

ABSTRACT

Title of Thesis: A WELL WITHIN A SINKING SHIP
Hugh Condrey Bryant, Master of Fine Arts, 2018
Thesis Directed By: Professor of Art, Shannon Collis, Department of Art

A Well Within A Sinking Ship is an exhibition of sculptures in The Art Gallery at the University of Maryland. It comprises four sculptural works exploring formal and structural possibilities within the context of destruction, reclamation, and salvage. In the following, I explain the basis of my creative practice and subject matter referenced and then provide descriptions and reasoning behind the sculptures presented in the exhibition.

A WELL WITHIN A SINKING SHIP

by

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University of Maryland, College Park, in partial fulfillment
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Advisory Committee:
Professor Shannon Collis, Chair
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Professor Justin Strom

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Dedication

This exhibition, *A Well Within A Sinking Ship*, is dedicated to the memory of a great educator and an even greater friend, Andy Dunnill. Andy was my professor during my undergraduate studies at the University of North Carolina at Greensboro. Were it not for his guidance and encouragement I would not be where I am today. He taught me a great deal about sculpture and provided the tools of inquiry every artist should possess. More importantly, he taught me what it means to live the life of an artist and for that I will be forever grateful. Thanks Andy, you're always with me.

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The Shakedown - Trial by Being

A thorough shakedown—a test period or trial run to weed out any subpar, flawed, or defective components, parts, and materials— is customary for any ship or aircraft, as well as most machinery or structures that must withstand prolonged periods of dynamic stress. A shakedown helps establish predictable life spans for components. It also optimizes long-term performance, functionality, and stability. Only after a shakedown can the subject be deemed fully operational.

Many parallels exist between the shakedown and the creative process. To create is to participate in a trial by being, to conceive and test ideas, to fail, to learn from those failures and ultimately to try again. The trial is the shakedown by which systems of building and constructing begin and forms emerge; cutting, welding pieces into place, cutting those pieces out again and then reassembling them once more. Combinations of process and material are trialed through improvisation and constant reconfiguration of the sculptural elements. The success or failure of the resulting forms within the structural system of the sculpture is determined by the artist. My creative process is a constant shakedown, testing pieces and parts and combining them to create operational entities; they become sculptures that reinterpret the subject matter and communicate successfully through the visual aspects of material, aesthetic, and form.

Two distinct but overlapping themes inform and shape my practice. One theme examines the destruction and aftermath of natural disasters. Of especial interest is the destruction of buildings and structures by earthquakes. The other is the reimagining and reclamation of forms in those ruins, mimicking them to create new architectural entities that explore structural possibilities. These themes inspire formulas and systems that are

applied to sculpture. Each one is a way to test ideas through the shakedown. The shakedown is an action-based means to a physical end, a trial of systems by which risking, making, and being become the grounds for fruition.

The Sinking Ship - Violent Transformations

Images documenting destroyed human landscapes are strangely beautiful and oddly exciting. Hurricanes, floods, and especially earthquakes are mesmerizing. Our order becomes wrought with the chaos of the natural world. There is something eerie and awe-inspiring about the blind, intentionless agency of natural systems that sweep through our constructed world.

Dynamic lines are present in the remnants of buildings. What used to be floors become pancaked together, overlapping in an undulation of material. What once was a series of stable right angles becomes a flexible pile of shifting instability (fig.1). There is tension in the leaning and slumping (figs. 2, 3, and 4). The unstable lines in shifted and shaken structures defy gravity. Their instability and defiance is what grabs my attention. The energy in these precarious forms is visceral, as if one could sense the pull of gravity and feel off balance.



Fig. 1 - Aftermath of the 1985 Earthquake in Mexico. Image by Corbis via Getty Images, obtained from: <http://www.dailymail.co.uk/news/article-4864392/Massive-8-0-magnitude-earthquake-recorded-Mexico.html> Accessed April 2018.



Fig. 2 - Aerial footage still of the aftermath of the 2011 earthquake in Christchurch, New Zealand. Obtained from: <https://www.ndtv.com/video/news/news/65-killed-in-massive-new-zealand-quake-191679> Accessed April 2018.



