

Another Atlas of Minor Projects

A COLLECTION OF CARTOGRAPHIC EPHEMERA
FROM 2021–2023

by Daniel P. Huffman, Πινακογράφος

Introduction

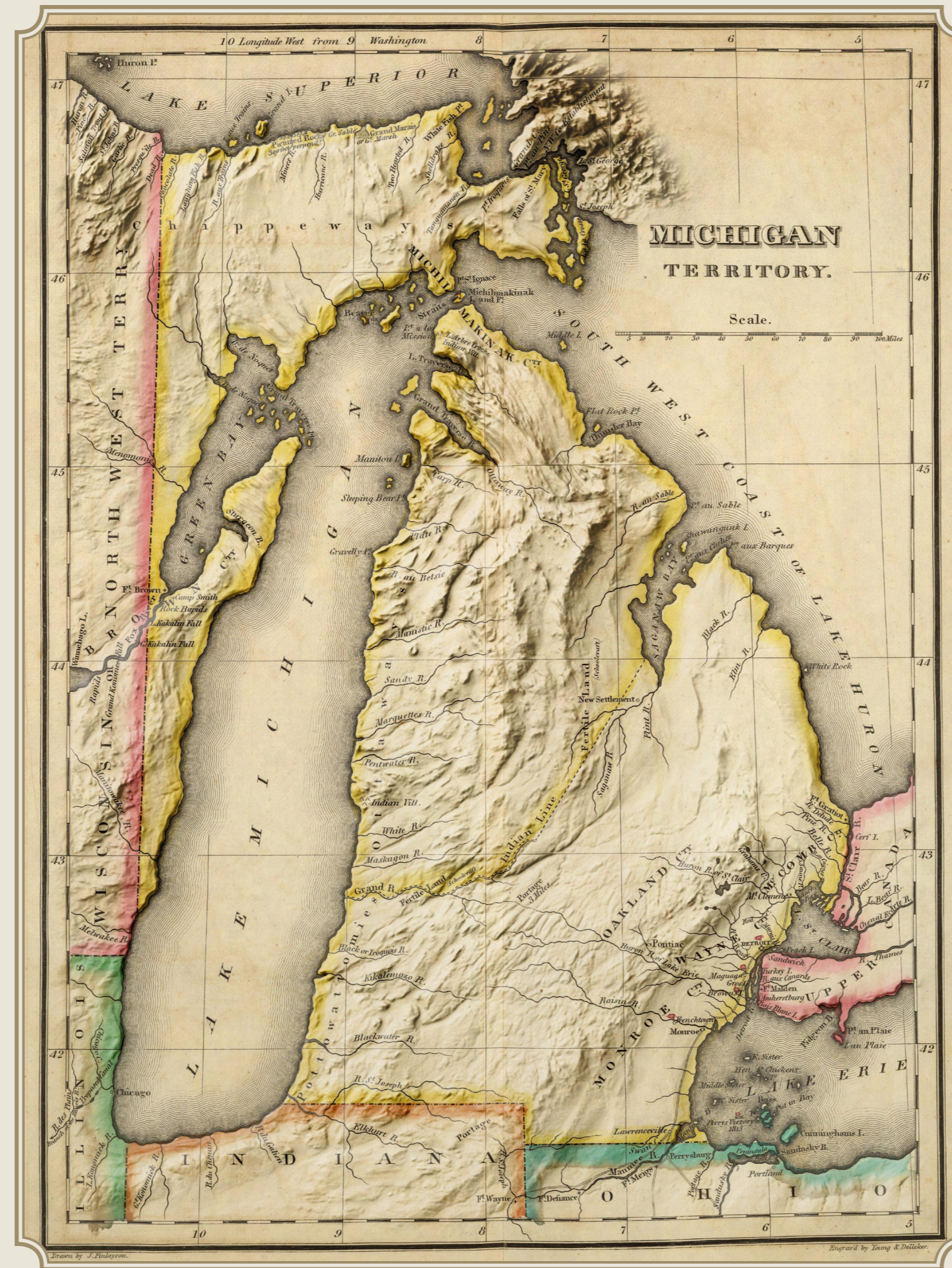


I CONTINUE TO MAKE A LOT OF LITTLE RANDOM CARTOGRAPHIC things in my free time. Mapmaking isn't just my profession, it's also a major hobby, and so my hard drive and social media accounts are littered with small (and occasionally large) creations that no one paid me to make. These efforts entertain me, and teach me new skills. They satisfy my ego by letting me show off to my peers. Or they prove why something was a bad idea.

