

She's So Lucky,

She's a Star



Jenna Rothstein
Integrative Project
Thesis Paper

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1. Light distortion happens when rays of light pass from one medium to another. When light is going from point A to point B, and it passes through a new medium on the way, it refracts because of the different densities in material. Instead of taking the path of the least distance it will take the path of the least time (Hanrahan). Light travels quicker through air than it does a translucent acrylic, for example, so the acrylic will distort light as the light tries to find the quickest route. The change in density changes the speed that the light ray can travel at. Light moves in a straight line, until it doesn't (Doucet).

2. I'm interested in nonlinear natural occurrences. Nonlinear in the way that the ray of light is literally bent but also in the way that they are outside of usual. Oil slicks (in my mind, specific to strip mall parking lots and the bottom of neighborhood driveways) are caused by a thin layer of oil on top of the water slows down the rays of light, separating them into their individual frequencies much like a prism. Swimming pools, in backyards, public parks, and high schools create rays of distorted light called caustics. They are curved rays of light reflected and refracted by the curves of the water and bounce off each other to create a lattice of fleeting light rays (Hanrahan).

3. When people ask me what I'm doing, I've been telling them that my project is about light distortion, and how I am trying to get myself inside of a tube of glitter. When they push further, I say, "YEAH, OKAY, SEE YOU LATER," and then I briskly walk away. What I don't say: it's about this intangible awe of discovery. It's like walking up to a puddle on the ground and catching it at the right angle to see the sun refract through it. Figuring out new ways to see the world. My work is about the novelty of discovery for both my audience and myself.

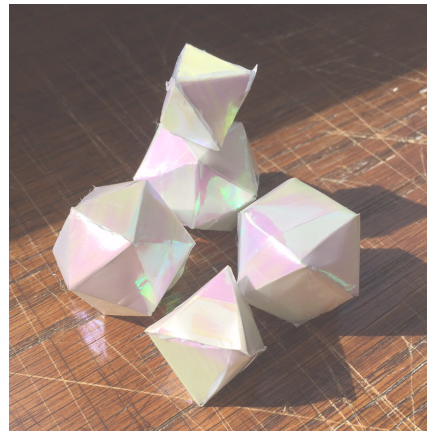
Thomas >



4. There was a little kid at the Hands On Museum in Ann Arbor who was in front of this interactive digital projection. The projection was a simple digital reflection, like a fun-house mirror, but with music and bright colors. He was dancing around and very much completely unaware of the fact that he hit me with his right arm. He was so captivated by this completely novel experience. In my head I named him Thomas. Thomas is my audience.

5. "My work is more about your seeing than it is about my seeing, although it is a product of my seeing. I'm also interested in the sense of presence of space; that is space where you feel a presence, almost an entity – that physical feeling and power that space can give." James Turrell. A presence can be created out of something that doesn't hold a tangible form.

6. This project started with tiny models to make tiny light distortions. I experimented with materials I'd gathered: reflection cubes, iridescent triangles, laser-cut hexagons, etc. I had iridescent confetti-strips, that are usually for wedding-related events. I wove them into this prism made of a copper frame. Then, I took them outside, to see what direct sunlight did when it interacted with my tiny art. Direct sunlight scattered the light off of the copper-iridescent prism and reflective shapes.

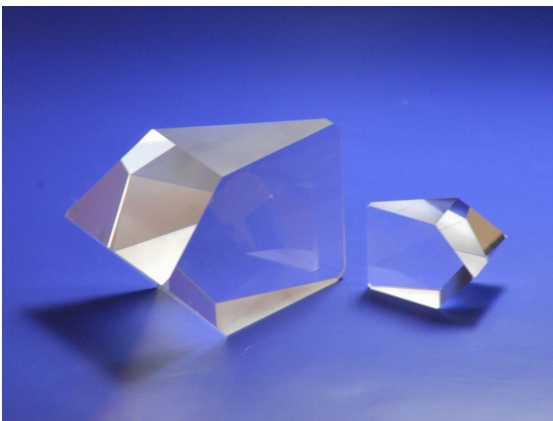


7. The weaving through the copper prism was my favorite, but I was not interested in the prism form. The material, and the quality of iridescence, needed a more organic form. Looking to natural forms that inspire a sort of awe in people, I found clouds, mountains, water. These forms are not standardized, have no recognizable patterns, and are not easy to capture.