Fig. 3 - Collapse of an unfinished 4 story building after the 2010 earthquake in Haiti. Obtained from: <http://eqclearinghouse.org/co/20100112-haiti/general-information/fierro-photos-part> Accessed April 2018.



Fig. 4 - Detail of 3rd story from figure 3. Obtained from: <http://eqclearinghouse.org/co/20100112-haiti/general-information/fierro-photos-part> Accessed April 2018.

Beyond the lines and forms there is an aesthetic element in the textures of these materials. The bundles and bunches of steel reinforcement bars, the cracks and the transitions between the surface of the concrete and the underlying gravel come together (fig. 4). Distinct sections catch the eye. There is a rawness to the interactions of these textures. The imagery reveals and informs systems that can instill the same visual tensions and aesthetics within sculptures.

Reference materials depicting post-stress structural failures are intriguing. The isolation and focus on one structure at a specific moment is alluring. Figure 5 shows shear failure in two columns from the 1971 earthquake in San Fernando. The contrast between torn concrete and buckled steel bars is jarring. Figure 6 shows shear failure after the 1994 earthquake in Northridge, California.

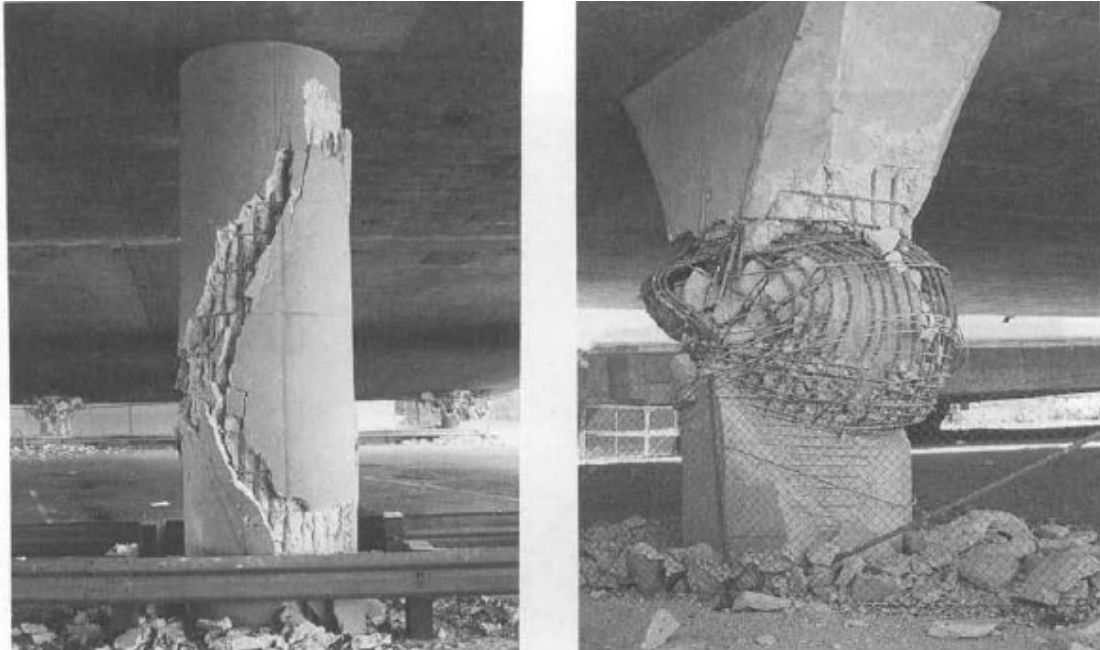


Fig. 5 - Shear failure within plastic hinge region, 1971 San Fernando earthquake. Obtained from: https://www.researchgate.net/figure/Shear-failure-within-plastic-hinge-region-1971-San-Fernando-earthquake_fig8_273573779 Accessed April 2018.



Fig. 6 - Comparison of retrofitted and unimproved concrete bridge columns following the 1994 earthquake in Northridge, California. Obtained from: <https://www.nap.edu/read/10799/chapter/3#24> Accessed April 2018.