MOST OF THESE PROJECTS STILL DON'T REALLY LIVE ANYWHERE. They don't get published in books, and they're too minor to blog about. I show them off on social media, and then often forget about them entirely. Half of the fun of preparing this atlas is remembering stuff that I made, and techniques that I want to try again.

SO I'VE ONCE AGAIN DECIDED TO COLLECT A BUNCH OF THESE FRAGMENTS into an atlas, giving them all a permanent home alongside their brethren from the first volume. It will help me out the next time my fuzzy memory prompts me to try and recall "that weird thing I did a few years ago." And perhaps in the meanwhile it will be of some amusement or inspiration to you, as well.

Daniel P. Huffman



1822 Michigan Map with Modern Relief

FEBRUARY 2021



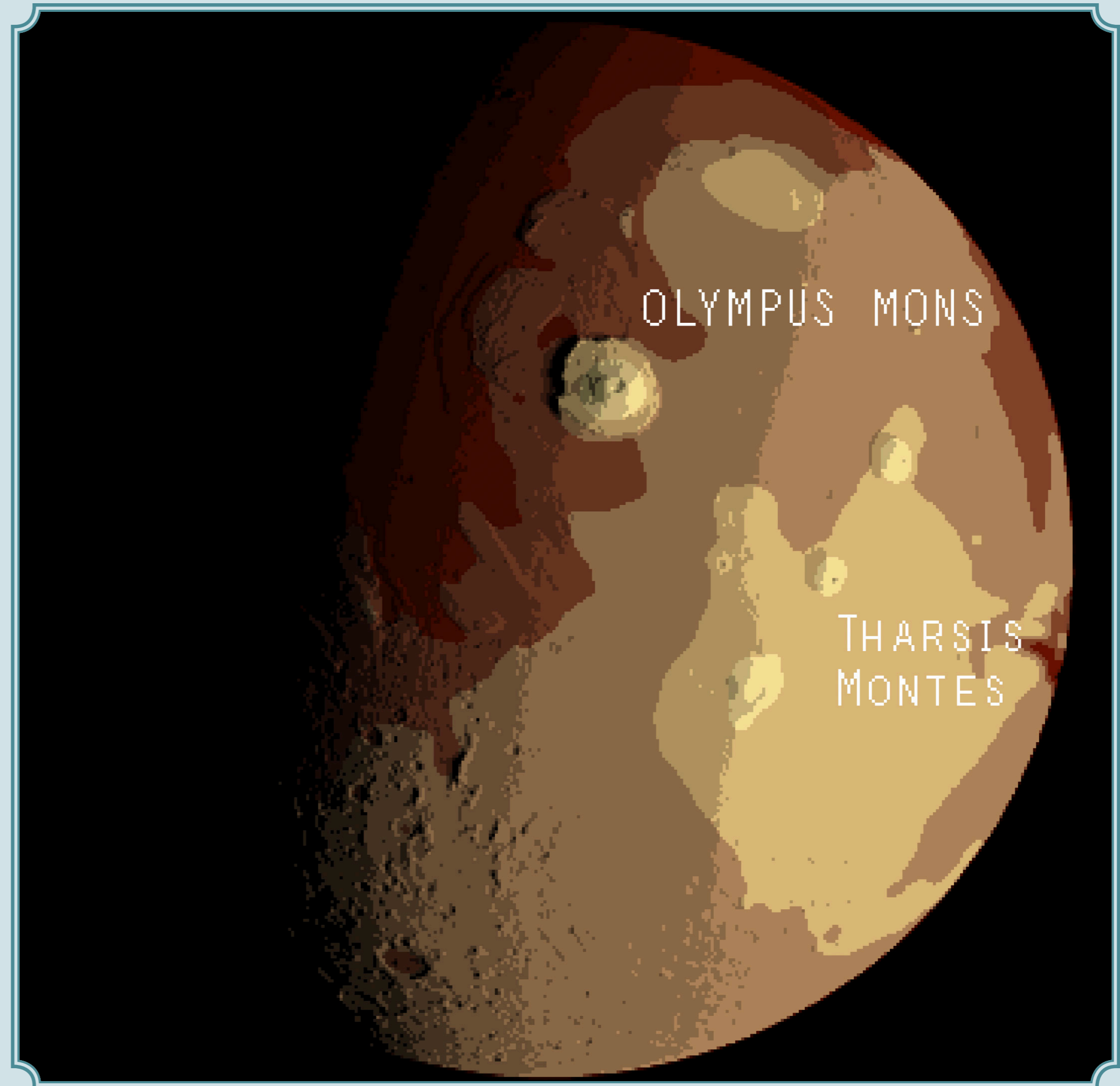
THE INTERNET IS LOUSY WITH OLD MAPS THAT PEOPLE HAVE ADDED shaded relief to, either for amusement or (more often) profit. I decided to poke fun at this trend by making one of my own, with a twist: while most people take an old map that's fairly accurate, and then line it up with modern data, I wanted to take an old map that was fairly inaccurate, and force the modern data into that shape. It took a lot of control points, but I got a decent-looking shaded relief that fits this very warped old map of Michigan that I found in the Rumsey Collection. The river courses are *wildly* inaccurate, so I faded the relief away in those areas to avoid clashes.

