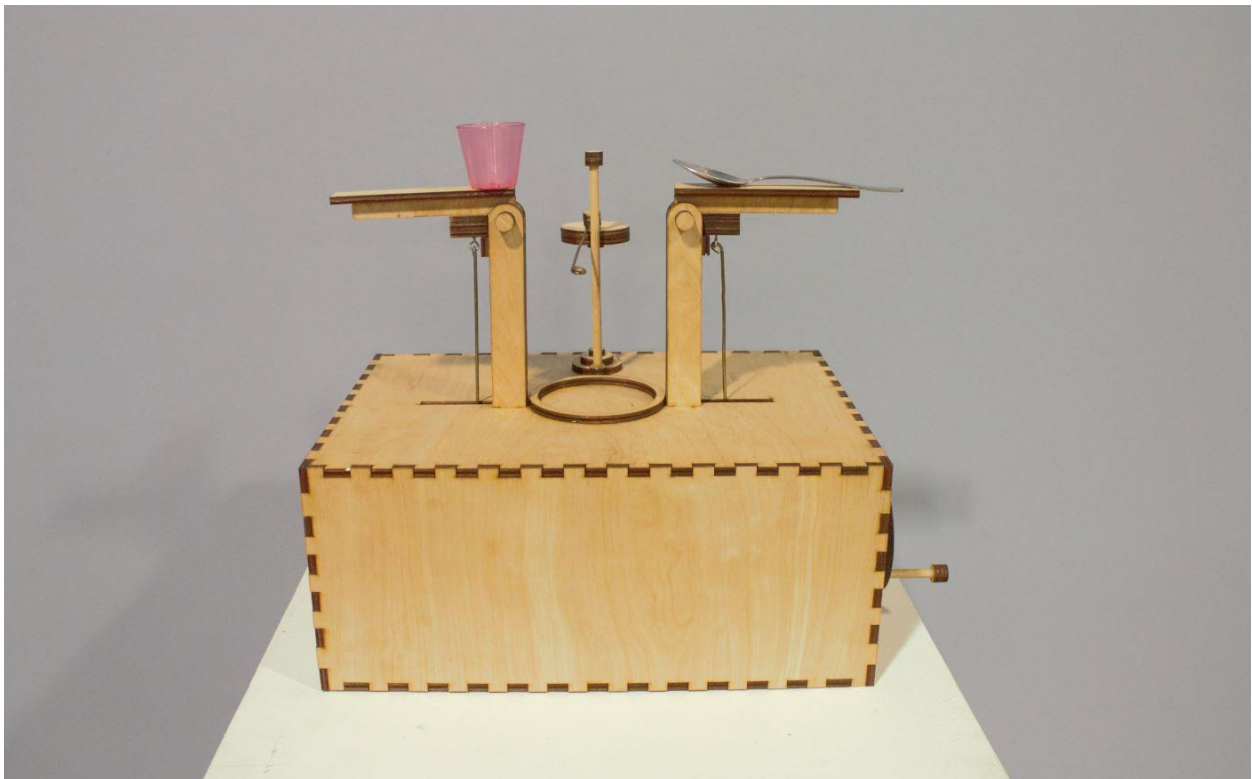


Figure 32: *Morning Routine*

When the crank is turned, the machine adds cream and sugar and stirs one’s coffee, an act that perhaps on the surface seems to make this more efficient. In reality it is convoluted and much less efficient. For example, the spoon and the shot glass each only hold about one portion

of sugar and cream. If the viewer wanted, say, two creams and two sugars, they would have to repeat the process, thus convoluting the ritual of adding seasoning to their coffee and negating whatever efficiency benefits the machine might have superficially offered, a la Rube Goldberg.

