

Project 2: Space as Data

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Design Statement

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Locations are important to us in the context of our lives- they only become something other than just a 'place' when tied to memories, hobbies, or other people. Then, the information has meaning, and that personal connection is unique and can be related to.

What one person prioritizes in a place won't be the same as the next, so relaying those stories can make audiences appreciate or notice things they've never seen before, or extend a community for something largely private or overlooked.

In this project, I focused on representing map data of my home city of Mississauga in a way that places attention on pet-friendly parks and roads to them, physically making them important to the viewer via raised 3D layers of laser-cut material. People often default to hiking trails or dog parks when it comes to walking pets, but others don't live close enough to any or can't exert themselves; it's theme is of unappreciated quiet paths in populated city areas.

Research

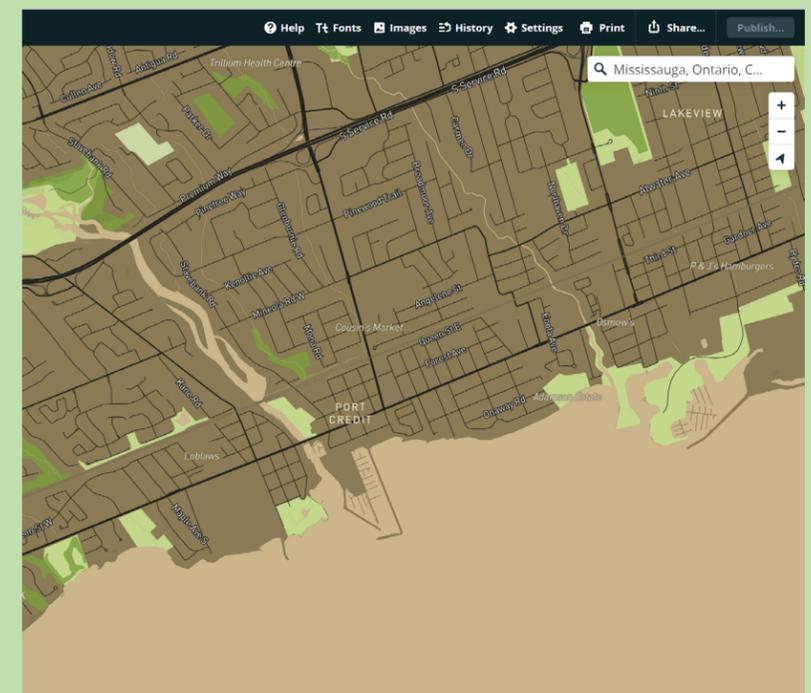
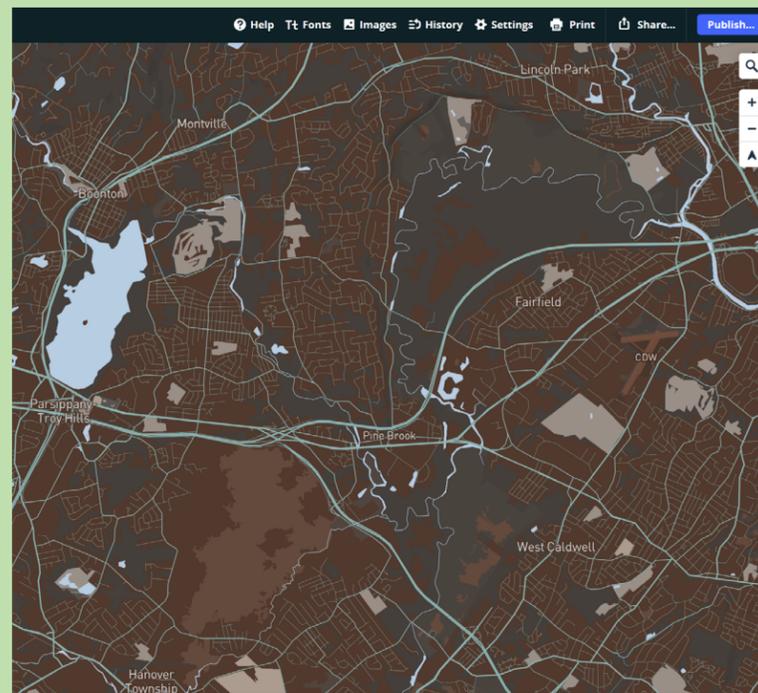
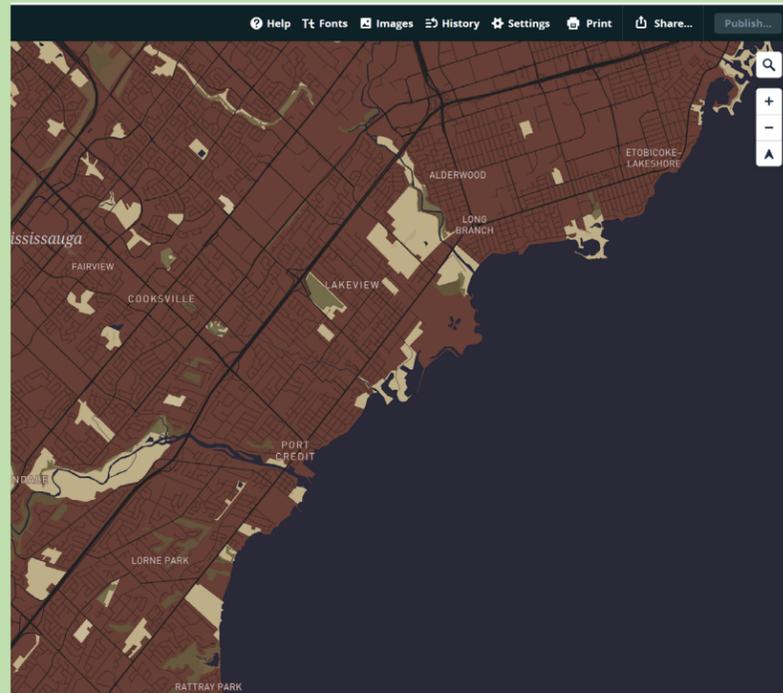
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The Spatial Workshops jumpstarted most of my project design- my initial idea were color palette generation and display of data, not emphasis on location or personal history. After that, I started to focus on areas I've traveled to when I was young or that were tied to culture.