The amount of energy unleashed by tectonic forces must have been immense. It is difficult to fathom such force. Applying the shakedown to test what is structurally possible while using systems informed by this subject matter is my way of comprehending these unseen forces.

Two sculptures from my thesis exhibition, *A Well Within A Sinking Ship*, reference this imagery. *Yaw* re-imagines shear failure. The term yaw describes a twisting or oscillating motion, usually of a ship or aircraft, along a vertical axis. The hexagonal prism that comprises the body was constructed in a straight frame. This framework was then secured horizontally to a heavy steel table. Pipes were inserted through the frame at each end and force was applied in opposite directions. The result is a twisted hexagonal prism (fig. 7). After achieving the twist, the middle section was cut out and manipulated by heating and bending the steel. Then more bars were added in an opposing spiral. The three sections were then fastened together and smaller steel rods were welded into the interior and onto each side to act as a support for concrete (fig. 8). Concrete was then applied to areas of the interior and surface (fig. 9). Manipulating the frame before application of the concrete allows the concrete to be shaped within the structure in response to the established form. This is accompanied by an interesting juxtaposition in processes. The reference imagery shows the result of a completed structure having undergone stress; *Yaw* is a structure that was created as stressed. The finished product is obtained by asserting control through a system of intent, whereas those structures that informed the system were born out of a loss of control.



Fig. 7 - Bryant, Hugh Condrey. In-progress photo of *Yaw*, Spring 2018.



Fig. 8 - Bryant, Hugh Condrey. In-progress photo of *Yaw*, Spring 2018.



Fig. 9 - Bryant, Hugh Condrey. *Yaw*, 9' x 2' x 2', Fabricated Steel, Concrete with Volcanic Ash (Mt. St. Helens), Spring 2018.

Pitch is the counterpart of *Yaw*. This sculpture follows a similar idea; a structure made as or meant to exist in a stressed state. *Pitch*, however, is not depicted as having undergone a violent transformation. Instead it depicts a column or buttress-like structure that is skewed, warped, and off kilter. Figure 10 shows the beginnings of the sculpture starting with the base. Right angles were avoided, relying on acute and obtuse angles. These angles and lines were followed as construction continued upward which furthered the skewed effect (fig. 11). The name is derived from the term pitch that describes the rocking or oscillating motion of a ship or aircraft from front to back along a lateral or horizontal axis. The shape came into fruition during the shakedown, using a system that responded to already established lines throughout the fabrication process. This system is quite different from *Yaw* as that frame was first built and then twisted. This sculpture does follow a similar system for the application of concrete but the interior is more of a focus. Planar sections created with reinforcement bar are pieced together over the interior structure and then coated with concrete. Where *Yaw* is destructively transformed, focusing on liminal moments where interior becomes exterior, *Pitch* explores a deconstructive avenue that leaves the exterior as a window to the interior (fig. 12).



Fig. 10 - Bryant, Hugh Condrey. In-progress photo of *Pitch*, Spring 2018



Fig. 11 - Bryant, Hugh Condrey. In-progress photo of *Pitch*, Spring 2018.



Fig. 12 – Bryant, Hugh Condrey. *Pitch*, 9' x 2' x 3', Fabricated Steel, Concrete with Volcanic Ash (Mt. St. Helens), Spring 2018.

The Well - Salvaging Possibilities

Architectural renderings, images of industry and salvage as well as the work of other artists help expand the range of possibilities. This comprises another set of creative systems that overlap with the examination of the destructively transformed. One artist whose work resonates with my own is Lebbeus Woods. His architectural renderings convey a futuristic dystopia while maintaining an air of wonder and hope. They are dynamic forms containing both mass and weightlessness as they climb upwards. Figures 12 and 13 are excellent examples of Woods' affinity for structures that stretch upward and out from their earthly foundations. They also appear as patchworks of salvaged materials pulled from aircraft, boats, industrial objects and even other buildings. This theme of salvage coincides with the systems and themes of destruction I use. Cranes, bridges, satellite dishes, boats, and aircraft, especially in states of disrepair, present new systems in the structural moments they display. The remaining works in my exhibition explore systems of balance and tension using reclaimed and salvaged steel components combined with newly fabricated elements. These sculptures carry a sense of mystery regarding their origin and purpose; each salvaged piece has an unknown history. They are architectural entities pieced together out of the old and the new.