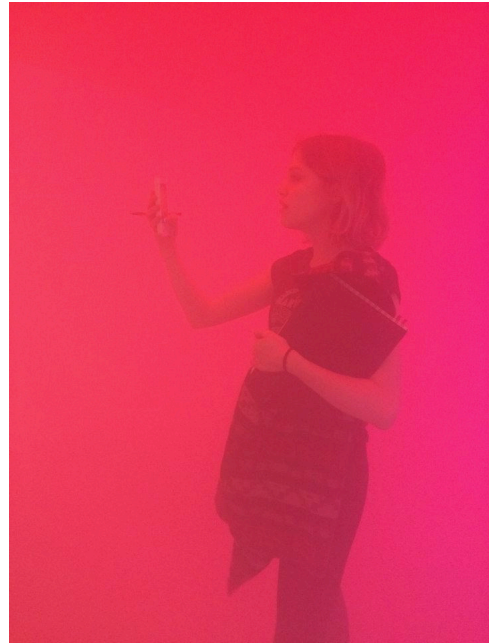
8. The human eye works in a prism-esq manner. It begins the process of sight when light is reflected off of an object and enters the eye by passing through the cornea. The cornea is a transparent layer that covers the eye, and it bends the light rays before they pass through the pupil. The iris expands and contracts in reaction to the amount of light present. After the rays pass through the pupil, they go through the lens, which refracts the rays more in order to focus them on to the retina. The retina is a layer of tissue on the back of the eye and it contains millions of rods and cones, which are light-detecting cells. The optic nerve then sends the information to the brain for it to be processed and understood (Dragoi).



9. Glitter in craft supplies, makeup, and hair accessories; the white and pink iridescence of my old "Secret Heart" Barbie's clothes, are materials that have transformative and magical properties. By twirling my Barbie around, or shaking the container of glitter, the materials always return to their static positions but profoundly different. The colors change, the shapes change, and the shadows change, yet the object is the same. Movement, along with the angle of the light source, profoundly transforms the properties that defines the objects.



10. Olafur Eliasson, a Danish artist who creates beautiful experiential light installations. I first saw his work in Denmark, a country of tall people that only wear black clothing. I saw two of his pieces in Aros, a museum in Aarhus, Denmark, a city of younger tall people that only wear black clothing. His piece, Feelings Are Facts, is a fog filled room with colored lights. Feelings Are Facts creates an immersive experience in which the viewer gets lost in a field of color (Elaisson, Olafur, and Ma Yansong).

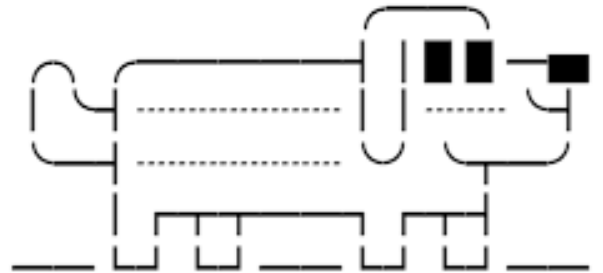


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11. I did a lot visual exploration during the days of the early internet. Geocities, Xanga, livejournal, and myspace all helped to form my views and interests. Web 1.0 culture goes along with my childhood captivation with sparkle and iridescence. To me, the internet is a place of discovery, especially the early internet. Growing up in suburban Detroit, the internet was a place to figure out things for myself and to escape the monotony of suburbia. The Web 1.0 aesthetic is defined by bright colors, archaic graphics, animated text, and garish decorations. ASCII emoticons, glitter text, and textspeak are all a big part of remembering and visualizing this culture(Chayka).



12. With his piece "Spherical Space" Olafur Eliasson crafts a light fixture using colored glass, steel and light to project colored geometric shapes onto the wall. This piece is a sculptural object that also creates a space that allows the viewer to be both inside and outside the piece at the same time. "What I am aiming at is to try to isolate the negotiation or engagement; that is, neither looking at the person nor the street, but instead at the in-between." (Eliasson).