The idea of recording information about a community area at it's present moment was striking, as public spaces being maintained and owned mean they'll eventually change since they're commodities (Berrizbeitia, 1).

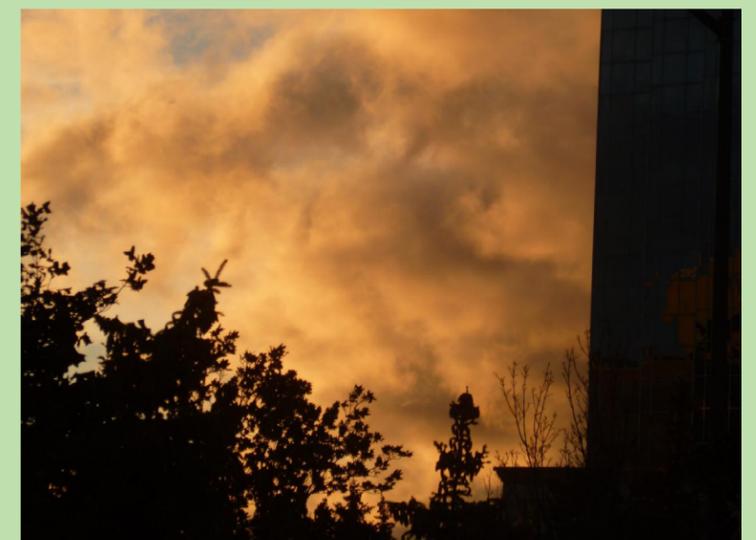
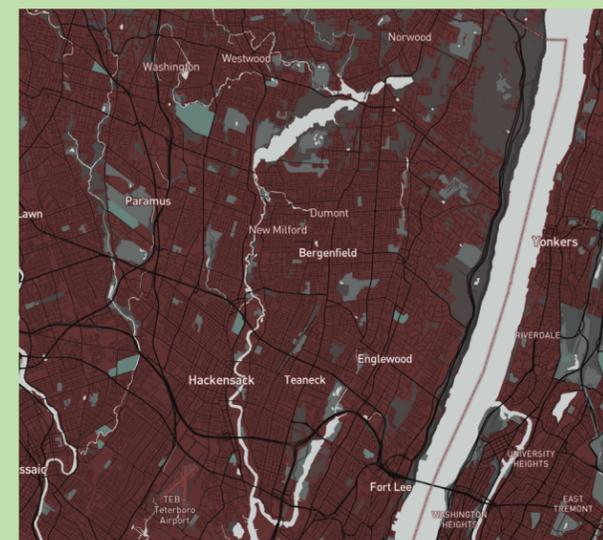
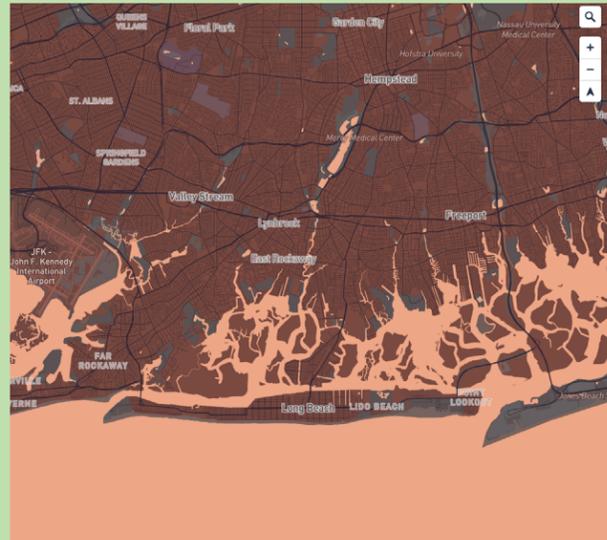
Research



Bachelard describes home is described as “the human’s first universe”, something integral to their memories and something you want to invoke to make them care (Bahadur). I agreed