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On the Six-Cornered Snowflake

Jackson Hescock

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BFA Studio Art (Painting)

Washington University in St. Louis

Abstract

On the Six-Cornered Snowflake, named after Johannes Kepler's 1611 essay on geometrically covering surfaces, is both the title of both my final thesis work and essay. Beginning with an inquiry into the nature of hand-made object as intrinsically valuable, my earlier sculptural work surrounding quilting is broken down and considered as a form of reverence for the American object. This is partly achieved through a comparison to traditional Japanese packing techniques and how my own assembly mirrors and converses with the graceful and sensitive packing of Japanese hand-made goods. Early 20th-century flight experiments are also hand-made objects of interest. Their history as tools, but more importantly as failures, introduces more clearly the importance and fascination I have with obsolete objects. The history of these machines, namely Alexander Graham Bell's tetrahedral kites, serves as the basis for an exploratory body of drawings used to highlight and reappropriate the obsolete machines. These drawings, in a similar fashion to artists Helen Mirra and Roni Horn, approach empirical science with a poetic lens. Through iteration and trust, the body of work orients itself towards a faith in mathematical systems and their miraculous adaptability, ultimately serving as the poetic crux of the work.

ORIGINS

A quilt is a mile, bound. Woven earth gridded and gridded again to a rectangular conclusion. If it would even be possible to know the distance between the sheep or budding cotton and the textile made from their donations. Even before covering the first heat-seeking body quilts have memory of land.

Years pass. Same family. Fabric eagerly absorbs crying and the subtle push of ambient air as bodies push through past that one chair where it always sits. The releasing hem is a form of comfortability. Patina is the relaxation of the object feeling at home. I don't think objects have amnesia.

Tarnished copper triangles hug with the help of stiff yarn. Four couples, eight singles. One shape with a geometric name that doesn't mean anything in the grand scheme of things. Tension balances them the wrong way. They are tied to a wall like sled dogs.

Thankfully vacuums are hard to come by in the day to day. Plenty of air.

SELFLESS PACKING

Object is a broad umbrella; man-made is still too vague of a term to know how something is made. For the past 200 years, the term “man-made” remains split into two categories: the handcrafted and the industrially produced. While artisanal goods have been around for centuries, the industrial object is the foil to reveal aspects of the hand-made that would otherwise have gone unnoticed. One factor which distinguishes in a singular form today’s industrially produced object from the old craft object and artistic object is that of outdating – the obsolescence of form (Dorfles, 1). Industrial goods are manufactured with such large scale for the masses. Thus, the changing taste of a 21st century culture is a heavy-handed factor in industrial production that continually alters the appearance and function of production. The mass-produced good is formally unstable (Dorfles, 2). Innovation and change are required to match the speed of a competitive playing field. The hand-made, however, operates on a much slower, old-world cultural scale. Objects like these are made with a degree of uncertainty and risk unseen in industry. In these accepted risks, the unique can manifest. These goods are personal and singular, made for the consumption or use of one maker who turns to them out of appreciation for the imperfect. Or out of practical necessity. The quilt is a meeting of need and the proximity of objects past their prime.

A grid of the dilapidation writ relevant. Like the quilt, my practice grids, weaves, and redirects the obsolete towards new problems, poetic and practical.



Figure 1, Jackson Hescoock, *As Specified by the Will and Testament* (2022), assemblage, dimensions variable

Handicraft's resistance to the obsolete is the basis for heirlooms. Hand-made objects often extend past the lifetime of their original maker or user and, in some cases, are

passed down to a younger generation to tend to. The interest in the heirloom spurred the creation of the sculptural assemblage, *As Specified by the Will and Testament*. The work is comprised of two components with equal emphasis and weight. The first is a set of two quilts, each handmade and found second-hand at estate sales. Their patina suggests they were well tended to and old. Storied and cared for. The second component is the shipping mechanism rigged together with dimensional lumber, storm windows, ratchet straps, Masonite, and packing tape. These packing materials are then rigged to suspend or secure the quilts between planks, glass, or polycarbonate plastics. The works lean against the wall to suggest a fleeting presence. Here now, ready for pickup. These quilts are in-between owners. The heirlooming process of transitioning between users is momentarily paused and literally framed for view.

The piece avoids using boxes or crates in the traditional sense. Instead, each apparatus is specifically constructed to meet the needs proposed by the quilts. These works are bespoke, made to measure like a suit. They fit their contraptions with precision. Or perhaps the contraptions fit the quilts. Each artwork is created in service of the object they house. They have no agenda but to display, protect, and relax. The manner in which the quilts are packed supersedes the presence of the packing itself. The quilts are suspended, not encased. Planes are laminated together by tension, not fasteners. The work is idiosyncratic and hyper-specific.

