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Andrew J. Arkell

University of Arkansas, Fayetteville

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**DRAWING AS ARCHITECTURE:
REPRESENTATIONAL SPACE ARCHITECTURALLY TRANSFORMED**

By Andrew J. Arkell
Fay Jones School of Architecture

Faculty Mentor: Dr. Laura Terry
Fay Jones School of Architecture

Abstract

This project was motivated by the premise that a drawing could take on architectural meaning beyond its initial performance as a re-presentation of an architectural idea; in other words, the motivation was to create a drawing that was architecture. When the drawing is the research, however, the conclusions found are necessarily different from the earliest goals pursued. There comes an understanding that a drawing may never be literal architecture; although, the means by which the drawing is created might be architectural or, at the very least, speak to ideals which are fundamental to the creation, to the process, of architecture.

“Poets make poems, painters paintings, and musicians music. Architects, however, do not make architecture; they make drawings and models of it – representations meant to direct the development of something conceived into something constructed.”

-David Leatherbarrow, “Showing What Otherwise Hides Itself: On Architectural Representation”

I. Introduction

Abstract drawings created in a summer Mexico study abroad program meant any notion of the drawn artifact, the precious art piece, or the perfect line was discarded. Instead, drawings were informed through nonlinear processes and, while graphical intentions were erased from the face of the paper and drawn over multiple times, the end result was never fully realized from the beginning. Preconceived notions suggesting that a drawing could be considered finished were replaced with others that considered a ‘finished’ drawing merely as a layer of graphite meant to be erased and continually reworked. Drawing, introduced as a process of artifact production for the majority of many architectural educations, reintroduced itself as a creative tool for both spatial manipulation and creation; in other words, space was defined by the lines, tones, and textures created with graphite and conté on paper. The act of drawing no longer presented itself simply as a means of displaying a final architectural work, as ‘re-presentation’, but rather drawing was emphasized as an origin point in architectural creation, a means of ‘representation’ in which drawing and architecture were inseparable.

While in Mexico, discussions with artist Thom Mills suggest that the drawn world creates itself through observations of real world relationships (Mills). Furthermore, as these relationships are visibly rendered, one can continue to graphically build upon them, making decisions within the reality of drawing that might ultimately affect the built world. Architecturally speaking, decisions about a building are formed through the transformative processes of drawing, erasing, and redrawing, meaning that while a built work resides in the real world, its origin exists in the

world of lines, tones, and texture—the “drawn world.” A fascination with this universe and its relationship to architectural creation has engendered this research project, in order to understand how this space, created through the act of drawing, transforms itself into architectural space, and subsequently, into an architectural work.

This research project examines how the intentions behind the drawing process are assimilated into the creation of space and architecture, emphasizing that drawing may serve not only as a tool of visualization, but also as a tool of conception. In particular, the goal of this research was to understand and define how an architectural idea might stem from the act of drawing, rather than a drawing being created for the purpose of an idea; that is, there was a search for an architecture formed from the relationships found within a drawing without those relationships already having been architecturally defined.

Drawing, whether by hand or via computer, is a known form of architectural representation. Specifically, drawing is most commonly used as a means for communicating an idea, allowing an architect to provide visual cues of one’s thinking, and enabling one to provide visual representation of the proposed architectural work. When considering drawing in this utility, it is not necessarily the manner of creation, but rather a means of re-presentation. However, when questioning the idea of drawing as a method of purely representational means, there remains the notion that perhaps the act of drawing is of more benefit to architecture than mere visual re-presentation.

In order to determine the connection between drawing and architecture, this research project considers that both lie in a separate reality, but are somehow metaphysically linked through the process of drawing itself. Drawing and architecture are both visual mediums, and it is through drawing that one may understand an architectural work before it is ever built. As a result, it may be understood that drawing plays more than a visual role in architectural creation, allowing for discovery and transformation of the concept before the construction process, as referenced in the writings of David Leatherbarrow (Leatherbarrow 50-55). Delving further into this idea, there is an effort to understand the methods of the drawing process, and to recognize how certain techniques might create spatial relationships that are subsequently transformed into an architectural work, all while remaining in the theoretical world of representation, or drawing. Although drawing and architecture exist within separate realities, there is an effort to understand how the foundations of a built architectural reality rely upon, and are ultimately conceived within, the reality of representation. Furthermore, there is the question of how this relationship asserts the validity of theoretical architecture as an essential component for understanding the realities of the built world.