with that- I actually centered the example maps around where I lived without thinking about it, using an Oakville campus palette.

Experimenting in Mapbox made me think of contrast- in data size, overlap and color to grab user attention and have either a sense of urgency (natural disasters, etc.) or a logical connection (softer colors and related topics) to create a sense of history for a story or to inform (Hudak, Week 8, 16).

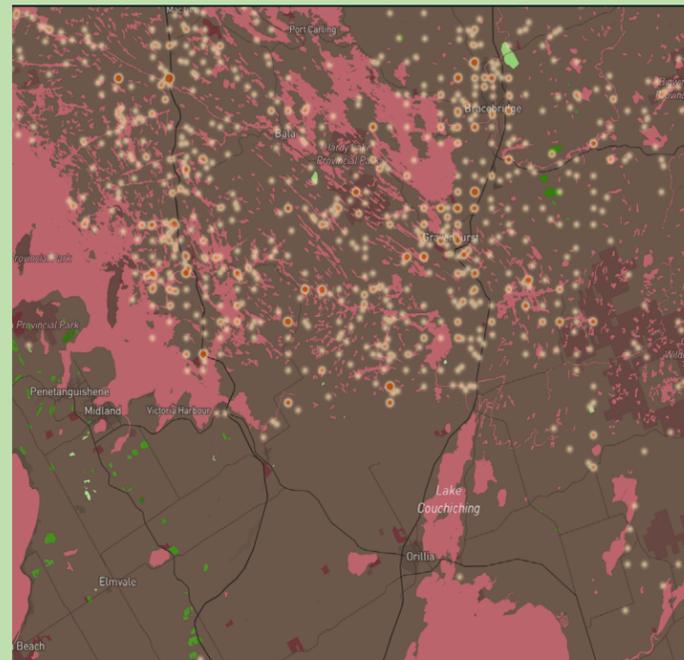
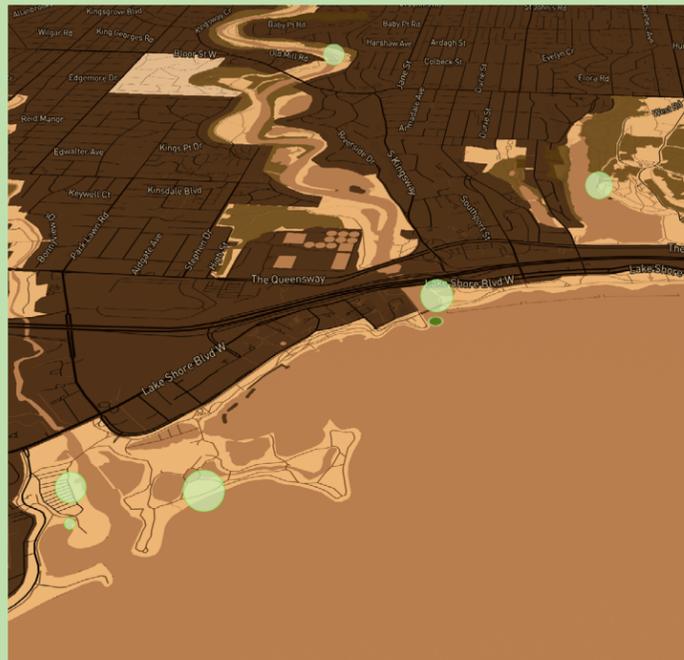
Formstorming



