AN ACT OF GIVING:
THE DISCOVERY OF SELF

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ABSTRACT

Relationships are the basis from which I am formed as an individual. I may have a relationship with a person, an object, or an idea, but the depth of my relationship with that other entity determines the extent to which that thing may influence my development as a person. It is through interaction with these relationships, particularly to ideas, that I become subject to the redefinition of my thinking. Consequently, change in thought and understanding leads to the discovery of the potential that is within my capacity. I can never be what I am not, and I can only find out who I am by constant growth and new understanding. Relationships, then, become the means by which I am able to give and receive.

As a gift becomes a physical manifestation of the relationship between two people, my work is a demonstration of the ways that I am influenced by mathematics, philosophy, art, and religion. I gather the potential that can be gained through the interaction with these relationships and place it into a newly formed context which I have defined. The result is a work rendered through the process of failure, perseverance, and sacrifice; all of which come about from the discovery of self. As I take from a relationship, I understand that the only thing there is to gain are aspects of myself that I had not known before. As I contribute to the relationship, I find that I must give back the only thing that I have, that which I have taken, that which is self.
Dedicated to the one I love
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VITA

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CHAPTER 1

INTRODUCTION

1.1 Relationships

A relationship is a connection or state of existence between two or more persons or entities. It is a sort of metaphysical link that connects things in the way that a bridge connects two pieces of land. In discussing a relationship, there are actually three terms being described, which I will refer to as a relation set: the two entities that exist on either end of the relationship and the relationship itself. In describing the relationship, one is actually making apparent certain qualities or characteristics of the different sides of the relationship. Before the relationship begins, each side exists under its own definition, which is based on its own specific characteristics. Once they are connected, their pre-existing definitions begin to form a new thing called a relationship. As each side remains in the relationship, they begin to be influenced and even redefined by their connection to the other entity. This, consequently, begins to redefine the relationship because the degree to which each side is influenced affects the intensity and direction of the relationship. This undulation causes a completely fluid dynamic within the relation set in which each of the three factors is influenced by the other two. For example, two people who begin a relationship of any sort come together with their own interests,
beliefs, tastes, etc. Those characteristics then have an influence on the other person since one person may like only horror movies while the other only romance. If the relationship persists, either one or both people will have to compromise their own taste or else never see movies together. Either end result will have some sort of impact on the relationship for better or worse. Consequently, the resulting state, or definition, of the relationship is changed. This then flows back to the people who become redefined by the newly described relationship. The person who liked romance movies may suddenly see something worthwhile in a horror movie that was clarified through the other person's interest, or both may fight bitterly about why the other will never concede to the other's desires. Thus, the two people are continually changed by each other, and the relationship becomes something of a living organism, which grows when it is healthy or stagnates and dies when it is sick. The stronger the relationship becomes, the more characteristics are redefined in each person; the couple who starts dating may only be concerned with surface interests like finding a dinner that is agreeable to both, while the couple who is married may be concerned with belief systems about raising children. This concept for relationships can be extended to objects, places, plants, etc. but also more specifically, ideas.

1.2 People to Ideas

People and ideas are at a constant relational influx with each other, and the more people or ideas that are added to the influx, the greater degree of redefinition there is for
each factor in the relationship. The way people are influenced by their relationship to ideas is demonstrated by C.S. Lewis’ illustration of two books:

“Imagine two books lying on the table one on top of the other. Obviously the bottom book is keeping the other one up—supporting it. It is because of the underneath book that the top one is resting, say, two inches from the surface of the table instead of touching the table. Let us call the underneath book A and the top one B. The position of A is causing the position of B. Now let us imagine... that both books have been in that position for ever and ever. In that case B's position would always have been resulting from A's position. But all the same, A's position would not have existed before B's position. In other words the result does not come after the cause... I asked you just now to imagine those two books, and probably most of you did. That is, you made an act of imagination and as a result you had a mental picture. Quite obviously your act of imagining was the cause and the mental picture the result. But that does not mean that you first did the imagining and then got the picture. The moment you did it, the picture was there. Your will was keeping the picture before you all the time. Yet that act of will and the picture began at exactly the same moment and ended at the same moment” (Lewis, 172-173).

This example helps us to understand the direct relationship between a person and an idea and the immediate existence of a relation set as soon as the elements are in contact with each other. In order to further explain the influx of ideas into other ideas and people and people into ideas, I will use a relation set in which there is a person on one side, a relationship acting as a bridge in the middle, and an idea on the other side. I will start with the idea using the sentence, “The bug is red.” There are many different concepts behind each word in this sentence, but it can still be considered a single idea, simply stated, “red bug.” As per Lewis’s example, a person may form a mental image upon hearing this sentence with only a basic understanding of those words, and with that understanding they may only have a simple idea of the subject matter. This idea may be mentally reinterpreted as “A specific bug is in the state of being the color red.” This translation employs different concepts for each word in the original sentence, which were
in place before the sentence was heard or read. The depth or type of knowledge about each of these concepts then determines the degree of influence they have on the person through their relationship with that idea; if that same person with basic knowledge then adds ideas about subtractive light to their vocabulary, they begin to understand why the bug is red and also why it is not blue. If they come into contact with ideas concerning entomology, the person might then learn the bug’s proper name, which would help them distinguish it from other types of bugs, and they might also know whether to inquire if it would be rare for this particular type of bug to be red in color. The addition of more and more ideas into the relation set further defines the person’s thinking or behavior toward the subject. The person who has an extreme depth of knowledge about red bugs may use the ideas that have influenced their relation set to study unknown facts, such as where the red bug sleeps and what it eats. If that person goes on to make new discoveries about red bugs, they may further define or redefine previous notions about the idea “The bug is red.”