Within the realm of drawing and architecture, the overarching aim of this research is to gain insight into architecture as a drawing, and to comprehend what architecture created through means of transformed spatial drawings necessarily implies. The value of such knowledge lies in the discovery that perhaps drawing may be founded upon theories meant to reveal truths about spatial creation that built architecture does not directly address. Discussions of space, light, void, and mass are inherent when speaking of architecture, yet as revealed through the drawing process introduced by Thom Mills, these attributes were implicit in a drawing’s various marks and tones (Mills). There is a space within the page; an exploration of that space through this research project will inevitably lead to a better understanding of how a manipulation and transformation of the ‘spatial page’ will serve as a transitional tool between idea and building, drawing and architecture.

Creating a Drawing, Creating an Architecture

This research initially focuses upon the creation of a drawing formed through the use of surrealist techniques; it then centers around a transformation of that drawing into an architectural work. The drawing itself serves as an exploration of the spatial page, a study in *conté*, watercolor, and graphite primarily concerned with the spatial relationships between the various marks and tones on the page, derived from the spatial characteristics of a studied object, with no initial regard for the resultant architectural work. There is, however, a certain regard for how the drawing is developed, with great intention towards discovering, and defining, the process by which the final drawing will construct itself.

It is from the idea in which the drawing is both product and creator, working in tandem with the architect in the reality of representation wherein all space is, perhaps, initially created, that this research then warrants as its contribution to current discourses and practices on drawing as architecture. Specifically, the project primarily concerns itself with building a method, which, at the conclusion of the project, might be critiqued and situate itself within discussions about drawing's role in architectural creation. The final drawing will stand as a testimony to the validity of the method built, and display the evident success and failure that might be achieved when architecture is created from an origin point within a different reality from which physical buildings, architecture, are not initially thought to derive.

Finally, there is, upon completion of the project, potential for an architectural work that is not merely the result of a transformative drawing process, but is inevitably the drawing process itself, a theoretical work clearly blurring the boundary between the reality of representation and the reality of the built world, between art and architecture. Thus, there is knowledge to be gleaned from this project, if one is to fully understand the importance of the relationships between drawing, architecture, and the creation of architectural space. Writing from a perspective of intentionality, this research is designed to undermine contemporary notions of the drawing as architectural re-presentation, and to solidify a particular drawing process, or method, as architectural representation, architectural creation, and, ultimately, as architecture itself. Such solidification, an assertion that all architecture begins on the page and exists within the page, then begins to have ramifications on the whole of the architectural field. One is left to consider, given the findings of the project, what a symbiotic relationship between architecture and drawing, process and product, might mean to the future development of architectural space. Furthermore, this research project leads to further speculation as to the origins of space, and in its transformation, how it is different from space that is architecturally defined. Consequently, drawing as a contributing factor to this transformation must be considered as well, including establishing this project's importance in understanding how this contribution, how drawing, is ultimately responsible for the creation of architecture.

Drawing Motivation

While drawing serves architects as a transitional tool from idea to building, the very process of drawing allows one to explore spatial experience and transformation without leaving the theoretical world of representation for the reality of the built world. Leatherbarrow stated, "Poets make poems, painters paintings, and musicians music. Architects, however, do not make architecture; they make drawings and models of it – representations meant to direct the development of something conceived into something constructed" (Leatherbarrow 51). While still general in its terminology of process, Leatherbarrow alluded to the actions taken when drawing. He also questioned the reliance on rather typical architectural drawings (plans, sections, and paraline projections) as the best means of architectural representation, alluding to the

possibilities of greater spatial relationships, and developments, in the creation or discovery of new marks made while drawing.

From a different standpoint, Filiz Öngüç identified several purposes of drawing, specifically its use as a representational method of perception, emphasizing the human place. In its encapsulation of perception, drawing must capture the individualistic experiences of place, suggesting that representation is not a flat idea, but a spatial one. Considering Öngüç's statement, "the belief that drawing is architectural thinking releases us from the otherwise constricting grip of perceiving it as nothing more than a tool of visual representation" (Öngüç 31), it becomes apparent that the purpose of drawing extends beyond the visual explanation of form. However, neither Leatherbarrow nor Öngüç fully considered the role representational reality may or may not have in relation to the reality of the built world. That is, both suggested the dormant potential of drawing as a powerful architectural descriptor and exploratory tool, but gave little thought to the idea that, perhaps, drawing occurs at the inception of an architectural work, assisting in its creation as well as its representation.