My initial maps used colors from location photographs (Sheridan, then Mississauga) and Mapbox's tools, though I considered monochrome and illustrations later. Ones with too high contrast made location labels unreadable, but they were good for setting tone.

Formstorming

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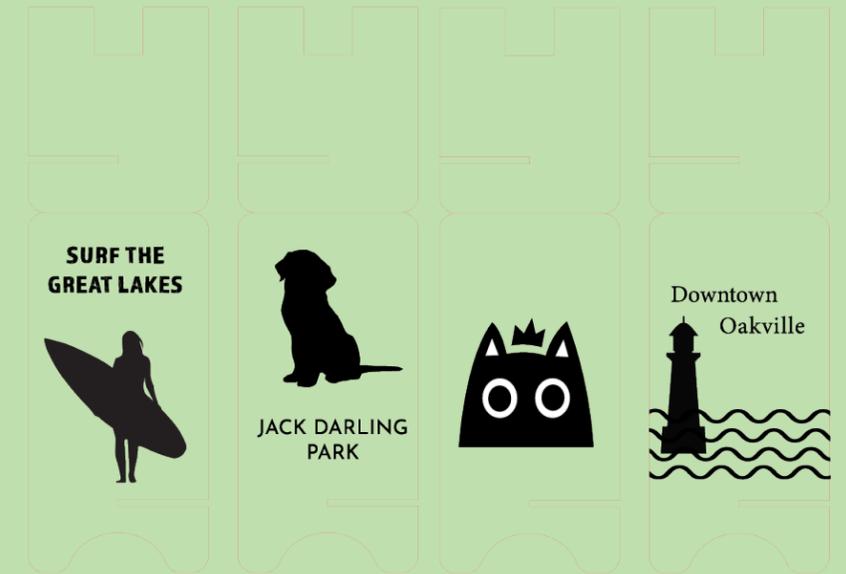
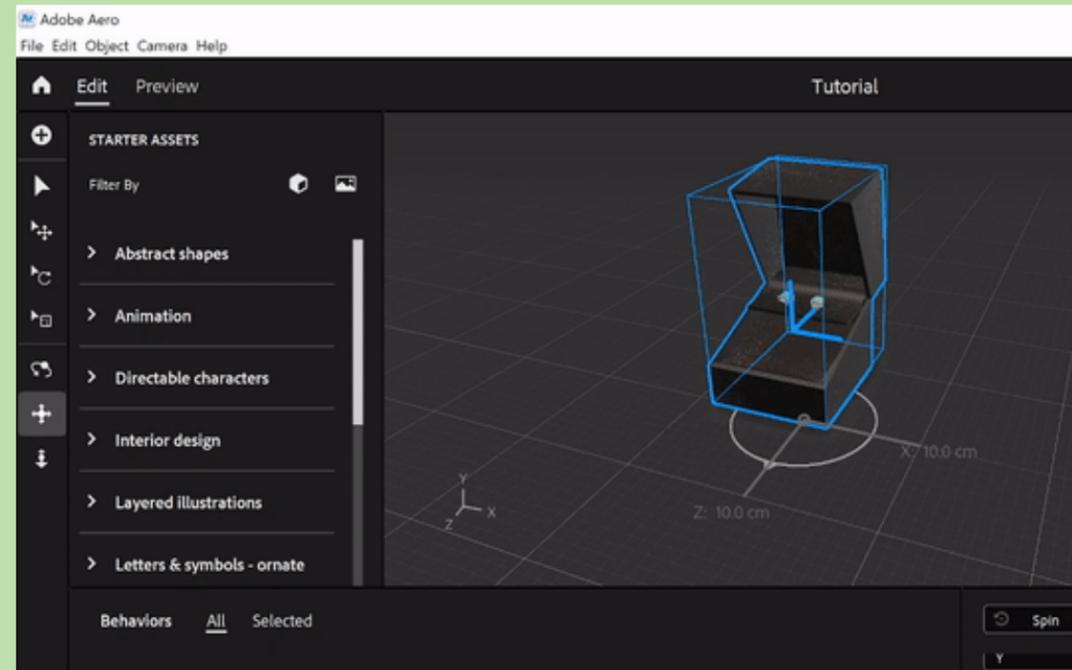