To further understand my exploration and development of self, which I will go on to discuss later, it is useful to understand that the red bug has always been, and will continue to be, a red bug, regardless of other ideas the person may come into contact with and be influenced by, regardless of how that person may influence others’ perceptions of the idea of the red bug. Ultimately, the character of the bug and the person’s perceptions are what influence the idea of the bug, but the person’s perceptions do not change the bug’s character. The terms ‘red’ and ‘bug’ could literally be redefined by science, but it would have no bearing on the bug, only on how it is perceived. The person, in a similar manner, may be redefined by their relationship with the idea, but they do not become a
different person. They remain the same person but now express qualities that have been revealed from within them. There is nothing new in the person that the idea created and added to their being. It was simply a catalyst that reacted with something that was already there. The result of this type of relation set is that there is a malleable idea on one end of the relationship that represents something whose character remains unchanged and an entity on the other end whose being is revealed through the intensity of the relationship with the idea; the relationship itself is simultaneously changed by degrees due to the new expressions the entity and other incorporated ideas bring into it.

1.3 Capacity

Capacity is the ability to do some things but also the inability to do others. In discussing capacity it can be seen how its potential is revealed by influencing factors, which may be entities that expand its abilities or things that impose limitations and boundaries. This is similar to the earth and the sky. Both have imposed limitations, which define what they are, and they are free to exist in the manner they do because they do not exceed those boundaries. As the earth and the sky come together, they reveal each other's capacity to form the horizon, but by their natures they are unable to supersede their relationship to each other. By looking at human understanding, it can be seen how capacity is based on a set of previously defined traits.

Understanding comes when a foreign idea is able to be recognized by the mind under the context of a previously known definition. A foreign language can only be understood with a translation key, but the key is just a tool that takes one concept or
symbol and links it to another. Without the key there is no way to make any definite associations between the native language and the foreign language. So, besides the key, the prerequisite for understanding the new language is knowledge of the concepts that will be represented. And this is essentially the person's capacity; if there is a concept in the foreign language that does not mirror an idea in the native language, the key will have nothing to link it with. Therefore, everything we learn or do during our lives is something we have opened up our capacity to accomplish; this is the process of growing and understanding.

As I have mentioned earlier, each person has the capacity to grow and become a new potential through relationships. As I have pondered this thought, I have asked myself how is it that I already have the capacity to become everything I will ever be, but I am unaware of the extent of that capacity, that I must consequently struggle my entire life to understand it. I have found that this installation does not answer the potential of this question, but it has become part of the process, a physical demonstration, through which I come to that understanding. Within this work I have sought to create a structure that encapsulates my life and other aspects of Life as it relates to me. When I use the term 'life' as I just have, I am referring to two different meanings of the word. There is life by which I mean my own specific existence and definite statements I can say regarding myself. However, there is also Life by which I mean the bigger, broader reality that all human beings experience, but, of which, I can only make estimations through my limited relationships with it. Because my life is always interconnected with Life, there are times when I attempt to speak of instances or attributes that are specific to me but in many cases find that I am unable to relate these qualities without referring to characteristics I
see in my relationship with Life. So it is through my relationship with Life that I become more identifiable and fully formed as an individual, by constantly analyzing the associations I have made in the past and continue to make in the present.

The example I have presented earlier with a relation set between a person and the idea of a red bug is a demonstration of how new ideas affect the relationship between the person and the idea by altering the person’s perceptions of the bug and the possibility of their behavior regarding the bug. In this example there is one living entity connected by relationship with a set of ideas; the degree that the person is redefined by those ideas depends on the intensity of their relationship. If that person were to be considerably transformed by the notions they were dealing with, they might begin viewing other things within the same context as the idea that influenced them. A simple example of this application would be a metaphor; it takes a basic meaning and applies it to something unrelated so as to draw a parallel between the two things in comparison. This concept is at the core of how I am defined and revealed as a person; the more people or ideas I apply to a certain context, the more that context will influence the way I think and react to those relationships. Thus, it also influences how I develop as a person.

1.4 Context

Part of the new understanding that comes from a relationship is due to its context. One artist who completely understood this concept was Josef Albers. Every time he took one color and placed it onto two different paintings with two different colored backgrounds he gave people a visual example of context. He showed them that a single
color can be perceived differently based on its surroundings; the same applies for people and ideas. A person will probably behave differently on a hot day than on a cold day or at a baseball game instead of an opera. An idea will be perceived differently depending on the other ideas it is connected to. The thought of eating may seem appealing when it is connected with chocolate but not with tripe. Context, therefore, becomes the definition of the relationship between two things.

I was once in a discussion with a group of people talking about language. At the time we were disputing which way to interpret a sample of writing. When we could not come to any definite conclusions, someone said that our situation was due to the weakness of language. The person argued that our dilemma was a weakness that exploited the fact that one group of words could be interpreted in many different ways. As I thought about this idea, I found that I disagreed with their suggestion. It was my opinion that language is a very powerful tool, and the fact that one group of words could be interpreted in many different ways is part of a language's strength. Conversely, it is a great weakness of our own that prohibits us from being able to interpret all the different meanings of one group of words at once. This situation is the same in relationships between people and ideas because words are themselves different forms of ideas. The gap between our limitations and the strength of language therefore sets the stage for context.