Robin Evans (156), however, interpreted drawing as the intervening medium in architecture, allowing one to work on an architectural project directly. Yet, the mystery of the transformation of drawing to building eluded Evans, which caused him to question this relationship and the role drawing plays within the physical and representational realities of architecture and the world. Evans' work helps to define the thesis further, serving as an explanatory link between architecture and drawing and their subsequent realities, and giving cause to the purpose of architectural drawing aside from purely aesthetic functions. Reading his essay provides justification to search for the link between drawing and architecture, to discover how intertwined both truly are. Evans implied that the built world is constructed through the world of representation, an implication that gives this thesis momentum to find answers to its questions about the relationship between drawing and architecture. His chapter "Translations from Building to Drawing", in particular, allowed for the theoretical consideration that perhaps space does not only exist in the physical sense, but also in the representational sense. In short, Evans depicted scenarios in which the architect never truly touched his work at all, implying that architecture is only ever really worked on within the space of the drawing, the space given to representation:

"Bringing with me the conviction that architecture and the visual arts were closely allied, I was soon struck by what seemed at the time the peculiar disadvantage under which architects labour, never working directly with the object of their thought, always working at it through some intervening medium, almost always the drawing, while painters and sculptors...all ended up working on the thing itself which, naturally, absorbed most of their attention and effort" (Evans 156).

Inevitably, such explanations lend great importance to the idea of drawing as a conceptual tool in the creation of architecture. Contrary to Evans' statements, however, this research intends for the architectural thought to occur after a drawing has been made, in order that the final work may originate and be produced purely from within this representational space.

Searching for a Method

Creating an architecture within the reality of representation assumes an understanding of drawing as a conceptual tool by which architectural space is made and manipulated. Such creation is a process which aligns itself most closely with the paradigm of *deconstructivism*, defined as a point of view that seeks to reveal hidden assumptions. Specific to this research, there is an effort to understand how an exploration in drawing can manifest itself into architectural

creation, and to possibly reveal that the relationship between architecture and drawing is not merely a matter of representation. In other words, there is the idea that drawings have a significant role in the creation of architecture, aside from drawing serving as the primary tool by which one reveals un-built architecture.

This research inevitably attempts to reveal that it is through drawing and its transformation that architecture is created, and that perhaps architectural space resides more permanently within the representational reality than it does in the 'real world.' Given that architects spend much of their time working on their architectural works through drawing, it is also reasonable to assume that perhaps all architecture, drawn or built, is real. Perhaps the only delineation between theoretical and real lies in the physical tangibility of a built work, but then even this may be a matter of representation. Still, these questions seek to reveal the truths behind representational reality and the reality of the built world, with the deconstructivist view serving as the door through which assumptions about architecture and drawing will be challenged.

Researching these architectural statements requires a methodology that is less intent on gathering specific facts and data and more focused upon the unexpected result, especially those results that arise from the very act of drawing itself. Surrealist techniques involve freedom from aesthetic and moral self-censorship, a removal of conscious decision-making, and a basis in the unconscious. Surrealist techniques are the most efficient methodology to use given research that intends to discover how architecture is created when its origin is not architecturally defined. Specifically, the surrealist technique is a design strategy that allows freedom of exploration in which direction is nonlinear and the results are unknown and unpredictable, meaning that the drawings will be directed by each move of the hand, with no 'final image' set as the end goal. Knowing this, one must understand that the end of this research begins with the creation of a drawing, and that the drawing's spatial implications will only be realized after a transformation into architecture. That is, while the discoveries made in the execution of this thesis cannot necessarily be determined presently, there is an idea that what knowledge reveals itself lies in the transformative drawing processes. The research is made as the drawings are made, for the drawings are the research.

Drawing with watercolor, conté, graphite, and sandpaper will be the primary tactic by which this research project produces drawn work. The chosen medium will be applied to the same paper, one 22" x 30" sheet of 140lb Fabriano Hot Press Watercolor Paper, over the course of four months, reinforcing the idea of graphic layering, or *pentimenti*. This term refers to a technique involving a layering of images so that previous drawings might have a relationship with and even inform decisions being made in new drawings. Such a technique is synonymous with the strengths of the surrealist technique, as the unexpected juxtapositions are fully realized as new drawings are made upon the old. This technique is important to the idea of representational space, as the layering of images implies the application of depth to the page, a 3-dimensional characteristic of space that is important in the transition to architectural space. As the 2-dimensional medium creates tones, lines, and textures, the layering of the *pentimenti* allows for the creation of drawn space, which gives direction for transformation into architectural space and form.

