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We interact with maps on a daily basis, most likely more than we realize. We use GPS to navigate on our cell phones, watch weather reports on television, and use maps to navigate board games, video games, books, movies, and social media. Not only do we have these external maps, our brains are constantly keeping track of our orientation and keeping an awareness of our surroundings, even if they are familiar to us.¹ Humans have been making maps for thousands of years. Why are they such an important aspect of our lives?

Some of the earliest “maps” in human history were cave paintings depicting constellations in the sky. Between 12 and 40 thousand years ago, people charted the skies and equinoxes to record time in cave paintings.² The ancient Maya also used constellations to navigate, and because the skies were so important to them, star maps even influenced where their biggest cities were built.³

The oldest known geographical world maps were carved into stone tablets in Babylon around 2,300 B.C.E. These depicted a map of the empire surrounded by dangerous waters, a common theme in many ancient maps. This kind of map is thought to be a symbolic or religious representation of the world rather than an attempt at accuracy. The oldest surviving world map is one of these tablets from Babylon.

The first maps to represent systems of currents and swells in the ocean were sea charts made by Polynesian islanders from coconut frond midrib and sticks and shells, and bound together with coconut sennit. These sea maps were very complex and accurate despite not using any modern aids like the compass or sextant, and allowed people to navigate to and from hundreds of small islands in the regions of Polynesia and Micronesia.⁴

Over time, cartography has become more and more accurate, after developing countless surveying techniques. One interesting technique of the 13th century called a portolan map charted seas to a high degree of accuracy using a technique with compasses, which was only recently understood by modern researchers.⁵ The first map to use lines of latitude and longitude was the *Geographia* by Ptolemy. The



Ptolemy's World Map, Reconstructed 1482 (WikiCommons)

¹ “You Are Here.” Radiolab, WNYC Studios. 24 Jan. 2011. Web.

² <https://www.businessinsider.com/ancient-cave-drawings-are-constellations-of-stars-2018-12>

³ <https://kottke.org/16/05/mayans-located-their-cities-according-to-constellations>

⁴ http://thenonist.com/index.php/thenonist/permalink/stick_charts/

⁵ <https://www.discovermagazine.com/the-sciences/the-mystery-of-extraordinarily-accurate-medieval-maps>

lines were based on his studies in Alexandria and astronomical observations, and despite their inaccuracy, the *Geographia* was very influential to future cartographers. The original volume made around 150 AD. was lost, but this is what we know based on subsequent editions reproduced in the 1400s. It was made using woodblock prints and reproduced in atlases.⁶

The Mercator Projection, created in 1554 by Gerardus Mercator, was very influential to mapmaking because it allowed cartographers to plot the curved lines around earth as straight lines on a paper.⁷ Today, the world maps we are most familiar with employ the mercator projection, so we can draw straight lines continuing in one cardinal direction. However, the nature of this projection means that land near the north and south poles are distorted and appear larger in size than they truly are.

Today, many of us have highly accurate gps and satellite imagery at our fingertips, and the development of accurate maps is more dependent on our mastery of computers than human drafting skills. Personally, I am interested in the physical drawing and drafting involved in maps and the artists who incorporate cartography in their work today. I researched some different ways that artists approach the subject of cartography. Often artists are concerned with what maps can represent besides a literal terrestrial geography, for example mapping or recording certain routes, events, and meaningful places within a city or country. With their work, they encourage others to think critically about how our surroundings influence us, and tell stories with maps. For example, Molly Roy, a cartographer from Sacramento, uses maps to shed light on social issues and histories of underrepresented groups. She is currently working on a Sacramento Atlas Project, including research and stories on water use, levee systems work, the Black Panther activists in Oak Park, and Native American and immigrant histories in the city.⁸⁹

San Francisco artists Jennifer Starkweather and Amanda Hughen have worked together on a project called Climate Narratives, interviewing people from various backgrounds about climate change. Based on the interviews and stories they collect, they have painted a series of map-like abstract art.¹⁰

Geographer, professor, and artist Denis Wood studies everyday aspects of our geographical environments in his book, *Everything Sings: Maps for a Narrative Atlas*. The maps in this book are close studies of neighborhood streets, including the mapped route of a postman, light from street lamps, and more. He considers his maps as “poems” of cartography.¹¹ Besides these, I have found many other artists, including Julie Mehretu, Guillermo Kuitca, Casey Gardner, and Paula Scher, who incorporate the visual language of maps in their artwork to communicate their ideas and research on geography and cities.