Tantalize

Drawing from the Greek myth of Tantalus, *Tantalize* explores the universal notion of human desire and denial. Tantalus a Greek demi-god, wanted to test the power of observation of the Gods of Mount Olympus by killing his son Pelops and serving him as a meal to the Gods.¹⁸⁹

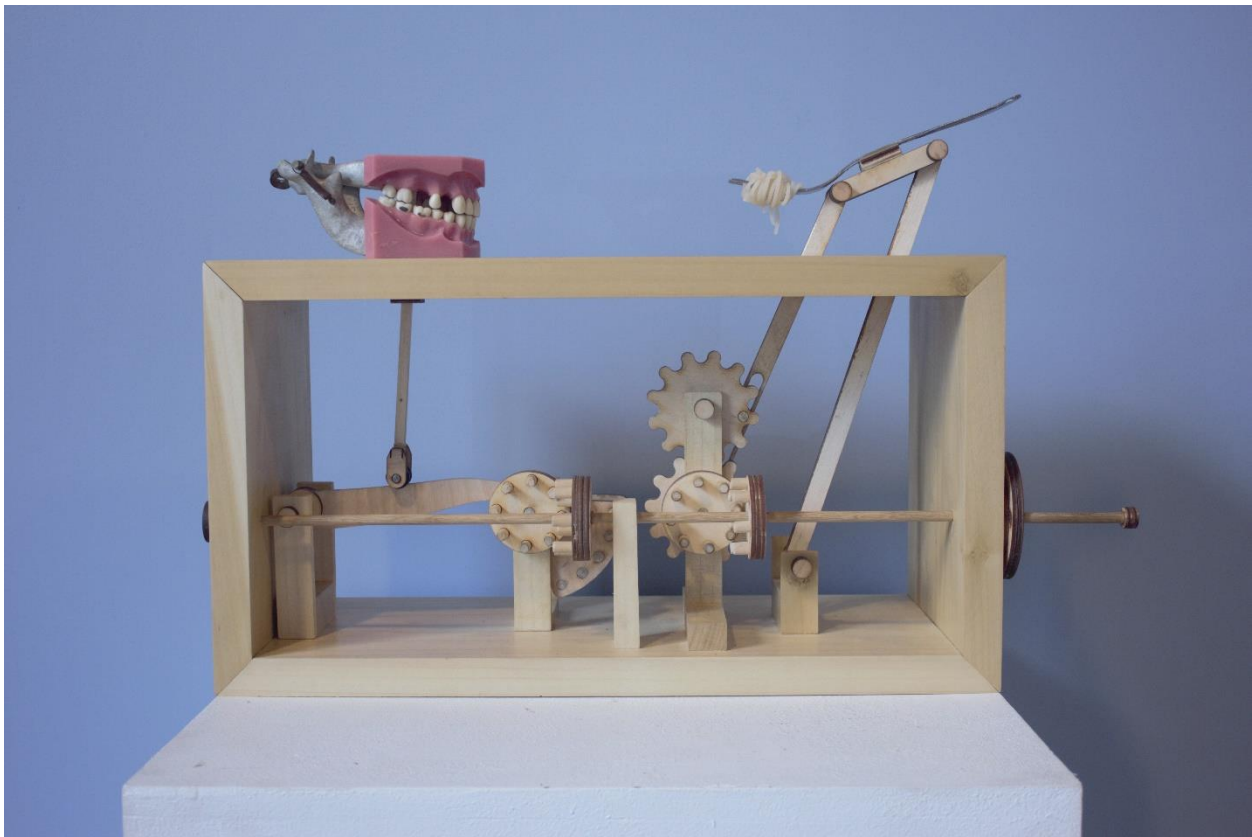


Figure 33: *Tantalize*

Upon discovery of his attempted cunning, he was punished by forever being stuck waist deep in a pool of water with a low hanging branch of fruit dangling just above his head. Every

¹⁸⁹“Tantalus.” *Encyclopaedia Britannica*, Encyclopædia Britannica, Inc., 7 Feb. 2018, www.britannica.com/topic/Tantalus.

time he attempted to drink or eat, the water or fruit would recede, denying him that which he desired.¹⁹⁰ Using the idea of food as our most basic of all human desires, *Tantalize* illustrates the core idea of the myth: as the participant turns the crank, a set of jaws open and a fork with spaghetti lunges into the open mouth; as the participant continues to turn the crank the fork pulls back just as the jaws are about to close. Depending on the perspective of the participant, they could assume the role of the one who desired, or the one who would deny said desire: the tantalizer or the tantalized.