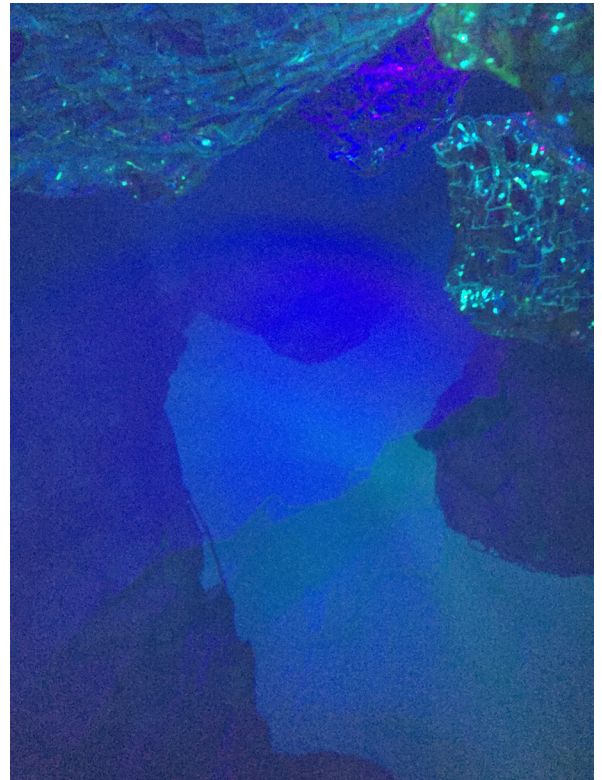
13. She's So Lucky, She's a Star consists of several asymmetrical cloud-like structures. The base of the clouds are made of chicken wire. In order to make the clouds I first form the hexagonal chicken wire (3' by 25') into a basic three-dimensional blob. Next I further form my desired shape by distorting each hexagon with pliers. This is to strip it's uniformity. The chicken wire structures are painted white. Strips of the iridescent cellophane (one-inch wide) are woven into the chicken wire cloud, so that the cellophane follows the shape of the form.

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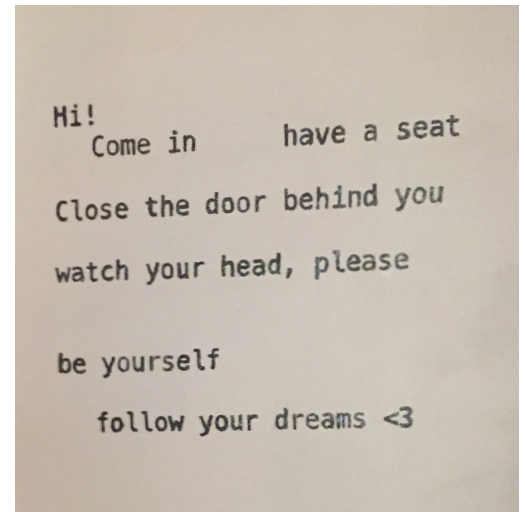
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14. I am interested in the illusion of space in conjunction with the optical illusion of light. I aim to create a sense of space that feels both magical and effervescent. All we know of the world is what we have created through what we sense (Plato's cave parable). What is real, how does the space I create through light distortion differ from the room it exists within? I want to explore the way we use light, pick up on it's distortions and quirks rather than its linear use. Rather than a means to reach a goal, or a way to light a path, light and light distortion are the products of my work, the goals themselves.



15. After my iridescent clouds structures are hung from the ceiling. The lights are wired and attached to the sides and tops of the clouds. The lights are color changing at different speeds and color schemes. She's So Lucky, She's a Star exists in a dark room with white walls, ceiling and floor in order to maximize the visibility of the movement of the light reflection/refraction. Seating is provided.

16. On the door outside my installation room are a set of instructions painted black in Courier New, with a glitter overlay. The instructions are "Hi! Come in, have a seat. Close the door behind you. Watch your head, please. Be yourself. Follow your dreams <3."