Low-Resolution Mars

FEBRUARY 2021



LONGTIME FOLLOWERS WILL KNOW THAT MARS IS A FAMILIAR friend in my cartographic work. At some point, I decided to make a little low-resolution spinning globe animation of the Red Planet. I then later labeled and shared a single frame from that image. The limited-but-not-too-limited palette and the low-but-not-too-low resolution gave it felt like something I could have seen in a video game decades ago.





Penrose Relief Doodle

AUGUST 2021



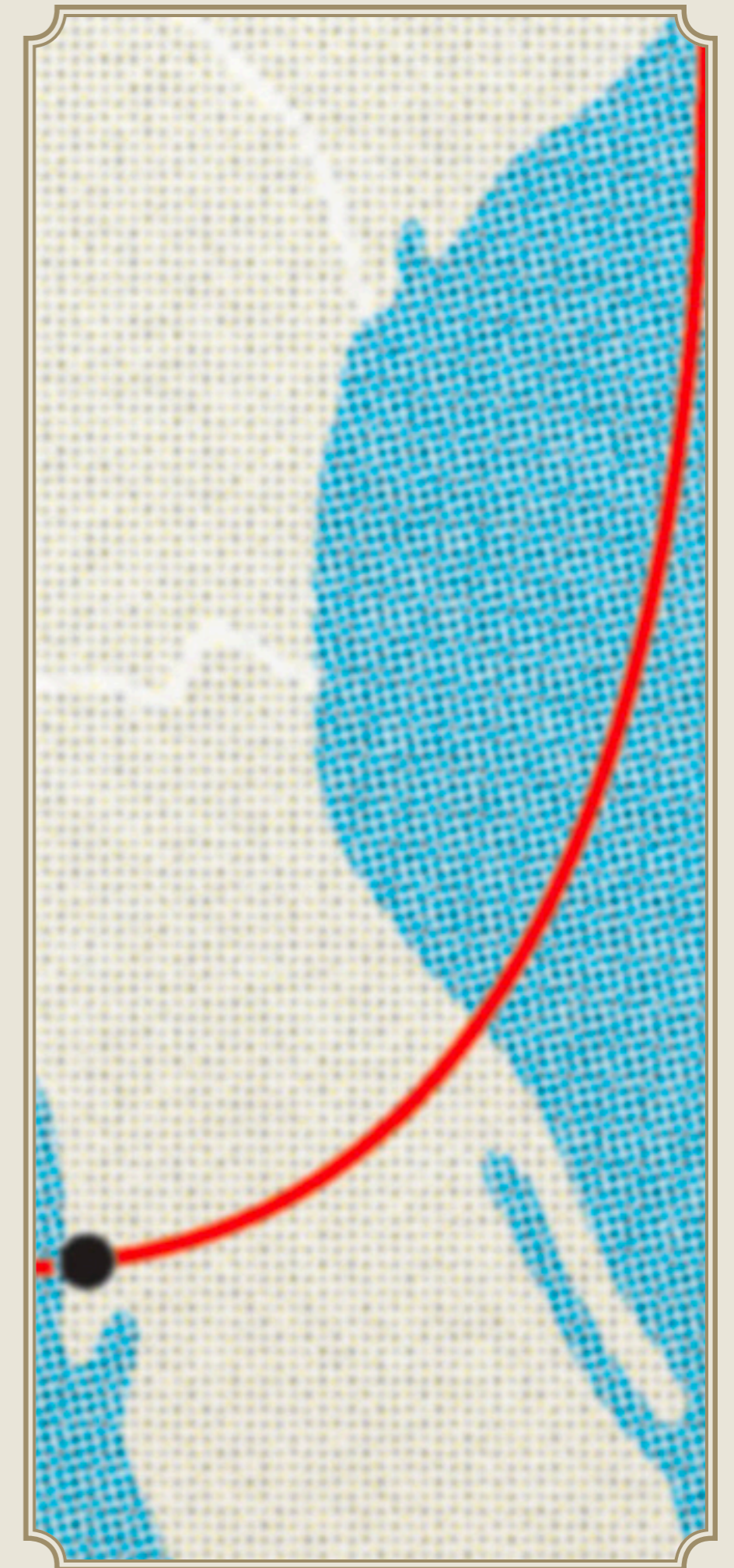
NOTHING FANCY HERE. I SIMPLY DID A QUICK SHADED RELIEF OF Africa, and then aggregated its shades according to a Penrose tessellation. I have learned in recent years that Roger Penrose has previously litigated against people using the tilings that he invented. So, don't tell him that I did this.