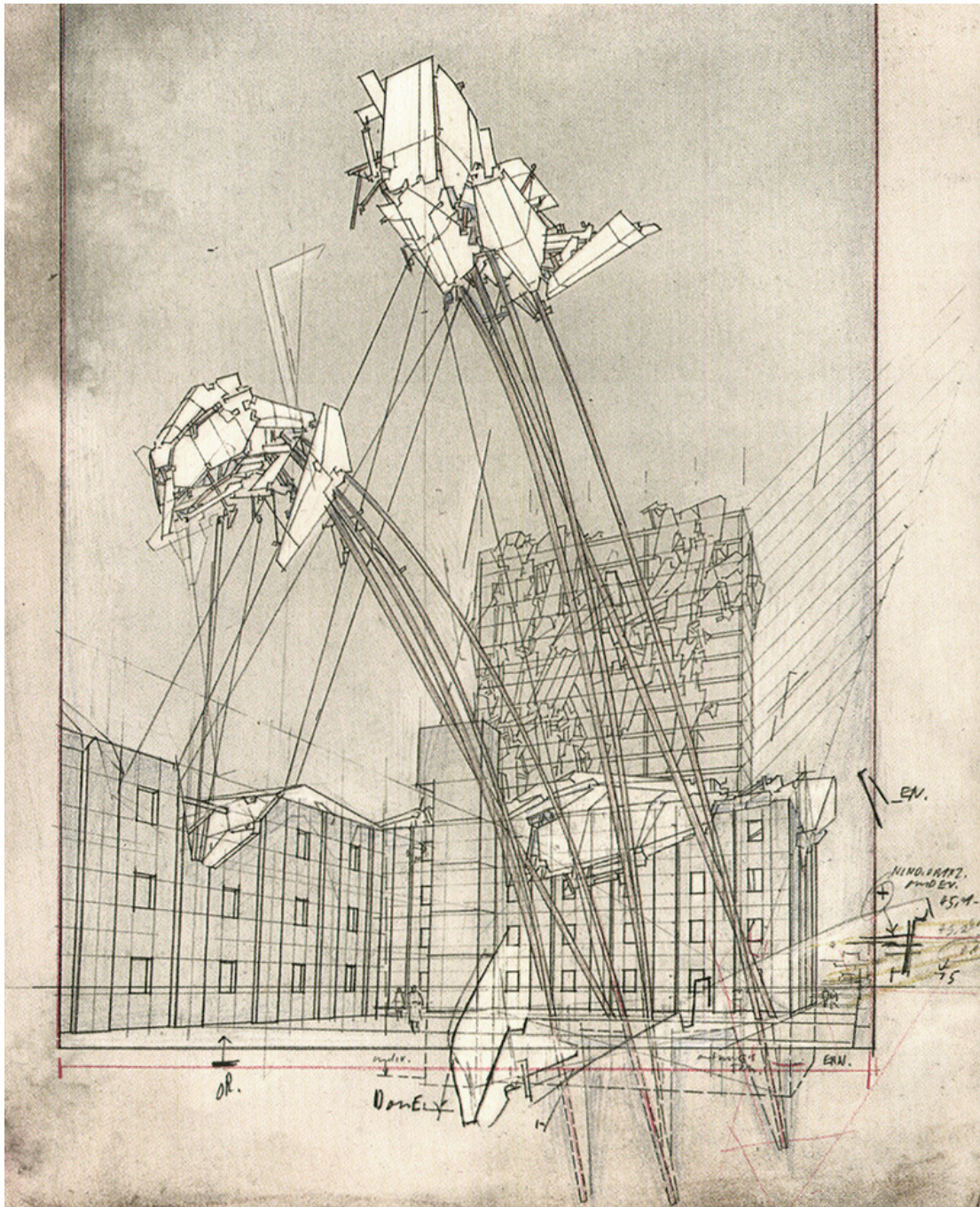


Fig. 13 - *High Houses*, from the series *War and Architecture*
Sarajevo, Bosnia and Herzegovina. 1995-1996 by Lebbeus Woods
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Accessed April 2018.