The rules for drawing construction presently consist of the following:

- Each drawing will only use watercolor, conté, and graphite as a medium, as well as the void, which may be achieved through cutting, excessive erasing, or sanding of the paper. Of the watercolor colors, only sepia and Payne's gray will be used.
- Sandpaper is an acceptable erasing tool.

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- Photo-documentation will occur at least every time the paper is cut, and whenever a significant amount of medium has been applied to the paper (the latter to be defined within the context of each drawing).
- Cuts and additions will be determined by their contribution to the overall spatial composition of the work. As each drawing has not been started, it is difficult to determine the exact number of cuts and additions to be made, as development of the space on the page is necessary to evaluate this determination.
- Any additional paper added will have edges and cuts perpendicular to the original edges of the paper, although the size and amount of paper added is on the basis of each individual drawing and its compositional needs.

Each drawing will have a different subject. The chosen objects were selected for their inherent ‘architectural’ orders and for their geometrical complexities that were manipulated by time. Thus, similar to the drawing’s expression of chronology in the implementation of layering through the *pentimenti*, each object signifies the chronology of time through elemental manipulation. The objects drawn are: 1) log, 2) (wasp) nest, 3) rock, and 4) bone (armadillo skull) (Figures 1-4).

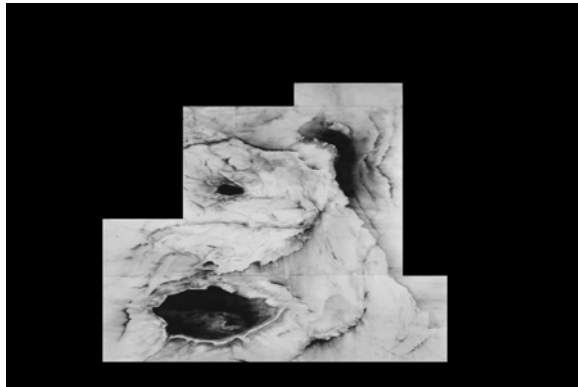


Figure 1: Log. The black background is not part of the drawing. Horizontal orientation (with right side of the page treated as the bottom).

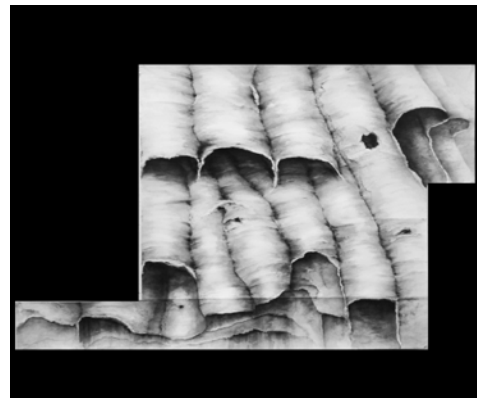


Figure 2: Nest. The black background is not part of the drawing. Vertical orientation.

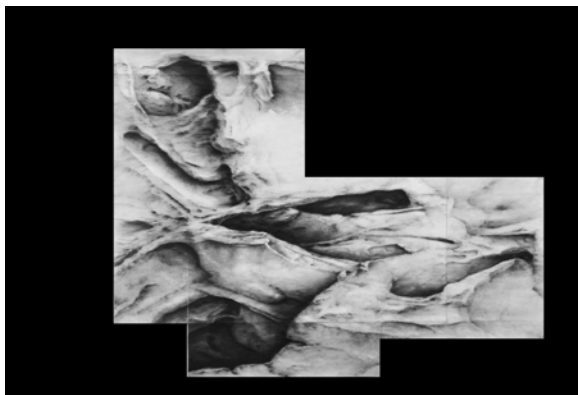


Figure 3: Rock. The black background is not part of the drawing. Vertical orientation.