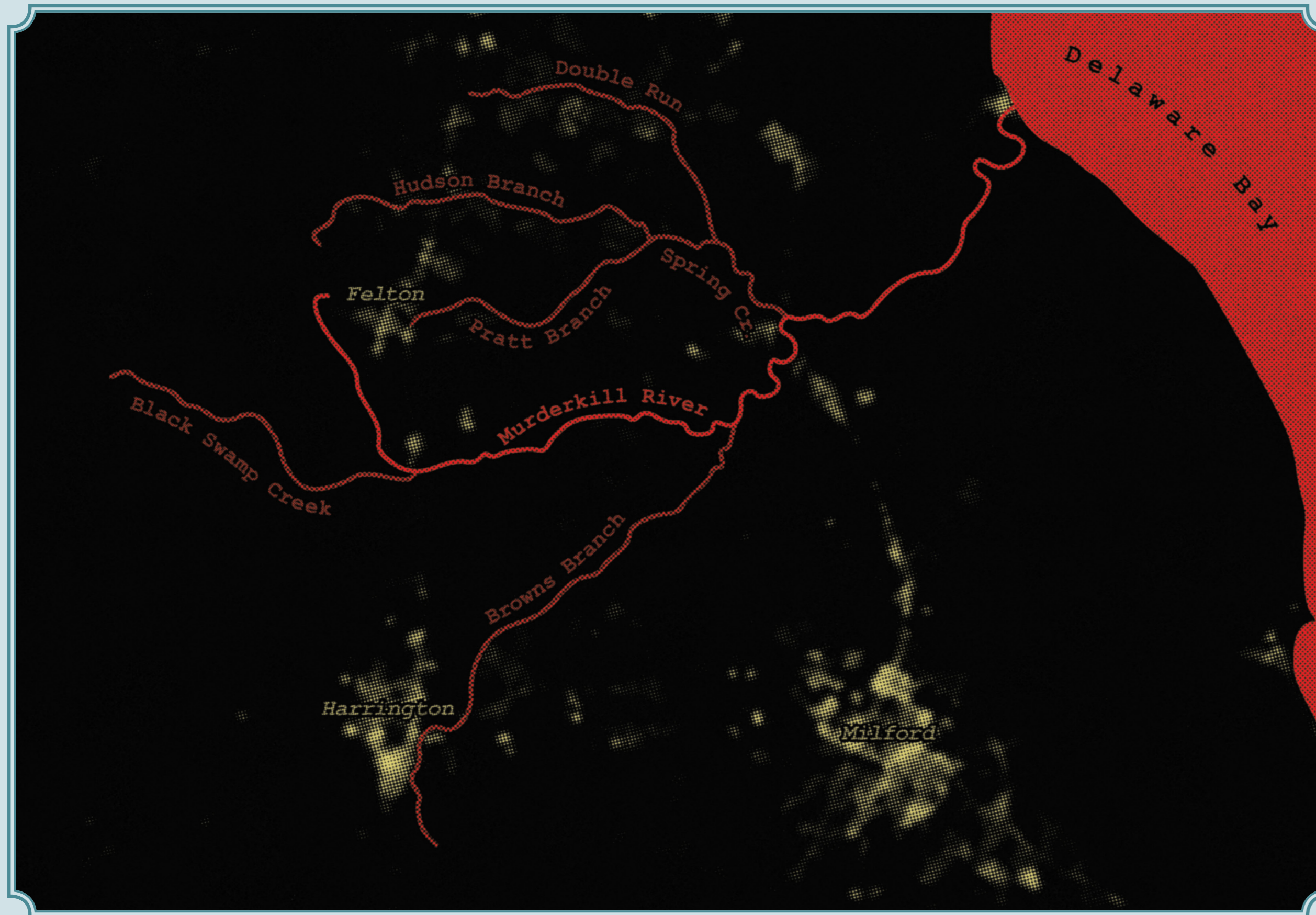
Atlas Travels

AUGUST 2021



MY HANDMADE CYANOTYPE *ATLAS OF GREAT LAKES ISLANDS* HAS been touring the world for a few years, and sometimes I like to make maps on social media that show its progress on the journey. It's pretty satisfying to look back on the distances this little book has covered. Since these maps are pretty straightforward, I also try to give them a little more visual interest by giving them the look of an old halftone print. In this case, I also made use of some hand-drawn state line-work from Project Linework.





Murderkill

OCTOBER 2021



I'M NOT A BIG HALLOWEEN PERSON, AND IT'S UNCOMMON FOR ME to do anything special in acknowledgement of Spooky Season. But, for once, I deviated from that pattern, and made a weird, unsettling map of the Murderkill River in Delaware. That is its actual name, thanks mainly to the Dutch (look it up). I don't think this map really "works" stylistically, but it was a chance to answer the question of "what would happen if I inverted a halftone?" It has some inklings of haunting-ness, but probably could have used more iteration time to really get there.