The sculpture *Pintle* uses a system of tension and balance and remains upright due to the pull of gravity. This required an intense shakedown that involved a lot of building, tearing down, and rebuilding to achieve the balance required for the piece to stand. While inspired by the work of Lebbeus Woods and imagery of industrial dilapidation, self-erecting cranes (fig. 14) and utility bridges (fig. 15) were also referenced.

Pintle is comprised of interconnected sections and stands 10 feet tall at its highest point. Frames bolted onto a central section of angle iron help with stabilization. A rear counterweight was fabricated and a cantilever section was fastened to the central angle iron support (fig. 16). Except for the lower stabilizing sections, which are bolted on, the rest of the components are secured with 3/4 inch pintles, for which the sculpture is named. Concrete was then applied to the lower stabilizing forms that act as foundational supports, grounding the piece. There is strong physical tension between the top cantilever and the rear counterweight. This tension is visible in the warping and bowing of the diagonal support that attaches the central piece of angle iron to the counterweight (fig. 17). This effect is caused by the pull of gravity as the cantilever torques and pivots on the pintles. The cantilevered section possesses the most mass and draws attention upward. The visual weight present in the top of the sculpture enhances the tension. It looms precariously above the gallery floor (fig. 18). Many parts of this sculpture are sections of steel salvaged from other structures. Those parts were retained in the weathered state in which they were found. They carry their unknown history in their appearance. When all are pieced together, a sense of mystery extends beyond the final floating form.



Fig. 14 - Photo of a Mantis self-erecting crane. Obtained from:
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Fig. 15 - Photo of a utility truss bridge. Obtained from: https://traccoh.com/traccoh_construction
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Fig. 16 - Bryant, Hugh Condrey. In-progress photo of *Pintle*, Spring 2018



Fig. 17 – Bryant, Hugh Condrey. Detail shot of *Pintle*, Spring 2018.



Fig. 18 - Bryant, Hugh Condrey. *Pintle*, 10' x 6' x 15' 6", Concrete and Fabricated Steel, Spring 2018.

The fourth and final sculpture of the exhibition is titled *Beacon*. It explores balance and tension with a system involving the oppositional pull of three articulating sections. The work of Lebbeus Woods and images of the abandoned RAF Spenigot radar dishes in Lincolnshire, Great Britain (fig. 19) served as inspiration.

Beacon has three leaf-like sections salvaged from the flanges of large I-beams that can pivot up and down. All three are mounted to I-beams that are configured and fastened into a hexagon (fig. 20). The pivoting sections are suspended by large steel cables connected to a central structure that protrudes from the center. The truss-like structuring of the central support mimics those present in truss bridges (fig. 15). The diagonal orientation is dynamic; the reach of the central support as it juts out adds further tension (fig. 21). As with *Pintle*, the salvaged steel used to construct this work possesses an unknown history. The resulting mystery mimics the experience of stumbling upon the abandoned RAF dishes. The title *Beacon* expresses hopefulness. When coupled with its mysterious nature, one wonders, what is it a beacon for?



Fig. 19 - The abandoned RAF Spenigot radar dishes in Lincolnshire, Great Britain. Obtained from: <https://witness.theguardian.com/assignment/51bf1439e4b08f0b0eb201ae/374290> Accessed April 2018.



Fig. 20 – Bryant, Hugh Condrey. In-progress photo of *Beacon*, Spring 2018.