Traditional Japanese packing plays a role in my decision to work in this way.

Japanese packing, too, is bespoke for the contents. Their tailor-made nature makes them highly functional and protective of the goods they store. But these packages are also beautiful shapes in themselves. “In no way self-conscious or assertive, these wrappings have an artless and obedient air that greatly moves the modern viewer” (Oka, 9). In the same way that Japanese packaging imbues beauty upon objects in service of their protection, so does my work *As Specified by the Will and Testament* tackle the display and elevation of American goods without overshadowing the quilts. This work is an object created *for* an object.

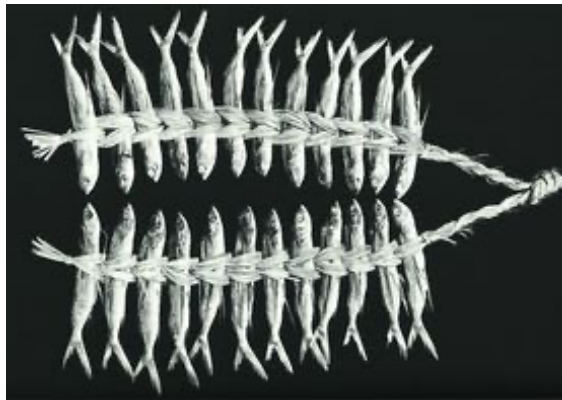


Figure 2, Artist unknown, *Fish Carrier*, roughly 20" tall, straw, dried fish

The selfless packing of Japanese goods is also an act of reverence and respect. The sequence of time and thinking that comes with packaging hand-made or natural objects is opposite of the industrial settings. Box sizes are usually standardized. Some

goods are manufactured, sized, and designed with shipping in mind. Thus, the mass-produced object is compromised on some level. In the case of the hand-made good, the role is reversed. The package is designed, altered, changed for the product. The allegiance to objects that comes with custom packages is an indicator towards systems of value. The Japanese craftsman who created this string of straw to carry fish greatly values the fish. Why else would they take the time to ensure their safety? The form of each fish is considered as is their integrity as food—this method ensures they can dry safely and remain fresh upon purchase. The good, the object is valued. My work, like the traditional Japanese package, quietly comments on the value of the shipped goods. Although the idiosyncratic structures are visually and practically quick, they nonetheless have specific care for the cargo.

Thus, the work hints at a value system. Why are these objects chosen as the recipient of such careful handling? Every textile included in my work is bought second-hand. The sale of a hand-made quilt is a poetic declaration of obsolescence. The artwork responds to a need for purpose. The quilts are the seemingly deserving recipients of their contraptions.

THE GULLS (SCHEMATIC)

“The two portly, bearded men puffed their cigars in companionable silence as they sat on the deck of the *Mabel of Beinn Bhreagh*, the Bell houseboat.

...

There was the occasional grunt as each man studied the seagulls soaring over the water. Finally, one of them grabbed the cigar out of his mouth, shook his head, and barked, ‘Isn’t that maddening!’

‘What’s maddening?’ asked the host, Alexander Graham Bell.

Dr Samuel Pierpont Langley replied sharply, ‘The gulls.’

Alec chuckled. ‘I was thinking they were very beautiful.’”

(Gray, 321)

Flight is the obsession of the late nineteenth-century inventor. The advent of steam and internal combustion engines gave promise to the turn of the century, wide-eyed optimist who looked to the empty sky with frustration and hope. Alexander Graham

Bell, having invented the telephone in 1876, too turned his attention toward the prospect of flight.

In lieu of the codified plane shape we enjoy today, Bell worked in a time when “flying machine” was still a vague term up for interpretation. His dominant interest was kites as opposed to winged gliders. Bell’s most interesting innovation during this period was the idea to construct kites out of tetrahedrons: four equilateral triangles joined together to make a pyramid; the cells could be arranged in twos or threes or thousands (Gray, 339). Permutations are variable. The kites are light and strong. Despite their obsolescence today, Bell’s kites flew exceptionally well. Several archived images capture the momentary flight of geometry. In the same frame the horse backed rider witnessed sky-bound pyramids of lattice, grids, crystal.