In *Repetition*, Kierkegaard has written, “What kind of miserable invention is this human language, which says one thing and means another” (Kierkegaard, 200). This body of work indirectly exploits this characteristic of language. As I have researched through different writings, I have picked out phrases, sentences, and paragraphs that
imply certain meanings to my life. Those meanings may either be part of the context of the writing they came from, or they may be completely unrelated, in which case I find there is a meaning in those phrases that relates to Life as I understand it other than what the author has intended them for. An example of this situation is when someone relates to the character in a movie or book because there is some quality in that character that they feel is pre-existing in their own condition or because the character has a desirable quality which they lack. Like the moviegoer, I take excerpts from people's work because they either verbalize something that I feel is true about Life within my frame of reference or clarify part of the potential that is within my capacity. There are people whose work preceded mine who feel in themselves the same types of things that I recognize in myself; this enables their words to give me clarity to knowledge that before had only been a vague awareness. For this reason there are some cases where the material I have written in my work is a series of quotes instead of original writing. In these instances the use of a quote often serves a better purpose than struggling to write something that someone had probably already said in a superior manner. It would be senseless to rewrite “a rose by any other name would smell as sweet,” but there may be some reward in using it within a new context. My goal, then, in creating this work, is not to make an original book or series of writings as if I were an author but rather to create an original work through the conjoining of many different elements under one context.

Everything that is written in this body of work has some bearing on at least one relationship to me, and because of this, the writing can be interpreted in one of two ways: it can be viewed as a series of statements or ideas that provide insight into my own character and thinking, or it can be interpreted as a set of ideas that may be directed
toward the viewer. This all depends on the context in which the viewer chooses to interpret the work. In my thinking most of the writing should be similar to a good proverb in that it should hold some amount of truth that remains consistent in a variety of different circumstances.

By discussing and creating this work, I am not trying to take these ideas and mesh them together into one thing so that their previous identity is not recognizable. Instead, I am trying to express each of these different aspects of Life by demonstrating the way they relate to each other or to me and simultaneously display the uniqueness of each subject.

C.S. Lewis has pictured a way in which this is possible:

“If you are using only one dimension, you could draw only a straight line. If you're using two, you could draw a figure: say, a square. And a square is made up of four straight lines. Now a step further. If you have three dimensions, you can then build what we call a solid body: say, a cube- a thing like a dice or a lump of sugar. And a cube is made up of six squares.

Do you see the point? A world of one dimension would be a straight line. In a two-dimensional world, you still get straight lines, but many lines make one figure. In a three-dimensional world, you still get figures but many figures make one solid body. In other words, as you advance to more real and more complicated levels, you do not leave behind you the things you found on the simpler levels: you still have them, but combined in new ways- in ways you could not imagine if you knew only the simpler levels” (Lewis, 161-162).

As I have stated earlier, the stronger or more involved a relationship becomes, the more it can redefine each of its factors, and yet each factor is still able to remain its own thing. The line in Lewis’ example is present in all levels of dimensions, but as its capacity is released on higher levels, it becomes something more important because it is working in conjunction with other factors. In the same way, there is a direct correlation between mathematics and philosophy through logic, yet each one stands as its own
branch of knowledge, which encompasses many more qualities than the ones that are seen through their relationship with each other.
CHAPTER 2

PHYSICAL DESCRIPTION & CONSTRUCTION

This installation consists of six ten-foot long scrolls that are suspended in a hexagonal format. Each scroll in the hexagon forms one side, which has another scroll as its opposite. There are then three pairs of scrolls with each one in the pair parallel to the other. They are all hung vertically and form an inferred interior space that is approximately sixteen feet in diameter (see Fig. 1). The design on the scrolls is based around one central point, which is a twelve-sided figure, so that each pattern originates from a common center like the spokes from the center of a wheel. This geometric figure is seen once at the top of each scroll with six borders extending from one set of alternating sides and six patterns generating out from the other set of alternating sides (see Fig. 12). Each scroll is an extension of one of the generated patterns and each geometric pattern consists of lines which are created visually by lines of words (see Figs. 2-7). Line segments, or occasionally entire geometric shapes and patterns in each of the designs, are constructed of phrases, sentences, or sometimes paragraphs of writing that express a certain thought (see Figs. 8 and 9). I generated all of the lines and arcs using only a straight-edge and compass, which are the basics restrictions used in Euclidian geometry. By these methods polygons are only constructed by using lines to connect the
intersections of circles, so that an \( n \)-sided figure is the byproduct of certain configurations of circles. During construction of the designs I do not deviate from basic rules, which are as follows:

1. All parts of the patterns must be constructed with either a compass, straight edge, or both.

2. The reflection of one part of the pattern must be related by size, distance, or intersection.

3. Any, all, or none of the construction process may be visible in creating one part of the pattern. (Example: a line may be created by connecting the intersection points of two circles, but the circles may be removed in order to express the line)
CHAPTER 3

IDEAS

3.1 Math

The design that results from these constructions is derived from Islamic art, which uses tessellating patterns to fill large spaces. As I began to construct the tessellations, I decided to base the primary design off of the twelve-sided regular polygon. While studying and working with that polygon, I found that the basic form of a tessellation involving a twelve-sided regular polygon at its center is enclosed by alternating squares and hexagons. This enables the surrounding polygons to expand into the basic shape of a hexagon (see Fig. 15). My original purpose was to fill each scroll with morphing tessellations because a tessellation's repetition is based on the sum of the angles of an intersection totaling three hundred and sixty degrees. Therefore, any place where I might construct a circle is potentially a beginning for a new tessellation because the circle's center is the point around which there may be angles that add up to three hundred and sixty degrees (Luecking, 4). In other words, I would begin with a twelve-sided polygon and its surrounding squares and hexagons and then attempt to replace the
next 12-gon center with a different polygon. I would then repeat this process with other polygons until I had a random tessellation. When I began the tessellation, however, the idea quickly changed into a series of infinitely expanding patterns whose arcs and lines are based on the geometry of a circle and are generated out of the 12-gon center.