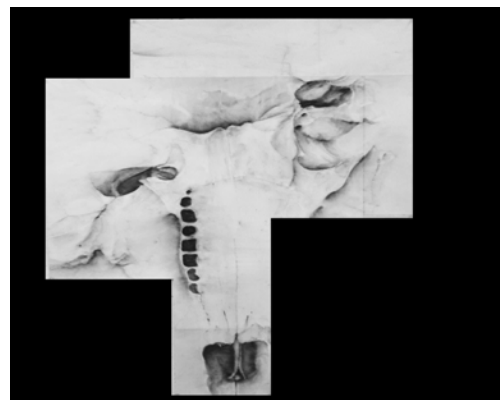


Figure 4: Bone. The black background is not part of the drawing. Vertical orientation.

II. Research Appendix 1:**The Spatial Composition**

The final composition will start on the same size sheet of one 22" x 30" sheet of 140lb Fabriano Hot Press Watercolor Paper, and this same sheet will be used for the entire semester; additions and subtractions will be made to the paper following the same guidelines established in the development of this project. There remains the notion that the drawing will inform itself throughout its development, although the spatial logic (spatial language) identified through the diagramming of the four drawings will certainly be held as the initial rules by which spaces are made, and by which the relationships between spaces, in regards to the larger composition, might be established.

The underlying idea remains that, as the drawing develops, as paper is added and subtracted, the piece might start to grow past the relatively small borders present in the initial four drawings (all approximately within a 2'x3' area), and begin to define space that is of a size relatable to human occupation of the body as opposed to the hand—perhaps, then, more characteristic of architectural space. One could assume, for instance, that if the drawing grew to a large enough size, it, were someone to face the drawing from six inches away, might then fill that person's peripheral vision and become spatially occupied, as it were, despite the medium's 2-dimensional limitations. Of course, the final size cannot be predicted, nor can the image of the final composition. One may assume, however, that given the findings and conclusions established within and at the end of this project, the thesis is heading towards a future that is, on the one hand, of a more determinable, analytical, and architectural character, and on the other, of a less predictable, but more exciting nature given its intuitive origins.

The Final Drawing

Although it may be hard to dictate what the final drawing will look like, the intentions behind the creation of the drawing, the process by which it is created, become increasingly concretized. The drawing will begin on the same size sheet of paper of the original four, but the addition of paper and the scalar change in drawing strokes will aid in the understanding of architectural space and its creation, as the space drawn is then more architecturally characteristic in its relation to the body. As a drawing, then, the final work seeks to be a 2-dimensional drawing that might be occupied in 3-dimensions, if only visually, but through this visual occupation begins to address assumptions that visual occupation is no less valuable than physical occupation, and that both forms of occupancy are valid means of experiencing space, of experiencing architecture; in doing so, as stated in the original proposal, the final drawing might then stand as a valid architectural work despite its apparent intangibility, again emphasizing differences between re-presentation and representation.

As a work, the drawing will be an architectural transformation of spaces initially similar to those drawn in a previous study, but, using the analytical processes derived from the diagramming, it will be inevitably different due to its application of light, shadow, mass, void, and surface being grounded more in the realm of architecture than 'general space.' The subject of the drawing is indeterminable; it may be an architectural landscape with a single construct, such as a column, or the drawing might be in the image of a threshold, a drawn 'doorway' that is spatially defined yet also alludes to the spaces beyond. Regardless of subject, the term 'architecture' is kept vague so as to prevent allusions to the construction of a building; the goal of the research project is not to create an architectural work that might then be programmatically defined, but rather to result in a drawing that is defined by the spatial languages discovered within the drawing process. The final drawing will most likely have an abstract character, yet it

will stand as a testament to the process and serve as a physical work that might then be evaluated for its architectural space in contrast to the original drawings and analyses used in its creation. The resultant image may not look like a familiar building typology, the drawing might not even resemble a building, yet the spaces, or space, to be viewed will hopefully spark a discussion that drives at the meaning of architecture that is created through drawing as opposed to architecture that is merely represented; in the end, a drawing that is architecture.

III. Research Appendix 2:

Post Research: 5 Ideals of Architecture

This research project was motivated by the premise that a drawing could take on architectural meaning beyond its initial performance as a re-presentation of an architectural idea. Initially, there existed the goal to create a drawing that was architecture. In the creation of a process wherein the drawing is the research, however, there comes an understanding that a drawing may never be literal architecture; although, the means by which the drawing is created might be architectural, or at the very least, represent ideals that are fundamental to the creation, to the process, of architecture itself.

While initially enamored with the idea of a large-scale spatial drawing, the process developed over the course of this research project transformed into a working method that has more to say about core architectural values and less about the finality of a product. The act of drawing no longer presents itself simply as a means of displaying a final architectural work, a re-presentation, but rather is emphasized as an origin point, an evolution of process which may then be used in the formation of architecture and architectural space.