Bivariate data was more tricky- I had ideas for some potential graphs, tied to activities my family does like fishing, more general hobbies like hiking or information on plant life, but there was often no overlap for the data sets I picked, as they were either small, extremely general, or out of date.

Several types I tried to cross-map were: fish restock spots for game and fishing access points, forest fires and diseased trees, bear sightings and hiking trails, and more like crown game or traplines.

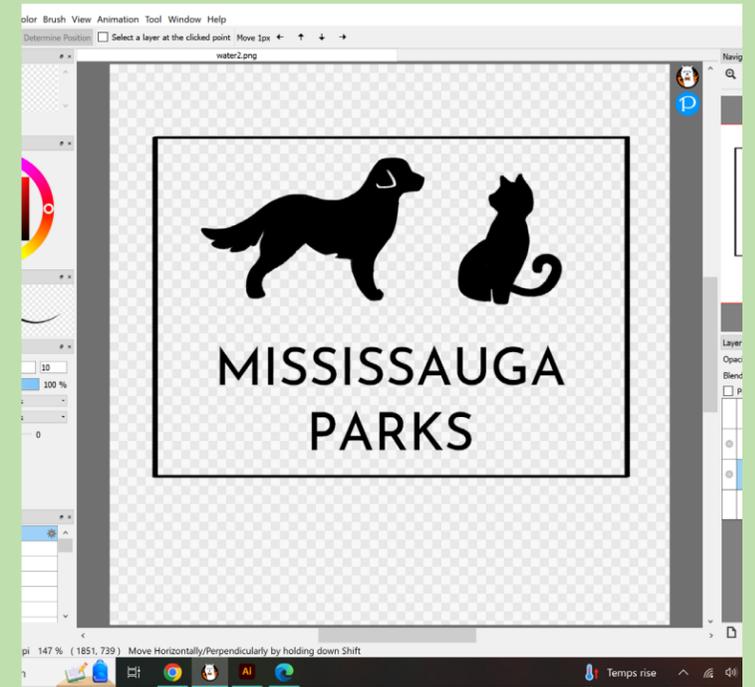
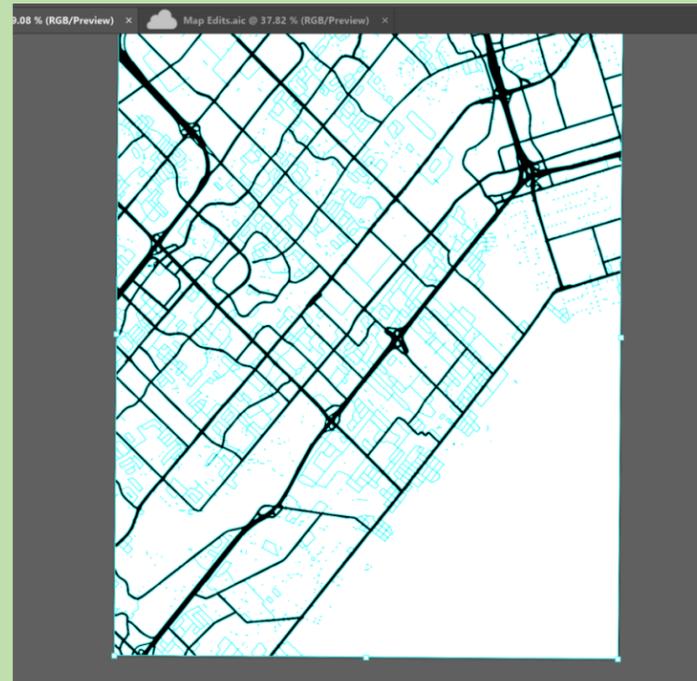
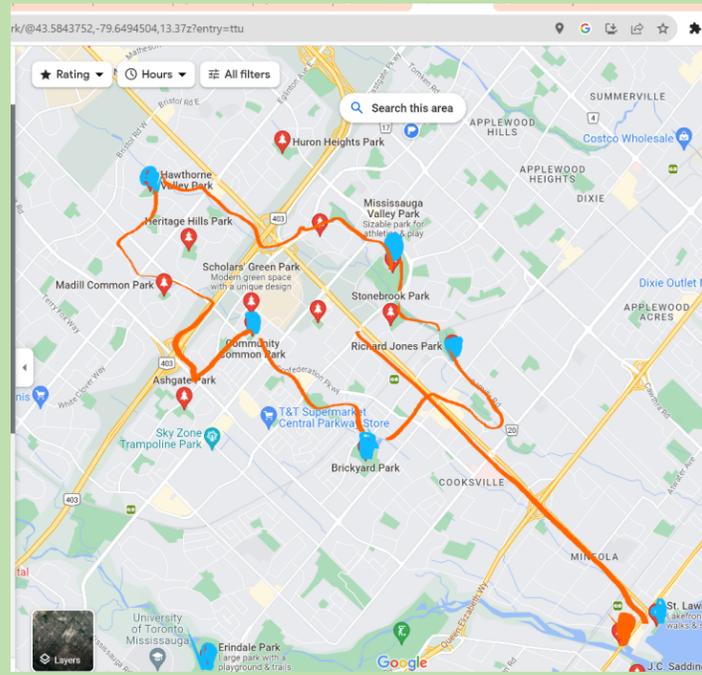
I ended up having bivariate data as a second choice for map style.

Formstorming



AR was interesting to try, especially with the concept of distance from a certain place playing a role in the design, but nothing specific to me jumped out about enhancing any single location. It did convince me to pursue something that covered a *set* of locations in an area more, because that was more interesting to me and familiar.

Formstorming



I focused on a series of parks that my family has visited before and the roads, balanced with some water in the lower third to help the layers show up. Buildings weren't important for outdoors locations, and it made the markers for the parks stand out more. Three layers- water, roads, the raised markers and a title sign, with icons I drew myself.