In mathematics the definition of a line is "a geometric figure formed by a point moving along a fixed direction and the reverse direction" ("Line"). If it were possible to see an actual line that was not drawn or formed by an object, then by definition, in order to see it, one would need to be able to see one point in an infinite number of places across a single space all at once. This can be illustrated by Zeno’s Paradox, which demonstrates that "before an object can travel a given distance \( d \), it must travel a distance \( d/2 \). In order to travel \( d/2 \), it must travel \( d/4 \), etc. Since this sequence goes on forever, it therefore appears that the distance \( d \) cannot be traveled" so that the point traveling along a line always has an infinite number of spaces to cover that lie between its current position and the next. (Weisstein). Before the end of the nineteenth century, a mathematician named Georg Cantor had shown that there are an infinite number of real numbers that cannot be counted that lie between all of the countable real numbers. Although both of these sets of numbers are infinite, the set of uncountable infinite numbers is larger than the set of countable infinite numbers. If both of these sets were put on a number line, there would be far more real numbers that we cannot account for that lie between all the real numbers that we can account for. Similar to Cantor’s discovery, there would be an infinite number of places between each position a point takes on a line, and so there would be more spaces on the line that cannot be seen than
positions occupied by the point. In a sense then, a line can be visually comprehended but not actually seen because of the number of spaces that exist within it.

I find this interesting in reference to my work because this is the way in which the lines that compose each design represent themselves visually. Each line seems to form and then dissolve because they are composed of words instead of solid lines. It is very evident that they exist, but in looking at them and trying to discern patterns and lines, the spaces between the letters and the words begin to dissolve the visual stability of the patterns and gives the entire set of writings a feeling of being present and yet not being able to be fully perceived. Like the number line, the words take up space where each letter is similar to a comprehensible equivalent of the infinitely countable set of real numbers. The spaces in between each letter, then, are likened to the numbers on the number line that cannot be counted, which would be similar to the infinite uncountable set of real numbers. Symbolically, there would also be an infinite depth of meaning in and around each word, letter, and phrase because of the multiple contexts in which they can be interpreted.

3.2 Philosophy/Logic

Within the concepts I have just presented, there is an allusion to paradox, which is a result of the existence of infinity. With Cantor’s theories there are two infinite sets of numbers from which it can be proven that one is bigger than the other. With the mathematical definition of a line, there is one point which is in an infinite number of places at once, thus composing a line. In both cases the mind is required to grasp the
theory of infinity in order to conceive of an idea, but the idea is really only as far as the mind can conceive of it because infinity is not something that can be completely grasped and therefore cannot be part of a fully defined relationship. What these two ideas show us is that there really is a thing called infinity, but we just do not know how to measure it.

Following Cantor, Bertrand Russell co-authored a book called *Principia Mathematica* in which he attempted to form a complete system that avoided a certain paradox he discovered. The logic of the paradox alludes to this idea: Does the set of all sets that do not contain themselves contain itself? If so, it must remove itself because none of the sets can have themselves as a factor. If not, it must be added to itself because as it stands without itself as a factor, it qualifies for the list of sets that do not contain themselves. What resulted from Russell's book was that another mathematician, Kurt Gödel, was able to show through his first and second incompleteness theorems that the system Russell had created was vulnerable to the very paradox he tried to avoid. His first incompleteness theorem said "For any consistent formal theory in which basic arithmetical facts are provable, it is possible to construct an arithmetical statement which is true but neither provable nor refutable in the theory" (*Gödel's Incompleteness Theorem*). This basically demonstrates that a self-referential system cannot be proved or disproved through a systematic proof because the terms needed to describe the system is the system itself. If the system were able to complete its language with itself, it would suddenly be redefined as a new system and would consequently require a new solution; therefore, the system will always be incomplete. What Gödel's theorems show, strictly in terms of real numbers, is not just that there is an infinity, but also that a proof involving infinity results in self-reference and makes a formal proof impossible. So, by relationship
to these ideas, it is possible to infer that there are many things that are known to be true but are unable to be proved either true or false; thus there is an existing paradox.

In his writing, *Fear and Trembling*, Søren Kierkegaard discusses something he calls an *infinite movement*. This, in essence, means resignation but by Kierkegaard’s standards emphasizes a perpetual state of being. A person who has made an *infinite movement* is someone who has sacrificed something in order to attain a certain state of being and maintain it regardless of any other influencing factors. The man who decides to give up something, such as his life ‘for the greater good’ is someone who has made an *infinite movement*; that person has come to terms with the weight of the loss they are going to bear and still continues to move forward. I would interpret *infinite movement* as the redefinition in someone, through a relationship, so great that they are permanently resigned to carry out their life under the context, or influence, of that relationship.

Kierkegaard also speaks of a *movement of faith*, which, when preceded by an *infinite movement*, forms a *double movement*. The *movement of faith* is the means by which a person gains back what they have sacrificed in the *infinite movement*, and by my definition, the activity through which a person can realize their greatest capacity.