While the final drawing is, in itself, not architecture, the processes by which drawings are, and this drawing was, constructed reinforces lessons which are more deeply connected to the design and spirit of architecture than one might initially perceive.

Process > Product

The '*drawing as product*' has always been forfeit to the '*drawing as process*' and, despite allusions to this fact in the writings preceding the making of the drawing, the end product was initially thought necessary to establish deeper connections between drawing and architecture. However, such connections were already establishing themselves through the evolution of making—the transformation of process. The end continued to describe itself as indefinable, unknown, and, in many cases, a concept never to be reached; the final work, conceived through the process of drawing, erasing, and redrawing, has existed in many '*states of finishing*' but never in a '*finished state*'. In the case of the perspectives drawn from within the original four objects, and considered 'finished', they were deconstructed and used in the construction of the final drawing (Figures 5-8).

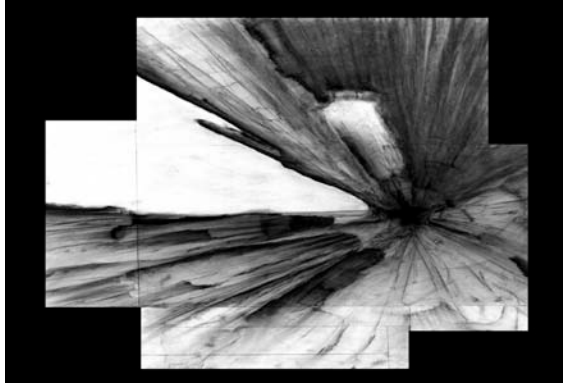


Figure 5: Log Perspective. Perspective as imagined within the object of the log. Vertical orientation.



Figure 6: Nest Perspective. Perspective as imagined within the object of the nest. Vertical orientation.

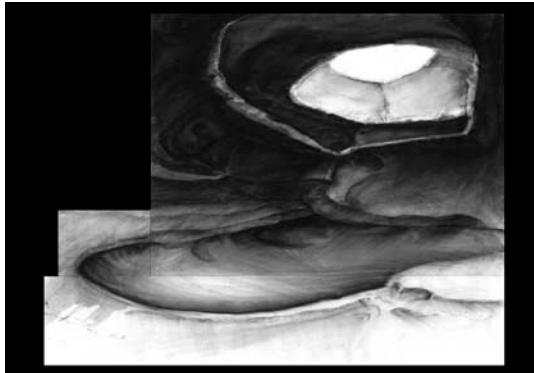


Figure 7: Rock Perspective. Perspective as imagined within the object of the rock. Vertical orientation.

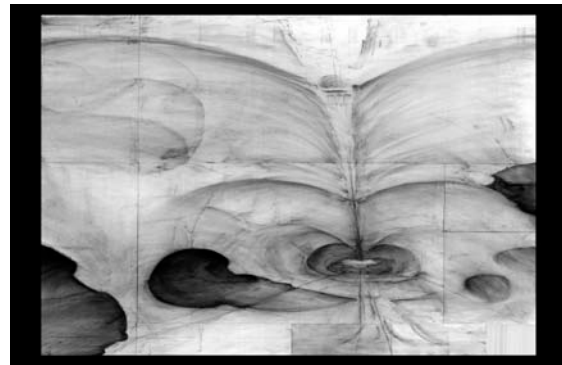


Figure 8: Bone Perspective. Perspective as imagined within the object of the bone. Vertical orientation.

There comes the realization that, in regards to this project, process was equitable to product, and, in the end, the process is perhaps more important than the product; or, rather, a product is only as genuine as the process that informs its creation. Considering the relationship between drawing and architecture, the means by which the former is created is fundamental to the conception of the latter—the process of drawing reveals, more than any other factor, the means by which the architect might construct the architecture which is initially born on, in, and of the page.

Drawing Process = Creation of Architecture

As has been the case over the course of this research project, much of the making was intuitive. Yet, it was through making, through drawing, that the intuitive process was more efficiently structured with ordered principles. The rules set up within the original prospectus provided the basic framework for the construction of a drawing. While developing the work, an adherence to, and a questioning of, the rules established allowed for a flexible drawing system that proved helpful in the decision-making later in the process. For example, maintaining perpendicular edges when adding paper facilitated the making of the larger drawing, as the pieces available already comprised a geometry whereby the individual pieces might be perpendicular to one another (Figure 9).