Decisions, Decisions

Decisions, Decisions is centered on the idea that all humans face tough decisions, often of the moral variety, that lead many to seek help through divine means like prayer or divination. Using archetypal images to convey the ideas of “good” (angel) and “bad” (devil), the work has an easy access point through which most Western viewers will engage.

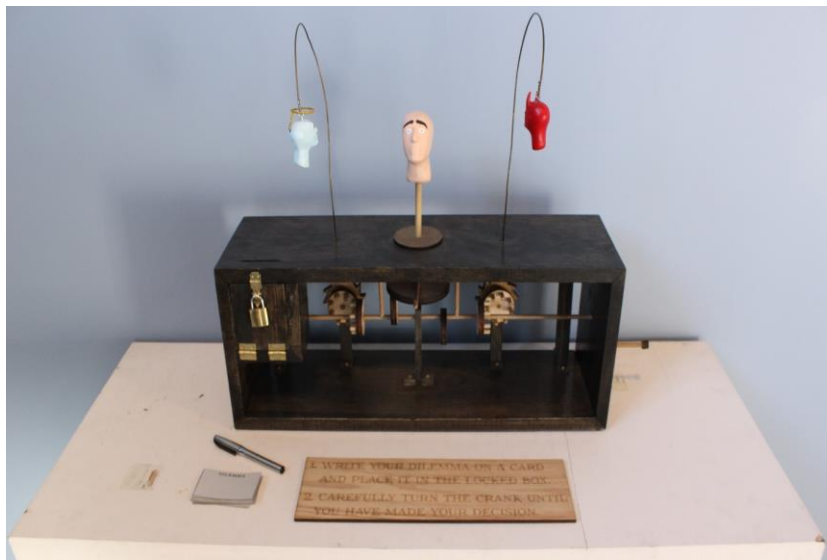


Figure 34: *Decisions, Decisions*

The sculpture consists of a box with the interior exposed, allowing a view of the inner mechanical components. On the left side is a locked box. On the top of the piece are three heads: an angel on the left, a worried looking figure in the center,

and a devil on the right. In front of the piece a set of instructions are placed along with a pen and

¹⁹⁰ “The Myth of Tantalus.” Greek Myths Greek Mythology, Greek Myths & Greek Mythology.com, 2018, www.greekmyths-greekmythology.com/the-myth-of-tantalus/.

some cards with the word “dilemma” written on them. The instructions tell the participant to write a particular dilemma on a card, (anything from “Should I have the roast beef sandwich for lunch?” to “Should I pull the plug on grandma?”), place it in the locked box, and use the automata as a vehicle to help make their decision by turning the crank. When cranked, the figure’s head turns back and forth between the two archetypal figures, the angel and the devil. When the participant has made their decision, they stop cranking, letting the figure face either morally good (angel) or morally bad (devil).

Laudator Temporis Acti

Inspired by the works of Paul Spooner and other automata artists associated with *Cabaret Mechanical Theater*,¹⁹¹ *Laudator Temporis Acti* employs the use of dark humor to examine ideas of strife associated with generational gaps. The theme, kicking a baby, was the result of an expression an ex-girlfriend often used, saying things like, “I’d kick a baby for a