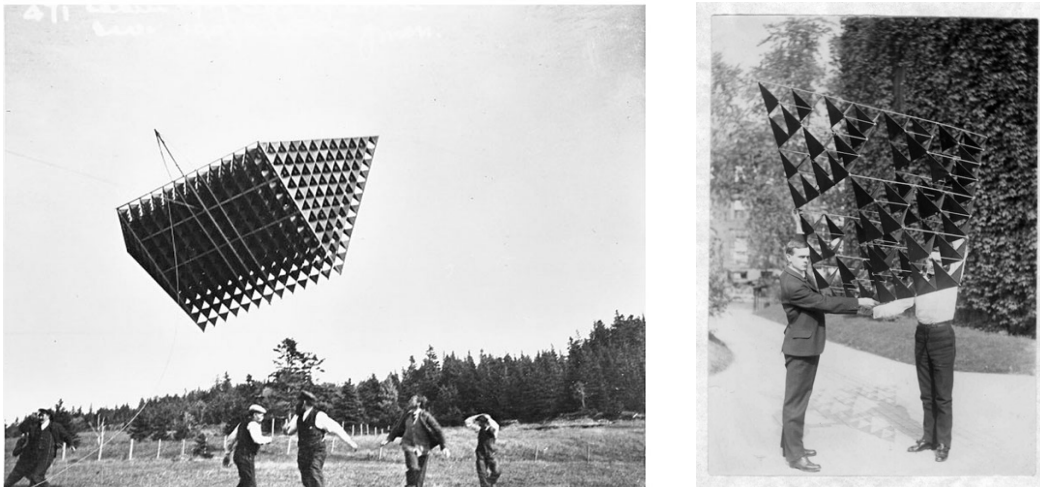


Figure 3, Alexander Graham Bell, *Tetrahedral Kites*, dimensions unknown, materials unknown

On December 17, 1903, the Wright Brothers' triumphant 12 seconds of flight deemed the glider prodigal plane. Thus, modern aviation was born and Bell's flying tetrahedrons became failures. Perhaps, though, only on a societal metric. Bell's kites succeeded from a factual standpoint—In the mission of flying, they met their mark. In terms of satisfying the need of society in their time, the Wright Glider provided the world with the shape and model that would find its way into mass production, hence the ubiquitous plane shape we enjoy today in the 21st century. The forced obsolescence of Bell's kites by the Wright Glider makes clear the difference between empirical and societal successes and how each constitutes a type of failure. The empirically successful object will not extend beyond its maker if society has no need for it. The object meeting the needs of its own time will proliferate until a new need is formed.

Failure can be thought of in terms of the two-fold man-made object previously discussed. For the artisanal maker, their goods may only be sought out by a small population of people interested in that option. And, if artisanal lies in the realm of the custom, then the bespoke is a way to harness and accept a fate of failure. The bespoke object is created opposite of societal or global needs. Production results in a single object of empirical quality, gifted or sold to a single recipient. Tetrahedral kites are the prototype, the failure, the airborne obsolete.



Figure 4. *On the Six-cornered Snowflake* (2023), tympa paper, Masonite, felt, washi kozo, steel.

*My thesis work *On the Six-cornered Snowflake* reverses the disappearance of Bell kites and plays off their obsolescence. A series of four drawings on yellowed paper make up the first part of this work. The drawn kites are simultaneously schematics and subjects. Graphite and orange colored pencil are used to make triangular grids reminiscent of drafting lines. The completed, unobstructed triangles are then colored in. Triangles with overlapping planes are left unrealized. The drafting language of the drawings makes them both hypothetical and grounded. As schematics, they*

presuppose something from the future. Given a scale and further instructions, these structures could be assembled and realized. The drawing predates the next thing, the continuance of a sequence. This is only communicated due to the carefulness of line and the visual language used. Math controls these drawings. Grids, turned and redrawn.

The schematic is bespoke in that it is custom. As depictions, they exist as tools in service of the thing they plan for. But the drawings also ground themselves. While they do presuppose something else, they nonetheless exist in the now. The schematic for the *thing* becomes a *thing* in itself. They rest on the ground and not the wall for this very reason. The drawings are simultaneously thing and concept. The specificity of these drawings as objects for objects is the allure.