Final Design

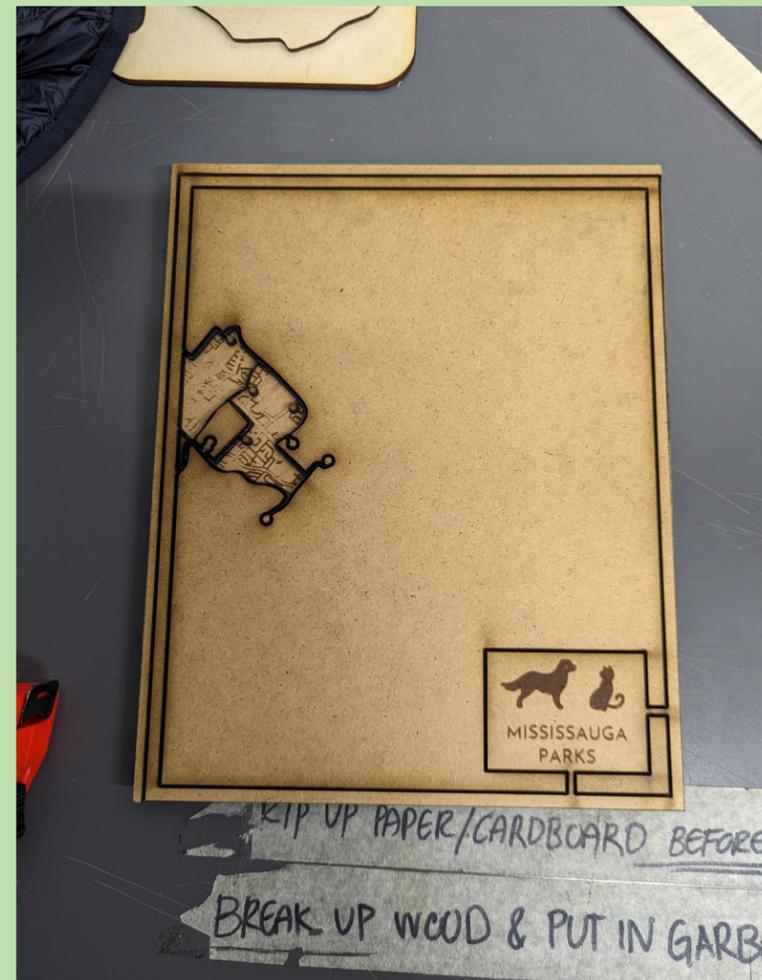
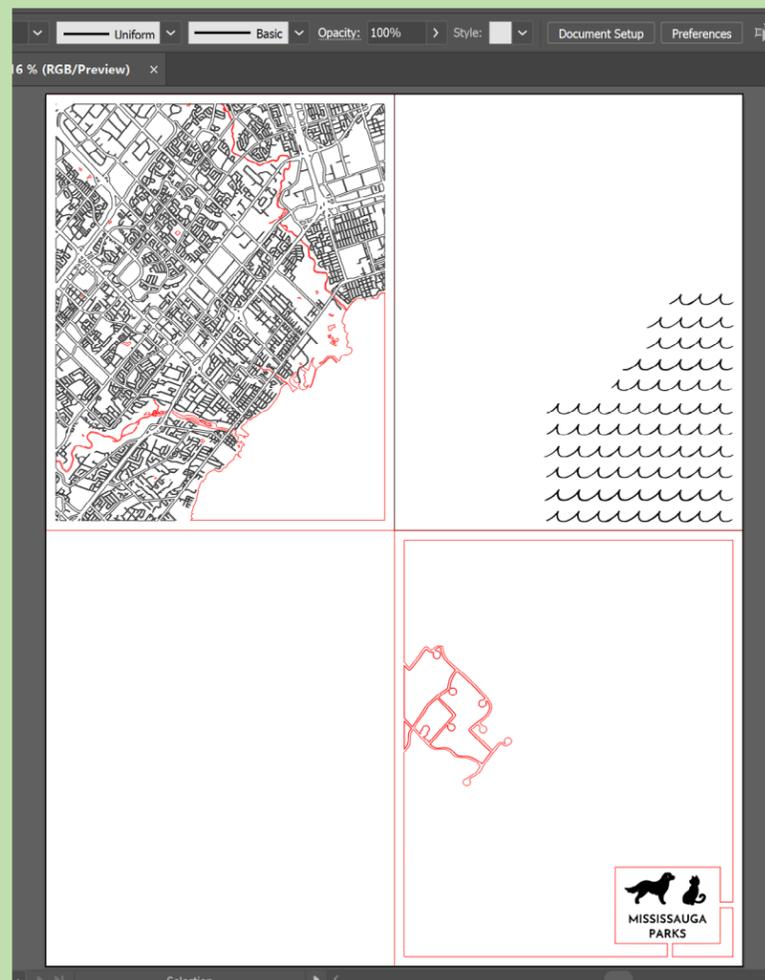
10



The final map design. The roads between the park markers were painted copper to catch the light and match the natural color scheme of the wood.