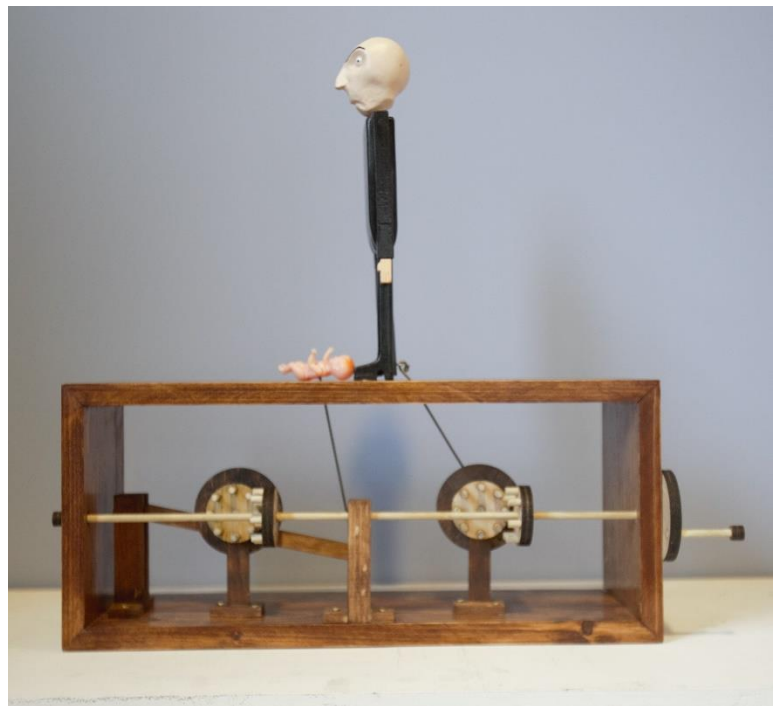


Figure 35: *Laudator Temporis Acti*

cup of coffee.” I always thought this was an immensely dark and funny image that would fit nicely as a way to illustrate the conflict between young adults and old, baby-boomers and millennials.

¹⁹¹ “Mechanical Is Our Middle Name.” *Cabaret Mechanical Theatre*, 2018, cabaret.co.uk/.

The viewer is presented with an old, cantankerous-looking man that stands above a baby lying on top of an open box with the mechanical components exposed for viewing. As the viewer turns the crank, the man kicks and the baby goes flying. When the participant finishes turning, the baby and man's leg return to their original positions, where he is ready to kick the baby once again.

The Politician

The Politician explores the use of political buzzwords. It is intended to decontextualize the use of such words in an effort to question what is actually being said when they are used in association with politics and in political speeches.

The participant is presented with a disembodied "talking" head on top of a decorative wooden box. As the participant turns the hand-crank on the side, the jaw opens and closes while it speaks random words.



Figure 36: *The Politician*

The words spoken originate from presidential inaugural speeches, starting with JFK and finishing with Barack Obama. Each inaugural speech was filtered for word frequency and the top 200 most used words were chosen. As the viewer turns the crank, the jaw opens and closes and the head randomly speaks one of the 200 words.

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APPENDICES

Appendix A: Video Documentation

Throughout my time in the Intermedia MFA program, I held fast to the idea that I was a kinetic sculptor, and as such, I understood how documentation was a necessary aspect of the work. What's more, being that kinetic sculpture is a time-based medium, video documentation proved a much better way of communicating the essence of the work as I intended. Originally, I felt that the videos were simply a means to an end. That is, they were simply a record of the work, not to be confused with being a work unto themselves. It wasn't until I had conversations with Arthur Ganson and Chehalis Hegner-Ganson that I began to look at the video documentation as perhaps a secondary work arising from the sculpture itself. Within my artistic practice, I imagine how the video documentation will look and sound to a viewer watching it from afar. What camera angles can I use to best showcase the kinetic nature? What is the proper lighting to convey the tone of the piece? What does the soundtrack sound like, if there is one at all? How do I best represent that interaction I hope a viewer will have?

Thanks to Arthur and Chehalis, I realize now that I have been unconsciously creating small narrative vignettes, telling the story of how I see and hear these ideal interactions between

sculpture and viewer. Much of my early documentation was simple and straight-forward, mere representations of the sculpture in action exactly how it looks and sounds. However, as I continued to create these sculptures, the videos became more elaborate and in some cases, are a far different experience on the screen than in person. For example, some of the video sound tracks are not how the sculpture sounds like in person at times, but rather serve as a way to set an emotional tone apart from the sculpture itself.

I find this both incredibly interesting and also a bit disheartening. It is disheartening because these videos show very idealized interactions, sometimes impossible interactions, even. These interactions I dream of most likely will never occur as I see them in my mind's eye. But these videos are also very interesting to me as well. These videos were never intended to be viewed as art unto themselves, and yet, in many cases they have transcended simple documentation and could be considered as art in and of themselves, regardless of my conscious intent.