Kierkegaard explains that this restoration of a thing that was utterly lost is a paradox and something that is only accomplished by faith in relationship with God. This is the paradox Christ spoke of when he said “For whoever wants to save his life will lose it, but whoever loses his life for me will save it” (Luke 9:24). The man who resigns to give up his life through *infinite movement* is then able to receive God’s life through the *movement of faith*.
In Dostoevsky’s novel, *The Karamazov Brothers*, the character Dmitri is an example of someone who accomplishes a *double movement*. For the first part of the story, he is a man who contains within himself all of the conflict that Dostoevsky sets up in a philosophical debate about the existence of God. In this case, the conclusion that God does not exist leads to a life of impulse where people live in the way that they see fit, morally ungoverned by a higher authority. The conclusion of God’s existence, however, leads to the understanding that morality is the construct that people live by in order to love each other. Dmitri is in earnest a well-intentioned person who wishes no harm to anyone, but, due to his impulsive nature and ambivalence toward the debate he embodies, he continually throws others’ lives into chaos and injury. He is in constant confusion because he usually knows what he ought to do, but he is unable to override the impulses that motivate his desires and lead him to self-deprecation. One of the monks in the novel describes a man whose position is a result of self-deception, a position which is accurate of Dmitri due to his ambivalence toward God:

“Above all, do not lie to yourself. A man who lies to himself and listens to his own lie comes to a point where he does not discern any truth either in himself or anywhere around him, and thus falls into disrespect towards himself and others. Not respecting anyone, he ceases to love, and having no love, he gives himself up to the passions and coarse pleasures, in order to occupy and amuse himself, and in his vices reaches complete bestiality, and it all comes from lying continually to others and to himself” (Dostoevsky, 55).

At this stage Dmitri is a man who is trying to hold a relationship with two incongruous ideas. The result is that his capacity for becoming someone greater is either suppressed or released in a negative way because he cannot understand the definition of his
relationship with a higher authority; he cannot differentiate between borrowing and stealing, love and lust, God and self.

As the novel progresses, Dmitri finds himself amidst situations that push his capacity to the breaking point. Faced with the reality that he may have lost the one thing he desired most of all, the woman Grushenka, he decides to kill himself. But before he carries out his suicide, he decides to see this woman one more time. Upon finding Grushenka, she confesses her love for him, which alleviates his desire to commit suicide. Shortly thereafter, Dmitri is wrongfully arrested for murder, interrogated, and is again thrown into despair because he is unable to convince anyone of his innocence. Upon the conclusion of his interrogation, he lays down for a nap and has a dream from which he begins his double movement. The dream shows him that what people do has a direct impact on others' lives; in this case a child is in danger of starvation because no one will feed it. This impacts Dmitri so intensely that he is empowered to confess to all of his past misdeeds and to do what he can to make up for them. Even though he is innocent of the murder for which he is being tried and believes he will be justified by the truth, he resigns himself to suffering in prison in the place of another who would not be able to bear the burden. He has, here, exacted the sacrifice and reconciled the burden of the infinite movement. He then carries out the movement of faith in which he accepts the authority of God and regains what he has sacrificed. What he decided to give up was his life in submission to oppressive labor in prison, but what he received in return for his faith in relationship to God was new life. He says,

"I've felt there was a new man in me, a new man has been born within me! He was imprisoned within me, and he'd never have emerged if it hadn't been for this bolt of lightning... What do I care if I have to spend
the next twenty years of my life chipping away at a rock-face, I'm not afraid of that at all, I'm much more afraid of something else now: I couldn't bear the thought of this new person leaving me!” (Dostoevsky, 742)

This new life was the freedom to enjoy the simple qualities of living, to love others, and to do right; these were things that were inhibited by his ambivalence toward the existence of God, things that he was incapable of until his relationship to God was strengthened and his capacity was redefined.

Failure can be defined as “the condition or fact of not achieving the desired end or ends” or “the condition or fact of being insufficient or falling short” (“Failure”). While both definitions may mean nearly the same, the connotations of each are a little different. Failure to achieve a desired end may indicate a prohibition within oneself that deters success. Failure due to insufficiency may be a state at which an individual’s limitations cannot possibly meet the standard that is required. In Dmitri’s case, the events in his life that led him to where he was able to accomplish a double movement were the result of his failure to maintain his own moral standards. In the case of the man who is befitting Kierkegaard’s description, failure is the result of a limitation that keeps him from attaining an end although he tries with all his might. Both refer to a paradox in either self or situation, one being inward and the other being outward. In both of these particular instances, however, it has already been shown that failure does not have to end in loss, that it may end in restoration and abundance. The outcome of failure is thus determined by the type of relationships one holds and the behavior they display out of their capacity.

In regard to the creation of each of the six patterns for my work, it seems to me that their construction emulates the way progress is made in my life. I have certain
standards and expectations for myself; some of these I am able to keep but others, I realize, I am not because I have seen that I do not have enough authority over my own life to meet those standards. I have also noticed that sometimes I change my standards. In some cases this may be a legitimate part of forming new relationships, but more often it seems to point to a flaw in my character. It usually reveals my willingness to compromise my standards at a time that is easier or more comfortable to accommodate my existing circumstances. In *The Karamazov Brothers*, Dostoyevsky writes “A Karamazov is a man of opposites, of extremes, a man who can call a halt in the midst of the most reckless abandon the moment he feels himself subject to another force,” (Dostoevsky, 931) and at times this is how I feel myself. As I make decisions in life regarding the relationships around me, my capacity is either revealed or suppressed according to the nature of those decisions. And, as personal failure is often the case in my life, I many times find that I have deviated from becoming the person I would like to be.