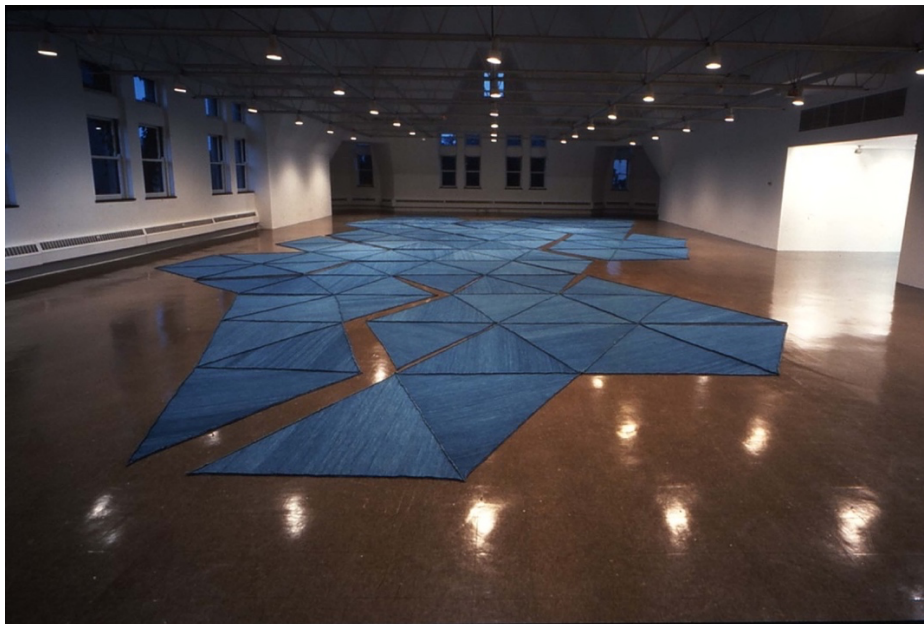


Figure 5. Helen Mirra, *Sky-wreck* (2001), dyed indigo cotton, 110 triangles

I place my work in conversation with artist Helen Mirra and her 2001 work, *Sky-Wreck*. What Graham Bell is to me, Buckminster Fuller is to Mirra. Her work explores the origins, limits, and application of the geodesic dome, Buckminster Fuller's empirically successful, but socially impractical idea for the perfect building. 110 triangles of indigo dyed cotton sprawl over an open floor. 110 seams connect the geometry. Albeit 220 of the 330 edges are left untouched. Gaps separate edges that the sky fills. *Sky-Wreck* lies somewhere between a diagrammatical sketch and the thing it depicts. Mirra's choice to render a three-dimensional object on a two-dimensional plane provides an inherent flattening. Buckminster Fuller's ideal structure is reduced to its mathematical form.

Mirra's work exposes the links between schematics and the *unpacking* of objects. The schematic unravels objects and presents them with a greater focus on physical, objective truth and the made-ness of things. Disassembling the object through sketches, blueprints, and plans is a reversal of production that pushes the product back into the realm of the prototype and the custom. In this sense, both my work and Mirra's reverse engineer an obsolete scientific idea to expose and harness the specificity of thinking responsible for their initial creation. Both Mirra and I have an interest in the redirection and reapplication of history. The forgotten idea can be respun toward a new goal.

ENCODING POETICS

Fuller's work had little practical application other than its ability to stimulate the imagination with beautiful forms. In one sense, the geodesic dome failed. But only by a single societal metric. On a poetic level, Fuller's work is potent. Mirra harnesses this failure to her advantage and leverages the form to attack a poetic problem of her own. The size and quantity of triangles in *Sky-Wreck* are determined by the size of the dome created given that humans can see five kilometers to the horizon line. Thus, the sculpture Mirra presents is a collapsed, scaled-down version of the sky we all see. Mirra dances around ideas of the horizon line, ownership of the sky, and the notion of *fixing* the area above us. A section of Ben Marcus's accompanying poem, *A Horizon Grammar*, lays out poetic theory regarding Mirra's work.

Is the sky an information?

For the time being the sky is a partial information. As such, it cannot be a clarity. Its hidden portion is carveable. Its outer flap is termed a horizon, which can be tucked under in the absence of light. (Marcus, 17)

Mirra unfurls Fuller's dome with careful encoding to approach her own poetic interest from the back side. The ulterior motive of metaphor hides behind history and mathematics and her own writing, only unveiled through careful looking and context. American artist Roni Horn is another avid encoder. Her drawings from the series *When I Breathe, I Draw* are swirling, geometric, and somehow meteorological. Horn's drawings are both simple and complex. From afar, they are formalist and simple. Geometries. Up close, they are geometries confirmed. Horn's mathematics for each angle remains present with faint pencil marks. Words are scattered between forms, floating together like clouds.