Acts of Contrition is no exception. Of the five sculptures, only *Atonement* does not utilize a soundtrack produced specifically for the audio. That is, the audio for *Atonement's* documentation is simply what the sculpture sounds like in real life. The rest have a variety of produced audio, ranging from whispers to pipe organ music to the sound of women orgasming. These sounds are simply not feasible to include as part of the real-life experience, however in video, they allow the idealized scenario I envisioned. Additionally, each video has very specific and intentional lighting. I intentionally used only a single light source for the documentation as a way of establishing a dark tone with all but *Ascension*, as I felt that was the only piece that was deliberately humorous in design and as such, required "normal" lighting that would be found in a gallery setting. The specific shots are also an idealization of the viewer experience. Each video

uses extreme close ups so as to highlight specific feature of the sculpture, just like any detail shot of an artist's work. However, in imagining the interaction of the viewer with the piece, I had envisioned that the viewer would pay close attention to these features, and as such have a deeper, more meaningful experience. Of course, to think that each and every viewer will engage with the sculpture in such an intimate way is folly. Some viewers will spend more time studying the work, and others will spend only a few seconds at most with it.

Regardless of my intent in documenting my work, it certainly appears that these videos have begun to take on a life of their own, whether or not I want them to. My idealized interaction, how I wish the viewer to experience the work, cannot be controlled in real life. In video, however, I retain much more control of not only how the piece is seen, but at times, how it is experienced as well. Am I strictly a kinetic sculptor? Am I a video maker? Am I both? That is up to the viewer to decide.