The process of making each pattern, then, becomes much like my “good intentions.” As I begin to move forward through my life, I make decisions and react to my environment to the best of my ability. After a while I begin to see the results of my actions, and regardless of whether or not I have made good decisions concerning my circumstances, eventually all my modes of thinking and the situations around me begin to break down. I find that the simplest things become the most difficult for me to accomplish, and there is a point when all of my efforts becomes useless. It is at times like these that I feel I must let go of my determination to maintain everything and let
things be as they are. It is only afterwards that I may be able to properly evaluate my situation and reassemble the relationships around me so that I can begin new progress.

The generation of each of the six designs is both a representation and a demonstration of these tendencies in my life. Using the rules for construction, I originally intended for the pattern to be symmetrical, but this became the one thing that I could not seem to control (see Fig. 10). Starting from one of the sides on the 12-gon, I began generating arcs and lines between two of the borders (see Fig. 12). As I progressed forward, I saw that the pattern often became asymmetrical, and the further the design progressed, the more skewed everything became (see Fig. 11). This occurred through slightly inaccurate misplacements of the compass or straight-edge, similar to the way that two lines that are seemingly parallel will often meet once they are extended far enough. I then went through a great deal of effort to try and correct the course of progress by attempting to determine which steps will move the pattern toward the center again. Every once in while, I find that I was able to bring the design back into center, but it quickly moved out of place again. Every time the design moved off center after I had previously tried to correct the problem, it became as bad as, or worse than, what it was before. Eventually I was brought to the point where I could not bring the pattern back into its symmetry, and I had to let the design fall apart as it progressed forward (see Fig. 13). The fact that I could not maintain any of the patterns' symmetry made each one a demonstration of my failure.

3.3 Religion
The number twelve in the Bible is very symbolic and has many different references. Some of the more obvious ones are the number of tribes in Israel in the Old Testament and the number of disciples that followed Jesus in the New Testament. The number twelve is interpreted as a symbol of divine government or authority. The number six as it is referenced in the Bible is symbolic of man; the number seven is a symbol of perfection and so the number six, being just short of seven, is also an imperfect number. In the way that twelve is a number representative of God’s authority over man and six is a number representative of man, at the center of the six patterns is a twelve-sided figure, which is also symbolic of God, and branching out from there is a set of six borders and six generated patterns. Each of the patterns is representative of man and how every man comes from God. Each one is generated in the same way so that, like man, they have the capacity to be alike, but all of them end up having infinite variations; if one pattern were to be remade it would be completely different than the first time it was constructed. As the pattern evolves from the center, it becomes more and more difficult to keep centered due to way in which I construct the patterns. As it progresses it begins to lose its symmetry, and toward the bottom of each scroll, the pattern appears as though it may be falling apart or moving into chaotic patterns. Thus, the breakdown of each pattern is symbolic of the state of a person who moves away from God. And as the total number of patterns is the same as the number of man, each pattern is representative of man and also of me in different states of thought and action.

On every line, corresponding line, and occasional geometric figure, there is a single thought written out which I have attempted not to repeat anywhere else on the pattern. The idea is that I write down my own thoughts and other assenting quotations in
an attempt to exhaust my thinking to the point where I feel as though I am writing down
the entire contents of my mind or being onto each scroll. As part of the idea behind the
tessellations in Islamic art, Muslims try to represent the infinite being of God without
creating any form of idols. When a person walks into a room filled with Islamic patterns,
they would be overcome by the infinite sense and mass proportion of the patterns, in the
same way a person would be overwhelmed by trying to comprehend the infinity of God
(Islamic Architecture). By conjoining these two ideas of exhaustive thinking and infinite
representation, I create a twofold symbolism: one being my endless search to discover
more of myself and the other a way in which I connect myself to God through
transcribing my thoughts onto a representation of his infinite being.

The way that Muslims employ the idea of infinity becomes very overwhelming
when experienced in person. The rooms they create literally immerse a person in the
concept. The scrolls that I have created also have the potential to be overpowering, but it
is primarily in a way that makes them consuming. As a person magnifies an object they
see that there is a limitless amount of new matter to be studied with every stronger
magnification. The same thing would occur if someone were to try to read all of the
material on the scrolls. The fact that there are different thoughts written out on almost
every arc or line means that, while they could read all of the material, it would require an
enormous amount of time and energy. A person would have to focus on one small line
and then another and another until they realized that every new construction held
different information. They would be overcome with a seemingly endless task of reading
all of the information.
All of the lines and arcs written on the scrolls are either blue or purple in color. Like numbers, colors also have biblical symbolism. In the context of the objects I am referencing, blue is often used in conjunction with and means the same as purple, a symbol for royalty and authority ("Color"). I found that these colors were used on different fabrics that served as a protective barrier between God and man. Both blue and purple yarn was used in the curtains hung in the Israelites' tabernacle. One particular curtain was designated to be placed between the Holy Place and the Most Holy Place in the tabernacle (Exodus 26:31-33). The purpose of this was to separate the place where the priests carried out their normal duties from the place where they were only permitted to enter once a year and then only under strict conditions. Besides these curtains, these colors were also used on cloths that covered holy articles when the tabernacle was moved. The blue was used to cover a variety of items, and the most important of these was the ark of the Testimony. The purple cloth was used to cover one of the altars (Numbers 4:4-6, 13). Together, the curtains and various cloths were used to designate items that were sacred so that they would not be desecrated. The consequence for breaching any of these cloth barriers was death; therefore, their purpose in allocating all these articles as holy was to establish respect for God's authority and protect people from harm.