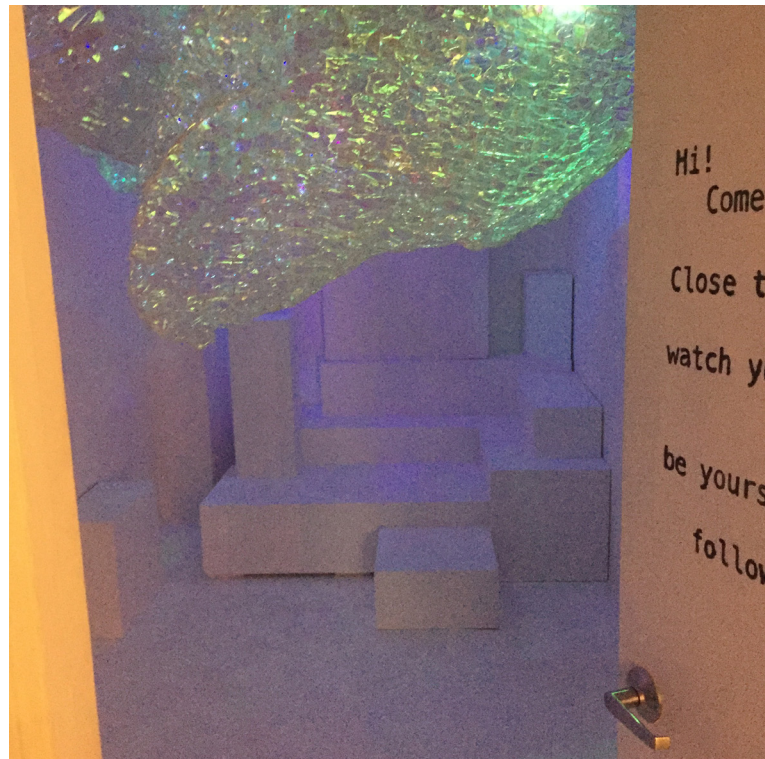


me after finishing
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17. "The medium not only reflects back, but also refracts what it is given; what is returned is ourselves, transformed and processed." David Rokeby.

18. This project started within an air of confusion. I had no idea what I wanted to do, I only knew what I liked. I liked science, computers, glitter, and rainbows. What I've come to understand through this process is a greater understanding of myself as an artist. My work explores multiple facets of culture, science, aesthetics, etc. What I aim for through the creation of art is mainly a deeper understanding of my subject matter. My work is the way I translate complex information in order to better understand it.



Works Cited

- Butler, Michael, Melissa Meadows, Nathan Morehouse, Lisa Taylor, and Kevin McGraw. "Iridescence: views from many angles." *J R Soc Interface* (2009). Web. 12 Jan. 2016.
- Chayka, Kyle. "The Great Web 1.0 Revival." *Gizmodo*, 28 Oct. 2014. Web. 1 Apr. 2016.
- Doucet, Stephanie M., Matthew D. Shawkey, Geoffrey E. Hill, and Robert Montgomerie. "Iridescent plumage in satin bowerbirds: structure, mechanisms and nanostructural predictors of individual variation in colour." *Journal of Experimental Biology* (2006). Web. 5 Feb. 2016.
- Dragoi, Valentin. "Chapter 15: Visual Processing: Cortical Pathways." *Neuroscience Outline*. The University of Texas Medical School , n.d. Web. 6 Feb. 2016.
- Elaisson, Olafur. "Your Engagement Has Consequences ." Olafur Elaission. N.p., 2008. Web. 6 Nov. 2015.
- Elaisson, Olafur, and Ma Yansong. *Feelings Are Facts*. 2010. Web. 6 Nov. 2015.
- Hanrahan, Pat. "Caustics." *Stanford University*. 9 Dec. 1997. Address.
- Rokeby, David. "Transforming Mirrors." David Rokeby. N.p., 7 Mar. 1996. Web. 19 Oct. 2015.
- Spears, Britney, perf. By Martin Max, Rami Yacoub, and Alexander Eric Krondlund. *Lucky*. Zomba Recording Corp., 2000. MP3.
- Turrell, James. *James Turrell*. N.p., 2016. Web. 2 Dec. 2015.