Links to Video

Temptation

<http://www.wadewarman.com/temptation>

Original Sin

<http://www.wadewarman.com/original-sin>

Confession

<http://www.wadewarman.com/confession>

Atonement

<http://www.wadewarman.com/atonement>

Ascension

<http://www.wadewarman.com/ascension>

Appendix B: Additional Images



Figure 37: Keith Newstead, *Ghost of Gone Bird*



Figure 39: Peter Markey, *Muscle Man*



Figure 40: Tom Haney, *Harvest*



Figure 41: Dug North, *Mekanikos vs. The Minotaur*



Figure 42: Thomas Kuntz, *Spooky Love*



Figure 43: Kazuaki Harada, *Laugh Out Loud*



Figure 44: Naekwan Jeong, *Untitled*

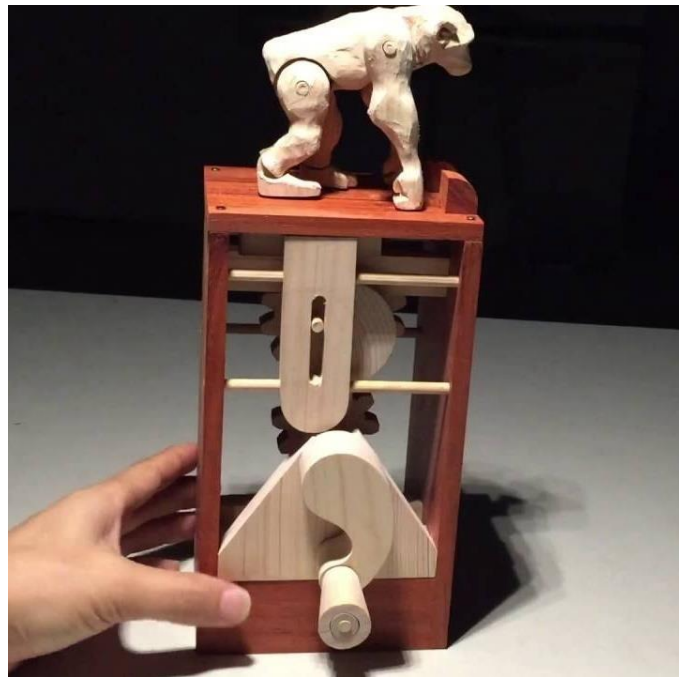


Figure 45: Seung Hang Lee, *Chimpanzee*