⁶ <https://www.britannica.com/science/map/The-Middle-Ages>

⁷ <https://www.britannica.com/science/Mercator-projection>

⁸ <https://www.sacmag.com/magazine/meet-the-maker-molly-roy/>

⁹ <https://www.mroycartography.com/>

¹⁰ <https://www.climate-narratives.com/about>

¹¹ Wood, Denis. “Everything Sings: Maps for a narrative Atlas. *Places Journal*. Oct. 2011. Web.

Not only do maps help us get to the destinations we want to be, they also keep us from getting lost. Being lost is a fundamental part of being human, but we usually try to avoid it out of fear. In *A Field Guide to Getting Lost*, Rebecca Solnit considers what is valuable about being lost. Everyone has felt lost at some point or another, and sometimes it leads to discovery. Our capability to get lost, surrounded by the unknown, and then go through the process of finding ourselves again is a sign of strength and problem solving. Often, artists use their work to invite the unknown and help us find connections that were overlooked before. Solnit describes, “Certainly for artists of all stripes, the unknown, the idea or the form or the tale that has not yet arrived, is what must be found. It is the job of artists to open doors and invite in prophecies, the unknown, the unfamiliar; it’s where their work comes from...” (Solnit). Sometimes, we need to get lost to find new ideas, and in fact, “to calculate on the unforeseen is perhaps exactly the paradoxical operation that life most requires of us” (Solnit).¹²

Compared to our modern ones, we see how technically imprecise and inaccurate ancient maps were. As Jorge Luis Borges describes in “On Exactitude in Science” no map can be completely accurate besides a map the size of the land itself.¹³ When we look back at what are now considered inaccurate or funny-looking ancient maps, people in the past may seem so lost compared to now. However, aren't people always lost in one way or another? People are always trying to “find themselves,” whether spiritually or searching for meaning in their lives. There are so many parts of the Earth that we have never documented or charted in detail, let alone other planets and mysteries in the rest of the universe.

When we started final projects, I decided I would research cartography and its relationship to psychology and history, but despite choosing this subject out of my own interest, I was reluctant to start working on my project. I felt like I was lost. Since leaving Oxbow prematurely, I have had a difficult few months. Like many others, I have struggled with missing friends, distance learning, canceled events and graduation, and everything else that comes with quarantine and social distancing. While my family has a lot of privileges such as health insurance and a home to stay in, this pandemic has taken a large toll on my wellbeing and mental health. So, why do I currently feel lost, despite staying in place at home? I think that it was very difficult to abruptly leave Oxbow, a place that felt like a home to me and I expected to stay for much longer, and where I had to say goodbye early to some of the best friendships I have ever made in high school. At times I have worried that I may never have that kind of community again. However, thankfully we can try to stay connected over the internet. Many of us may feel at a loss for what to do during these times, as it feels like we are stuck and can't do anything. I find myself wishing that I had a map, some sort of direction so I don't feel so uncertain, but I am trying to come to terms with the fact that I am seeking a sense of direction that simply cannot be had right now. Instead, I need to accept being lost and find what is meaningful about it and what I can learn from the situation instead of trying to avoid it.

¹² Solnit, Rebecca. *A Field Guide to Getting Lost*. New York: Penguin Group Inc., 2005.

¹³ Borges, Jorge Luis. “On Exactitude in Science.” 1946.

By making my short film, I am learning how maps can be tools for “finding oneself” and expressing ideas about our surroundings. Incorporating research and inspiration from these artists and cartographers, I am representing a personal map (both external and internal) of quarantine, my experience leaving Oxbow, and my uncertainty about the future. Through my process I hope to gain a stronger understanding of humans’ relationship to the map and examine what makes cartography so important and its potential to be incorporated into artwork.

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