The uses of these fabrics were all established as laws for the Israelites. They were limitations that the people could not surpass. The reason that people died from coming into contact with the articles these cloths protected was not because they were put to death for breaking a law but rather because God's holiness was so pure and powerful that anything impure was destroyed in his presence. Anyone not ritually purified who came
into contact with anything sacred died instantly. God told them that no one must "go in to look at the holy things, even for a moment, or they will die" (Numbers 4:20). In a sense, then, these limitations were things that people were incapable of superseding except in very rare cases. Within the patterns on the scrolls there are six borders that extend from the 12-gon in their center (see Fig. 12). These borders are composed exclusively of the dialogue between God and Job in the Book of Job. Before this conversation, Job demands an audience with God in order to find out why tragedy has come upon him. God honors his wishes by meeting him, but in the conversation God establishes a long list of things which Job can neither do nor understand and never really speaks of the trials Job has just endured. By the end, Job realizes through the precedent that God has just set that he could not possibly understand the implications the situation he has just lived through even if God were to tell him directly. Kierkegaard has written that "Job's significance is that the disputes at the boundaries of faith are fought out in him" (Kierkegaard, 210). Here in this dialogue God establishes man's limitations by comparing man's capacity to his. Therefore, the borders on either side of a pattern are part of the limitations extending from the center that keep each generated pattern from extending past the place where they should be. The borders become another inherent quality which allows each pattern to generate in a specific way—much like the rules used in construction.

Earlier I have explained how the line quality of my work may have the appearance of being present and yet not fully perceived. This relates to the meaning behind the Jewish name of God- Shaddai. A literal interpretation of this word means "my breasts," but in this instance it is in the context of the female body being veiled as
opposed to completely exposed. This idea is linked to the presence of God that a priest would experience when he entered the “Most Holy Place” in the temple or tabernacle, a presence that is simultaneously revealed and also hidden. It is logical that God’s presence would be like this because “God completely unveiled would be an idol; entirely veiled, he would be absent (Ouaknin, 24).” In this way God presents himself as a paradox that is defined by the limitations of our capacity to perceive him. (Jewish Ouaknin, 24)

The meaning of Shaddai can be further deciphered when it is broken into Sha-dai, which is an “abbreviation of a longer expression, Mi-sheamar leolamo dai- ‘he who says to his world ‘that’s enough’.’” In other words, this name designates God as the one who sets limits for everything (Ouaknin, 24). Another name for God in Hebrew is El, which means “strong God,” which is from where “Almighty God” is derived. This name is often used in conjunction with other names, like Shaddai. When the name El Shaddai is used in the Old Testament, it combines the sense of “almighty” with the meaning “my breasts.” Here the connotation of breasts is one of supply and nourishment, as in a mother’s relationship with a child. In conjunction with El this implies that God is “all-sufficient” or “able to provide abundantly for our needs.” Using this in connection with the abbreviated meaning Sha-dai- a God who sets limits, - there is a total implied meaning of “the God who sets limits by giving abundantly” or “the God who exceeds our limits by being all-sufficient.” So, in the first sense, God is someone who defines our capacity by giving to us abundantly and simultaneously setting our limits by what we are not given. In the second sense, God is the one who sets the limits of our capacity but is also the one who is able to provide any solution for situations that exceed our limitations.
These two implied meanings about God are why it would be possible to accomplish Kierkegaard's *infinite movement* in which a person makes a conscious decision to live at the limit of their capacity and his *movement of faith*, which allows a person to receive from God that which cannot be attained otherwise. (*El-Shaddai; The Names of God*)

3.4 Gifts in Relationships

Everything I have discussed up to this point is an explanation of the various connections I have found between a group of ideas that I have been involved with to such an extent that I have been driven to associate them in one context. One of the keys that has helped me link all of these ideas together is that of a gift. The models I have provided earlier give some understanding of how people and ideas influence each other and themselves through the formation of *relation sets* which are very malleable and dynamic due to the constant convergence of many different factors. In some cases, if not most, these relationships can be stabilized, or at least steadied, by the manifestation of a tangible form. I use the word ‘tangible’ loosely in that I mean a form that can be seen, felt, heard, written, spoken, etc. In other words it must be a form that can be perceived by some other means than just the mind in order to more completely understand the existence of its idea. An obvious example of this is an invention; it is conceived by the inventor through interaction with an idea and then expressed into a physical form that is a direct representation of that idea. A gift, then, is something that becomes a physical representation of an ongoing relationship between two people. This differs slightly from the example of the invention in that a gift is a physical manifestation of the metaphysical
bridge that serves as a relationship between two things; this is opposed to a tangible representation of an idea, which is a component in a relation set that is connected to something else by a relationship.

In his essay Gifts, Ralph Waldo Emerson writes:

"He is a good man, who can receive a gift well. We are either glad or sorry at a gift, and both emotions are unbecoming. Some violence, I think, is done, some degradation borne, when I rejoice or grieve at a gift. I am sorry when my independence is invaded, or when a gift comes from such as do not know my spirit, and so the act is not supported, and if the gift pleases me overmuch, then I should be ashamed that the donor should read my heart, and see that I love his commodity, and not him" (Emerson).