Figure 46: *Le Mouvement II Exhibition*



Figure 47: *The Responsive Eye Exhibition*



Figure 48: George Rickey, *Raumspindel*
Space Churn



Figure 49: Pol Bury, *Manhattan Cinetisation*



Figure 50: Jesus Rafael Soto, *Double Progression Blue and Black*

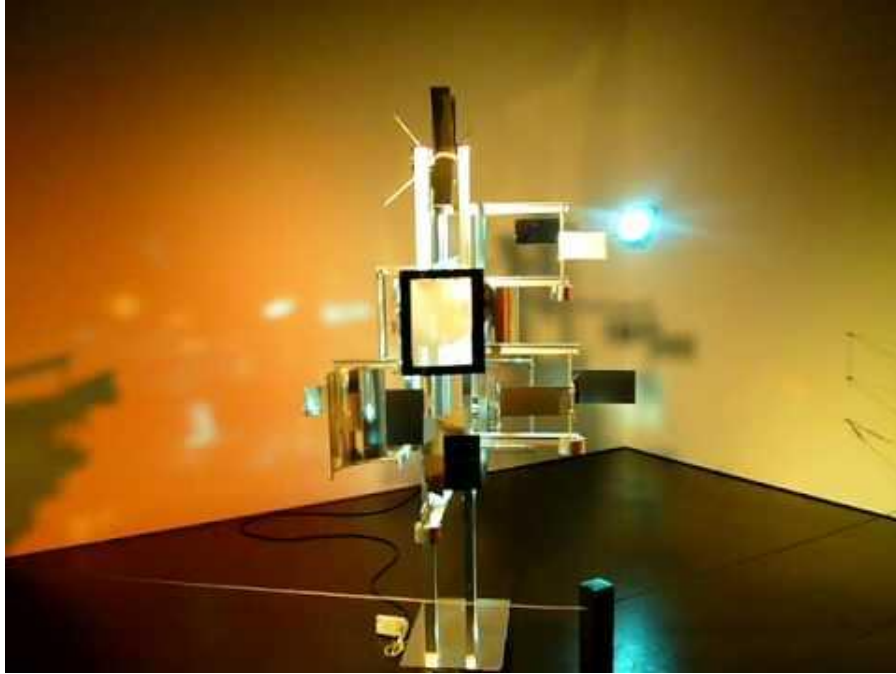


Figure 51: Nicolas Schoffer, *Chronos 5*

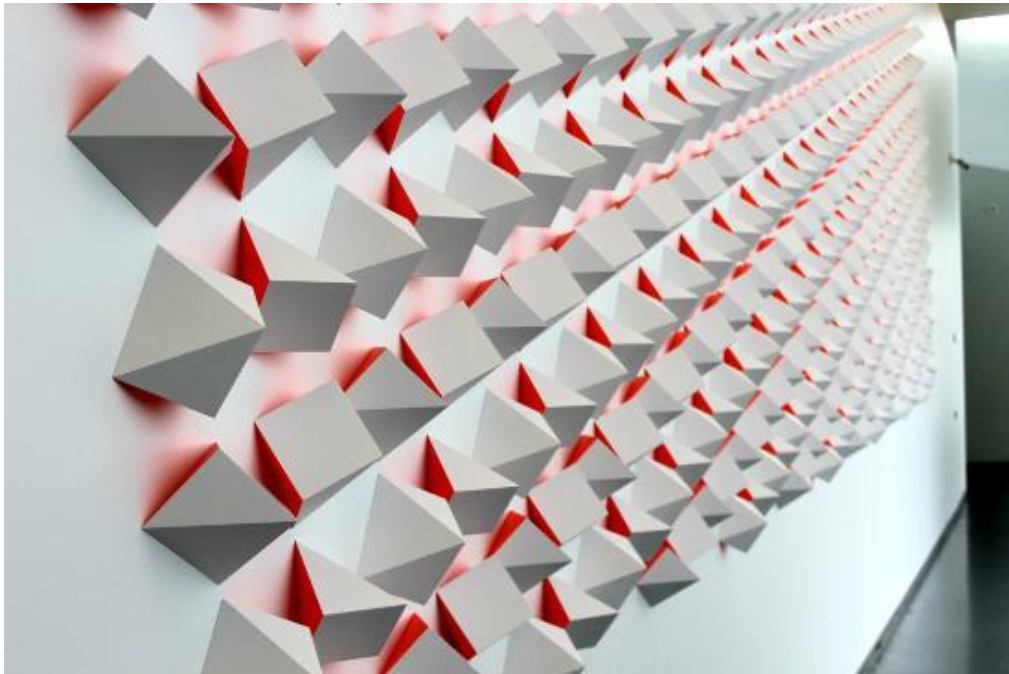


Figure 52: Luis Tomasello, *Chromoplastic Mural*

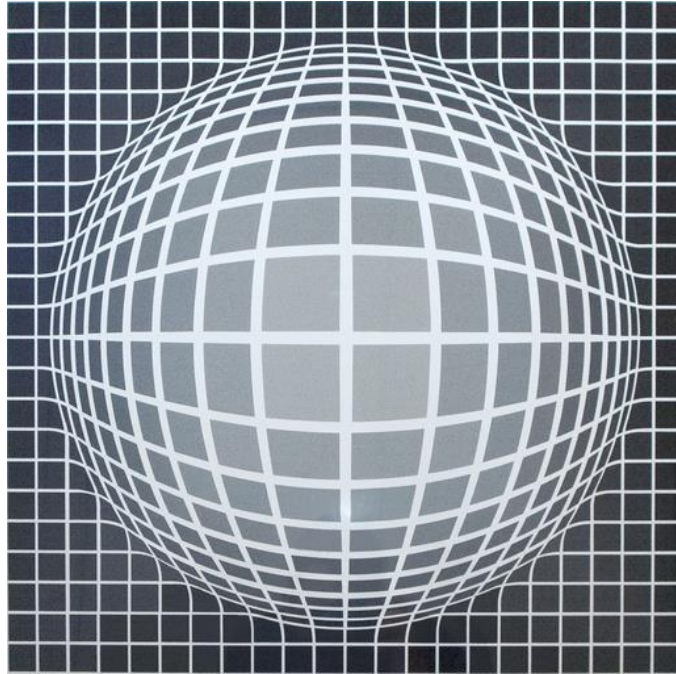


Figure 53: Victor Vasarely, *Grey Globe*

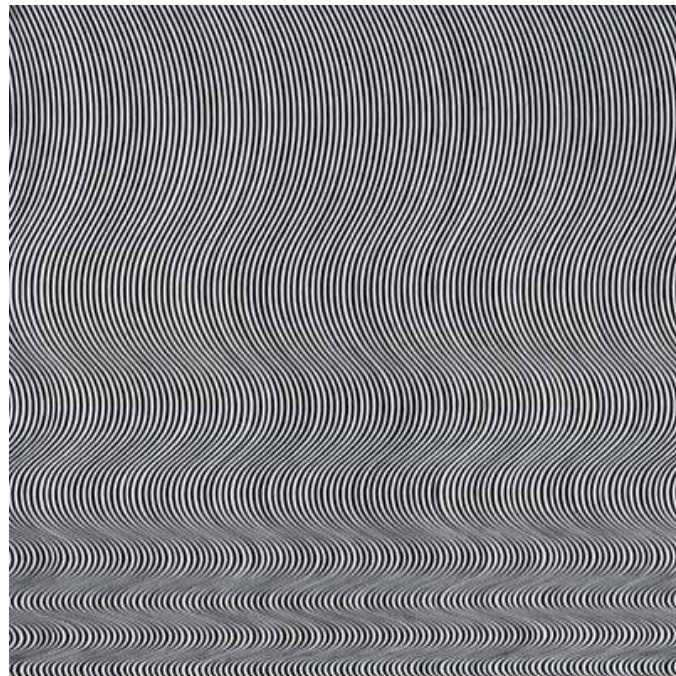


Figure 54: Bridget Riley, *Fall*

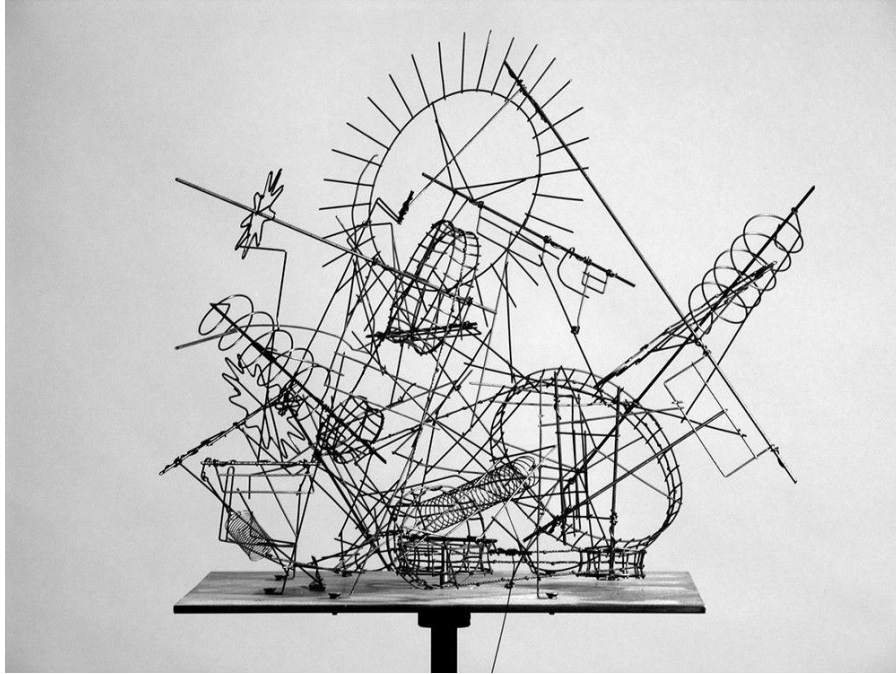


Figure 55: Arthur Ganson, *Madeline's Fragile Machine*