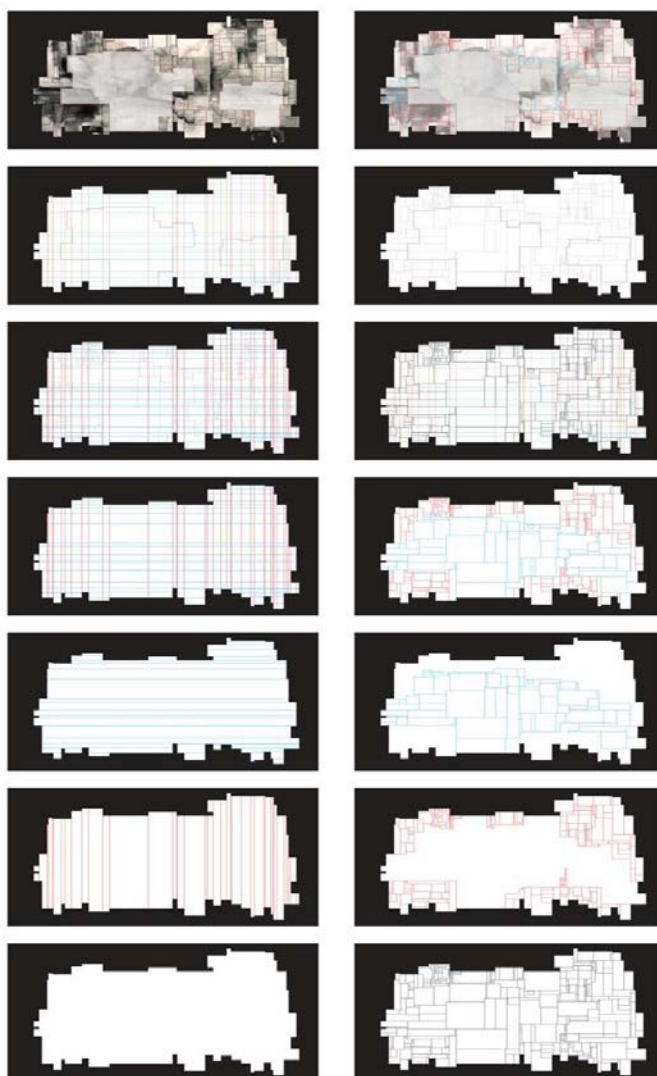


Figure 9: Final Drawing Diagrams. Diagram of drawing mid-development. An analysis of the pieces of paper, their joints, and the joints' relationship to the drawn space.

An existing rule thus proved a solution rather than a detriment, yet in the end, it allowed for larger questions to address the work; in particular, speculation about the frame of the drawing, and its erratic nature in contrast to the ‘regular’ frames used in the presentation of the work, brought about discussions regarding drawing the spatial implications associated with the edge condition. Such a discussion might never have come about without pursuit of this research topic, and while a ‘right’ answer was not chosen, the drawing elicits responses that might prove more beneficial to the field of architecture than this thesis alone. That is, while the thesis, in its pursuit of drawing as a critical component of architectural creation, seeks to contribute its findings to the architectural field, the questions it asks are far more important than the answers it produces.

More specifically, a method was created through which drawing might be used as a tool of conception in the creation of space and architecture; the latter two ideas are not physically rendered, but the drawing process created around this thesis enables one to ask critical questions of each in regards to their relationship with each other and to their relationship with their means of creation. ‘*Drawing as architecture*’ might be less valuable a phrase than ‘*process as architecture*’, where the former still retains its connection to product while the latter speaks to drawing and its true value to architectural creation. Nevertheless, where methodology is concerned, this research has demonstrated a solid foundation, spatial drawing, on which to stand in search of architectural questions; answers are not necessarily the goal, however, as it is the beauty of the search, pursuit of the unknown, that causes one to ask more questions. Ultimately, one must decide what it is about architecture, what ideals, are important to its creation as discovered through drawing.