Final Design

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At the scale I did it at, the roads lines for the markers were extremely thin- I did manage to cut them out, but they were hard to see and nearly entirely burnt.

I salvaged the circular marker dots instead, gluing them down. Since the map is a real, physical object, I thought light catching off metallic paint would help the path visibility.

Reflection

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I didn't initially think that you could use maps as anything other than flat visuals, so I was a little behind in understanding that trying to represent or enhance something about a place would push a design much further than just going for strong aesthetics would. I was very interested in doing a bivariate data map, but found that it was easier said than done to find up-to-date geological data that overlapped in a meaningful way.

The use of layers and line depths for lasercutting maps is more effective than I assumed. It frames information and *feels* good due to raised sections and the sturdiness of weight. A larger piece of wood likely would have shown the roads more cleanly but I don't think I would've gone for three layers if that was the case due to the cost.

Trying to visualize map parts in 3D space took some getting used to, with me having to cut a lot of information out of the lasercutting file strategically after seeing information too large and generalized in the bivariate ones and scaling problems in AR. Nevertheless, the use of information to add context to a map, knowing geography will eventually change, to make a design a record of memory is a powerful tool to conceptualize to.

Citations

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Bivariate Map Data:

Ontario Ministry of Natural Resources and Forestry. (2022, August 23.) *Bear management area* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/lio::bear-management-area/explore?location=49.013258%2C-84.732487%2C5.16>

Ontario Ministry of Natural Resources and Forestry. (2022, February 14.) *Crown Game Resrves* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/crown-game-preserves/explore?location=48.544053%2C-85.958000%2C4.91>

Ontario Ministry of Natural Resources and Forestry. (2023, November 9.) *Fishing Access Point* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/lio::fishing-access-point/explore>

Ontario Ministry of Natural Resources and Forestry. (2023, October 26.) *Fish Stocking Data For Recreational Purposes* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/mnrf::fish-stocking-data-for-recreational-purposes/explore>

Ontario Ministry of Natural Resources and Forestry. (2022, May 9.) *Fire Disturbance Area* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/lio::fire-disturbance-area/explore>

Ontario Ministry of Natural Resources and Forestry. (2022, December 14) *Forest Disease Damage Event* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/lio::forest-disease-damage-event/explore?location=50.580480%2C-84.745000%2C4.91>

Citations

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Ontario Ministry of Natural Resources and Forestry. (2021, August 19.) *Ontario Trail Network (OTN) Segment* [Data set]. Ontario GeoHub. <https://geohub.lio.ov.on.ca/datasets/mnrf::ontario-trail-network-otn-segment/explore?location=49.013258%2C-84.732487%2C5.16>

Ontario Ministry of Natural Resources and Forestry. (2022, August 23.) *Trapline area* [Data set]. Ontario GeoHub. <https://geohub.lio.gov.on.ca/datasets/trapline-area/explore?location=48.986863%2C-84.732487%2C5.06>

Research:

Bahadur, Tulika. "The Poetics of Space." On Art and Aesthetics, WordPress.com, 4 Oct. 2020, onartandaesthetics.com/2016/10/05/the-poetics-of-space/.

Berrizbeitia, Anita. "Social Conflict." Landscape Theory, 1 Jan. 2018, landscapetheory1.wordpress.com/category/people/social-conflict/.

Hudak, Steve. "*Interaction Design Week 8*" [Powerpoint Slides]. 10 Nov, 2023, Sheridan College. Lecture.