The way that Emerson presents the act of gift-giving reveals a strange dialectic for the recipient. He seems to say that the person who receives a gift they do not value dishonors the giver by not supporting their actions, in which case I would conclude that the recipient has undermined the relationship from which the gift came. The person who overvalues the gift is then someone who seems to care more for the object than they do for the giver, in which case they still demean their relationship to the giver. A perfect gift would then be something that fell exactly in the middle of these two categories: it is something that would require selflessness on the part of the giver and the recipient. In the same essay Emerson writes:

"The only gift is a portion of thyself. Thou must bleed for me. Therefore the poet brings his poem; the shepherd, his lamb; the farmer, corn; the miner, a gem; the sailor, coral and shells; the painter, his picture; the girl, a handkerchief of her own sewing" (Emerson).

By this standard, the giver recognizes that the only true act of giving is one in which there is some sacrifice of self; the gift that is given is not a thing but is a part of self.

Simultaneously, the gift can only be received in the proper manner by realizing that the
thing which is given is a piece of the giver; this requires a loss of self on the part of the recipient in order not to put a determinate value on the gift by submitting to the expression of their personal desires or tastes. They must realize that their service to the giver is to love the person and not the gift.

Here, the transaction of giving and receiving is what either initiates or perpetuates a relationship, which then constitutes a *redefinition* in the recipient and consequently the rest of the *relation set*. The gift stands as a representation of the giver until it is given, and then it becomes a manifestation of the relationship because of its ability to define qualities of the recipient as well. In this sense the fluid dynamic of the relationship is temporarily stabilized by the recognition of this tangible act, or gift. After the gift is given, the relation set will automatically be redefined, but the gift will always stand as a monument, or souvenir, for the state of the relationship at the time it was given.
CHAPTER 4

CONCLUSION

Like a gift, this installation becomes a physical representation of the relationships I have in my life. All of its elements represent ideas which I have joined together in a new context to present as a gift. Like the good giver Emerson wrote of, I have used the resources available to me to create something that is wholly me; it is the piece of me that I give. It incorporates many aspects of who I am by intertwining ideas through relationships in mathematics, philosophy, art, and religion - ideas that have influenced me but which I no longer perceive as independent from one another. The construction of this work is the way in which I redefine these elements by grouping them into a new context. The manifestation of these ideas into one culminating thing is a display of the capacity that their relationships have revealed within me, a capacity that was discovered through a long, intense amount of time devoted to discovering new potential within each idea.

This potential that I speak of is the potential of a relationship. The more time two entities spend involved with each other, the more they will affect one another. I have drawn a line from the theories of Cantor and Gödel to the philosophies of Kierkegaard, a line connecting theories where evidence of the infinite leads to paradox and solutions that are not provable and to philosophies of infinite movement that allow a person to enter a state of perpetual resignation from an impossible situation and self-sacrifice and to the
movement of faith through which loss is regained in spite of impossibility. I have connected the ideas of Kierkegaard to the writing of Dostoevsky, where Dmitri Karamazov becomes an example of the sacrifice and renewal explained by Kierkegaard. I have used Dostoevsky’s character to emphasize the failure I have experienced in my own life and how I, too, am able to understand the double movement. I am able to relate to all of these ideas under the context of Christianity through notions of contradiction, limitation, failing, sacrifice, and relationships. It is also through this that I am able to grasp the meaning of Emerson’s thoughts on gifts, that the gift I give is worthless without the sacrifice of self.

The installation that results from all of this philosophical probing is a space that provokes inwardness. The scrolls form a large hexagonal-like space, which is not defined so much physically as it is inferred by the overwhelming height of each piece and the way their proximity forms an interior space. They are close enough together to form a definite interior but far enough apart to encourage passage into the space (see Fig. 14). The paper each scroll is made of is semi-translucent so that light passes through, allowing the written patterns to be seen from the front and the back, but due to its nature, the writing is only accessible from the interior space. The experience that the space promotes is one of quiet and humility. The size of the work and the immense amount of writing that defines the space exhibit a sense of eminence over the individual, but it is one that is not confrontational or of an intimidating superiority. Rather, it is a calm, patient presence that waits to disclose much to those who persist in exploring what is otherwise subdued. It is a place where the individual is surrounded by thought; some of which is fragmented, some of which one must stoop down to retrieve, and some of which
is so high above the viewer's sight that they can only wonder at what is kept secret beyond their reach.

The writing is a representation of the process of thought. It displays an overwhelming sense of intensity and introspection by the exhaustive amount of time that is dedicated to every hand-written line, something that is felt by the viewer as they try to discern and consume all of the information that is woven into each design. Just as the process of exploring and writing gave insight into my own being, the process of reading may connect the individual with my experience by their seeking to understand what is written or prompting them to an inward reflection within the context of my thought. The interaction that results between the individual and the installation is that of a relationship. Those who choose to make an effort to invest themselves with the work are the ones who will receive the most from it in the end. The amount of interaction that each individual may have with the work is stored potential for the investigation and redefinition of self.

The amount of time and effort that I have personally invested into this work has been greatly rewarding. I have found out much about the potential that is stored up within me, aspects of my being of which I was previously unaware. Through this work, I have, in a sense, formed a relationship with myself that was revealed by the exploration of external influences and solidified through process. What I take from this experience is that: in order to receive I must give, and to give anything less than everything yields a very poor return. It is apparent to me that all I am able to give to another is all that I am. It seems a relatively small thing in comparison to what I have received, but it is an immense task in proportion to how much I have left to find within me.


Figure 1: Entire installation
Figure 4
Figure 5
Figure 10: Symmetrical
Figure 11: Asymmetrical
Figure 12: Top of scroll
Figure 13: Bottom of scroll
Figure 14: Interior space
Figure 15: Expansion of 12-gon into hexagonal form