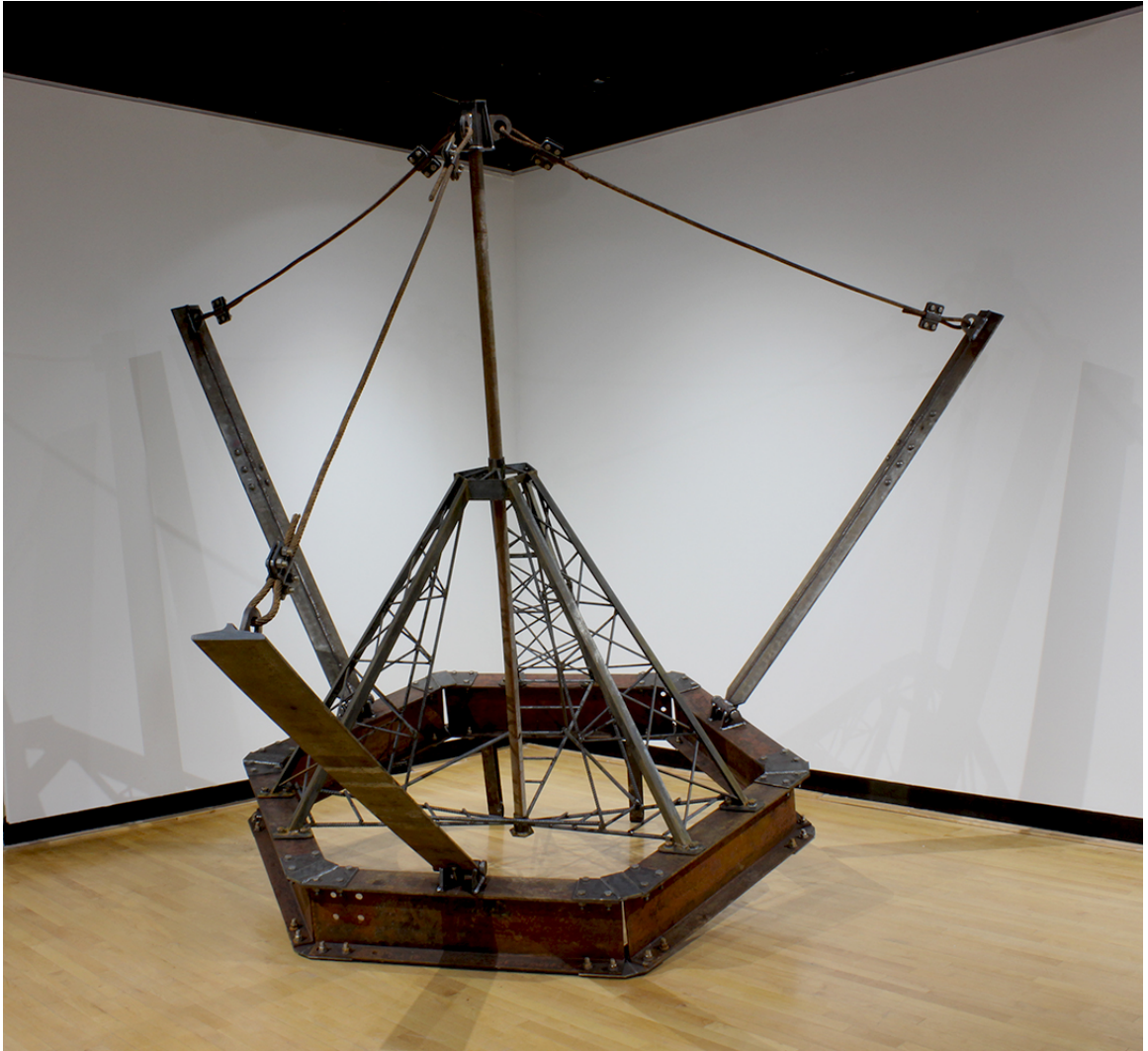


Fig. 21 - Bryant, Hugh Condrey. *Beacon*, 9' 6" x 10' x 12', Fabricated Steel, Spring 2018.

Conclusion

A Well Within A Sinking Ship is a sculptural exploration into the mystery and possibilities of what is beyond human control. The violent transformation of human architectural landscapes and the salvaging of elements from those landscapes become systems, guiding shakedowns where forms are tried and tested. The architectural entities that are produced carry unknown histories and origins. These works elicit questions for the viewer and those questions lead to possibilities. In essence, that is the purpose of the work.

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