Architectural Ideals

Implicit in these conclusions on process are architectural ideals that, once identified, are thought to both apply to the reality of representation as well as the reality of the built world—thus, one might use a similar process in the conceptualization of a architecture, as these ideals are fundamental to both drawing and building. They are:

1. *The Importance of the Hand*: Drawing by hand brings the architect, the creator, closer to the ideas and marks transcribed on the page. Rather than work by means of a computer, *crafting* the drawing necessitates a more methodical work-flow, as every piece of paper, every mark is thought about before it is incorporated into the larger whole, before it becomes a member of the structure that is the larger composition. The hand is the conduit through which the mind engages work, true in both the drawing and construction of form and space; the sense of craft imbues itself into the work, as one becomes conscious of the consequences of necessary decision-making
2. *Necessity of Decision Making*: Given that the final drawing was constructed within the latter half of the project, the work, much like a building, was dependent upon a process of quick decision making. The removal of error is embedded within the drawing method developed, given that any mark may be erased, sanded, or cut away entirely. Thus, a multitude of decisions ended as dust rather than components of the final drawing, yet they were necessarily made so that the ‘right’ marks might be discovered; in architecture, the first idea is not always the best solution to a problem, where time and iterative studies are necessary to reveal a viable path to a fruitful search. Drawing is the tool of conceptualization that allows for the active pursuit of iteration while, as discovered

within this process, understanding how time is a factor in the evolution of an idea, in the evolution of architecture and space.

3. *Embedded Sense of Time*: Architecture is forever linked to time; materials degrade, colors fade, light penetrates while shadows recede, and every building takes shape through an evolution of stages known as construction—all bow to time. Not only has this project, through photo documentation of the work, demonstrated a change in form over time, but also it has revealed the importance of time as it applies to spatial experience (Figure 10). As seen in the photos the space changes over time and, with it, so too does one's perception of that space. This is a factor often overlooked within the built reality, as many buildings exist as static re-presentations of an initial idea. The beauty of the process found in this thesis stems from the fact that ideas change, time changes, and space might change. Architects need to be aware, need to ask questions, of how their buildings might change, or at the very least, how their buildings might become as active and alive as the shadows that dance across their surfaces.
4. *Malleability of Architectural Ideas (Open System)*: The process discovered over the course of the semester provided an open system of drawing as well as an open system of thinking not only about drawing, but about architecture. The malleability of architectural ideas is often lost to the built reality, a world given to rules and regulations that, for the most part, never existed until they were created. A rule of architecture is no more a creation of the mind than a drawing is a creation of the hand, yet the latter is perceived as a more liberal pursuit than the former. However, as has been demonstrated within this drawing process, one might use the rules within a found system to the benefit of the project—rather than see sanding as purely a destructive, erasing process, it was transformed into the giver of light, used as a tool to *add* to the space just as easily as it might *subtract* from the space. The same mindset might be applied to architecture, wherein the rules of building might be rethought, reconfigured (much like the drawings were cut up and rearranged), to the service of a better architectural solution; within a process of liberation, there are no problems, only answers.
5. *Part to Whole*: A drawing, like a building, is a composition, a collection of parts brought together through organization, whether ordered or disordered. The construction of the drawing surface from the pieces of former drawings only furthered this point, calling into question the usual practice of building construction. All of the marks on and all of the joints of the paper work in unison to give presence to the space created; each piece might stand on its own as an individual work or space, yet its incorporation into the final drawing betters the larger space to be experienced when moving towards and around the drawing. As a discussion about architecture, then, one must consider the building as a composition, and see every component as serving the whole, and see every element as a contributor to not only the form of the building but the experience of the space (Figure 11).

This research has not reached an ultimatum, a final decision, about the relationship between drawing and architecture. Stated differently, this project has identified drawing, and the development of a drawing process, as a useful tool in conceptualizing architecture, yet it does not assume that the process set out in the prospectus and utilized over the course of the semester as the only means of addressing this relationship. Furthermore, although existing as a spatial composition, the final drawing has become more of a means to think about architecture in terms other than space, rather than specifically serving as the sole answer to architectural creation. In

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fact, this research project asks many more questions, and relishes the search as a means of discovering how the drawing and architecture might be related; the researcher may question how creating a drawing process might enhance the critical eye of the architect, might enable the architect to actively re-engage with *making*, and might ask the architect to re-assume the role of skeptical decision-maker—to make the unknown known through action.



Figure 10: Final Drawing Photo Sequence. Drawing as it developed over the course of the semester, beginning with the cutting and reassembling of the drawings in figures 5-8.

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Figure 11: Final Drawing. Final drawing phase. Horizontal orientation (with bottom recognized as the right side of the page). Original size: 6' x 12.5'.

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