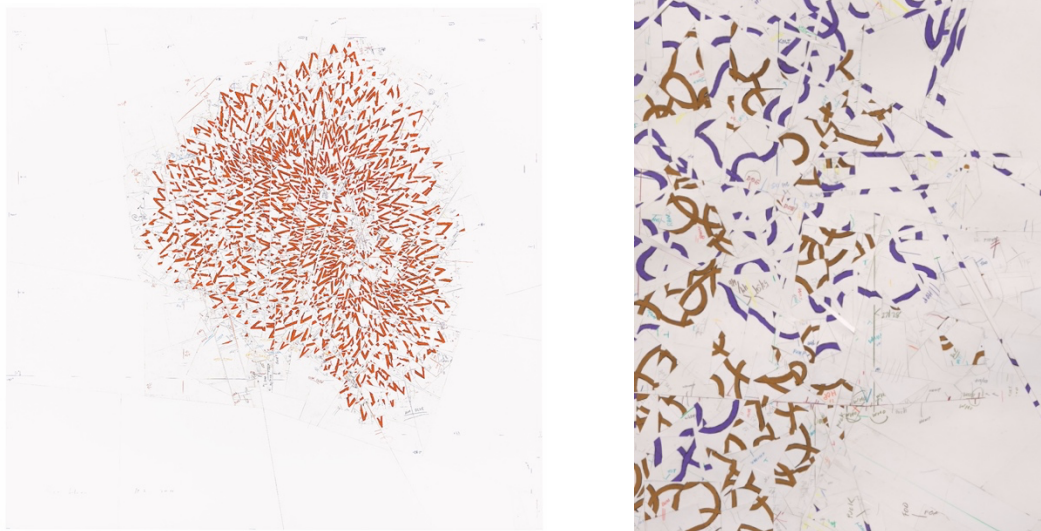


Figure 6. Roni Horn, *If 2* (2011), pigment, varnish, colored pencil, graphite pencil

The second part of *On the Six-Cornered Snowflake* is a long and narrow strip of washi kozo paper hugging the wall near the drawings. On it are mathematical instructions to nothing written with a typewriter. Hidden within this second part of the work are acronyms pulled from the radio language of instrument flying. Instrument flying describes the type of aviation in which pilots rely solely on the readings of their machine to navigate. In essence, flying with the faith of numbers and readings. Instrument flying is, on one hand, extremely pure in its objectivity. If flying is thought of in terms of physic and aerodynamics, empirical flight is pure flight. Or so says the human. Who is to say the airborne albatross doesn't enjoy a more poetic flight. Subjective, perhaps described by words and not numbers. My work is a combination of the instrument pilot and the albatross, switched. The drawing itself is quick and intuitive and *felt*. The words are calculated and rigid and *prescribed*. The schematic drawing, rooted in the bespoke failure of a century old kite, is the Trojan horse that sneaks poetics in through the gates. Like Horn and Mirra, my work is an exercise in restraint. *On the Six-Cornered Snowflake* withholds its secret words in place of the mathematic and geometric. The whispers lie within the edges of the triangle.

And in the faith placed in the mathematical system itself. Apart from fulfilling its own poetic agenda, my work unintentionally creates spatial maps of the environment it exists in. Grids connect with the lines of wood flooring, up to columns, back to itself.

The four drawings align themselves with everything; a further poetic truth emerges. Although the drawings were created simply as interpretations of obsolete flight machines, their cohesion and usefulness as a spatial tool speaks to the beauty of mathematics and system-making. Given enough time and iterations, any system of space or numbers *will* orient itself toward a goal or pattern. The faith placed in the 20th-century kite to abandon its original identity and confidently explore and find a new one is the final piece of poetics to sneak itself in. *On the Six-Cornered Snowflake draws its own dots and connects them too.*

END (PATINA)

Beneath boots
a mile of thin
green and black
herded into
rectangular paddock

Unnatural vine
lie in silence,
snakes too scared
to move.
Still, skin sheds.

Amnesia is
a creamy splotch,
bare crop rows
of a plain fuzz
trying to remember
its own name.

Clocks leave
thinness thinner,
flat glaciers
running from birth,
away from color,
towards the scars.

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3. Photographer unknown, *Photographs of Tetrahedral Kites*, size unknown, materials unknown.
4. Jackson Hescock, *On the Six-Cornered Snowflake* (2023), sizing variable, tympan paper, Masonite, felt, colored pencil, graphite, washi kozo, steel
5. Helen Mirra, *Sky-wreck* (2001), 110 triangles of variable size, indigo dyed cotton
6. Roni Horn, *If 2* (2011), pigment varnish, colored pencil, graphite pencil

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