Figure 56: Jack Pavlik, *10 Waves*

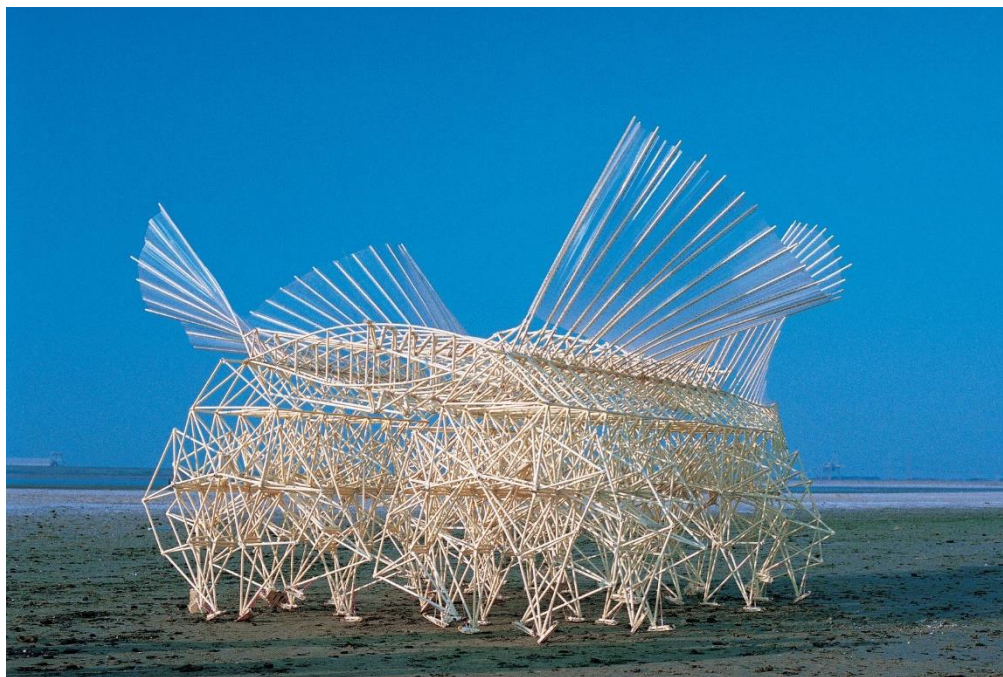


Figure 57: Theo Jansen, *Animaris Currens Ventosa*

BIOGRAPHY

Wade Warman creates kinetic sculptures that explore the human condition through the lenses of dark humor and theology. With backgrounds in electromechanical and emerging technologies, Warman is a recipient of the Susan J. Hunt Fellowship and his work has been exhibited in galleries such as the Morris Museum in Morristown, New Jersey; the Brooklyn Waterfront Artist Coalition in Red Hook, New York; and the Sally Otto Gallery in Alliance, Ohio. Warman is a candidate for the Master of Fine Arts degree in Intermedia from the University of Maine in August, 2018.