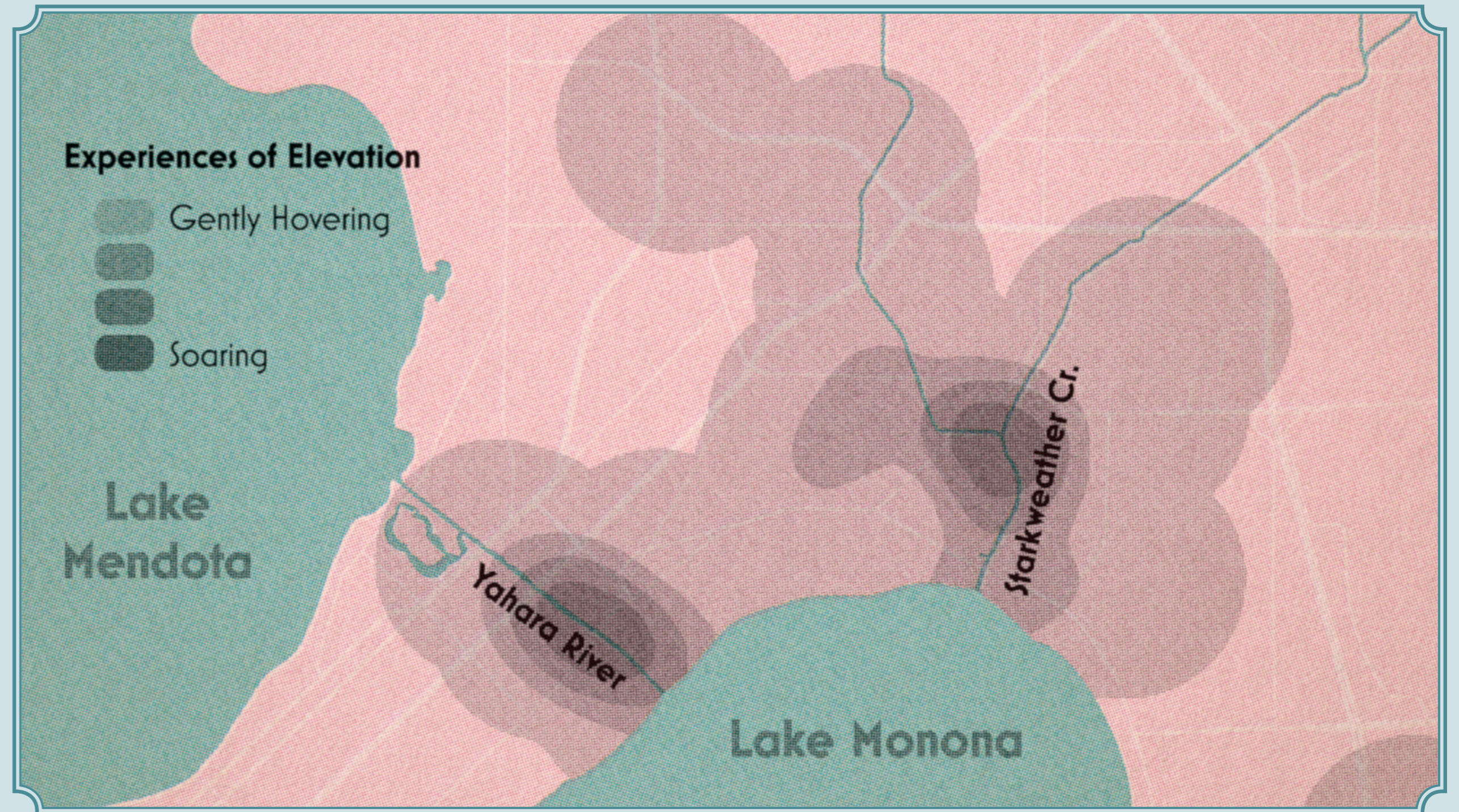
Elevation Experiences

NOVEMBER 2021

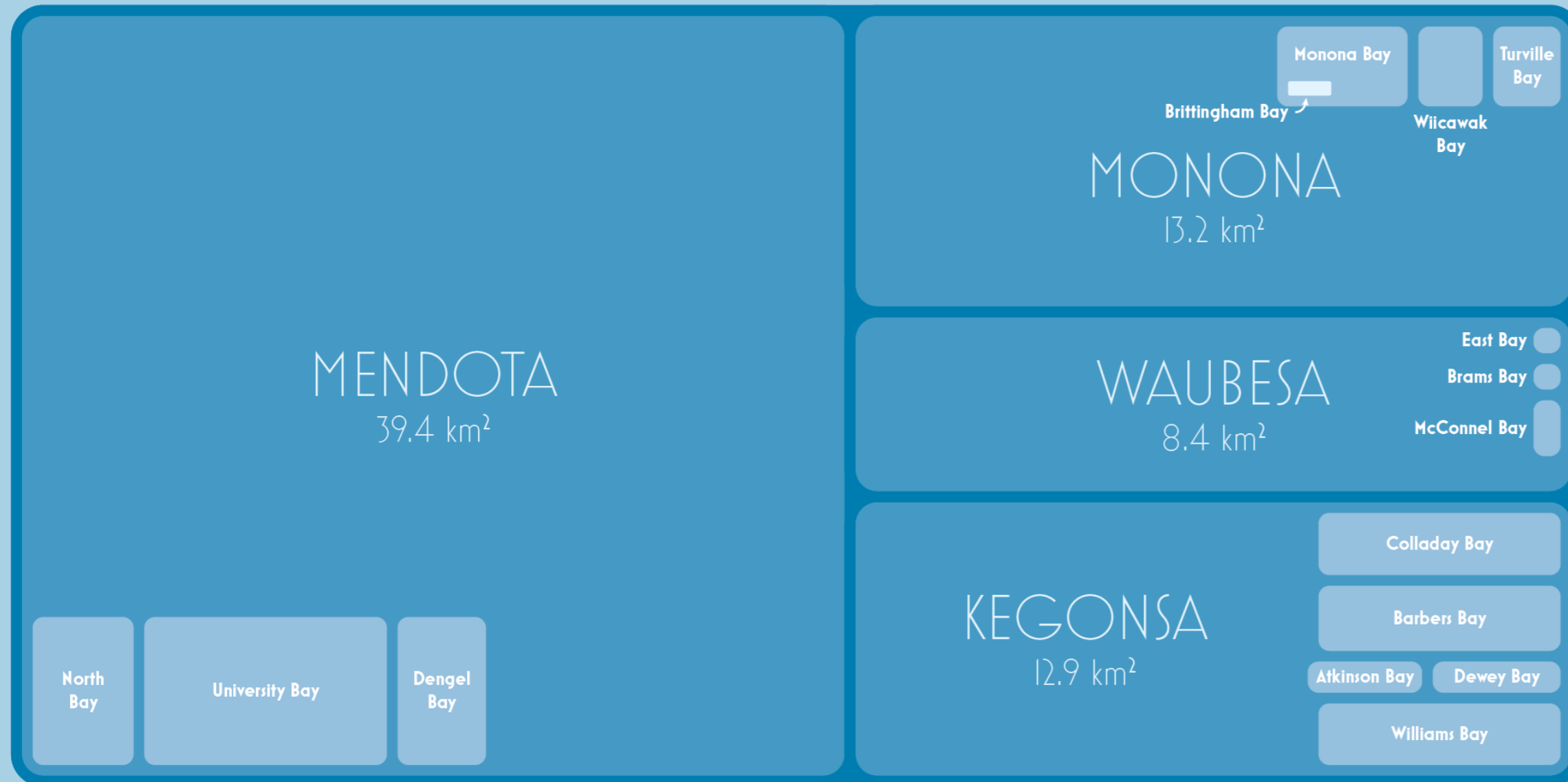


THIS ONE CAME ABOUT AS PART OF THE 30 DAY MAP CHALLENGE. I believe the prompt was “elevation,” and since I climb a lot of trees, I decided to map out the extent to which I experience elevation in Madison. This is based on a kernel density analysis that takes into account where the trees that I climb are, how often I climbed them, and how high I climbed in them.

I made this map on a livestream, back when I used to do those. I love sharing details of my process with people. However, I also find it uncomfortable to be watched by a group of silent strangers, so I mostly don't do it anymore.



THE FOUR LAKES



Four Lakes Bays

NOVEMBER 2021



THE MADISON METROPOLITAN AREA IS SITUATED ON A CHAIN OF lakes known as the Four Lakes. These lakes have bays within them, and so I prepared an abstracted diagram showing the hierarchy: the Four Lakes as a whole, the proportion of the total that each lake takes up, and the proportion of each lake taken up by each bay. I originally had this idea in the context of Lake Michigan, years ago: there are bays, sub-bays, sub-sub-bays, and even more there, and the hierarchy is quite fascinating. But, when the idea resurfaced in my mind, I thought I'd start by tackling a much smaller hydrographic system. And while the results are an interesting trifle, they didn't particularly inspire me to do it again for a larger body of water.

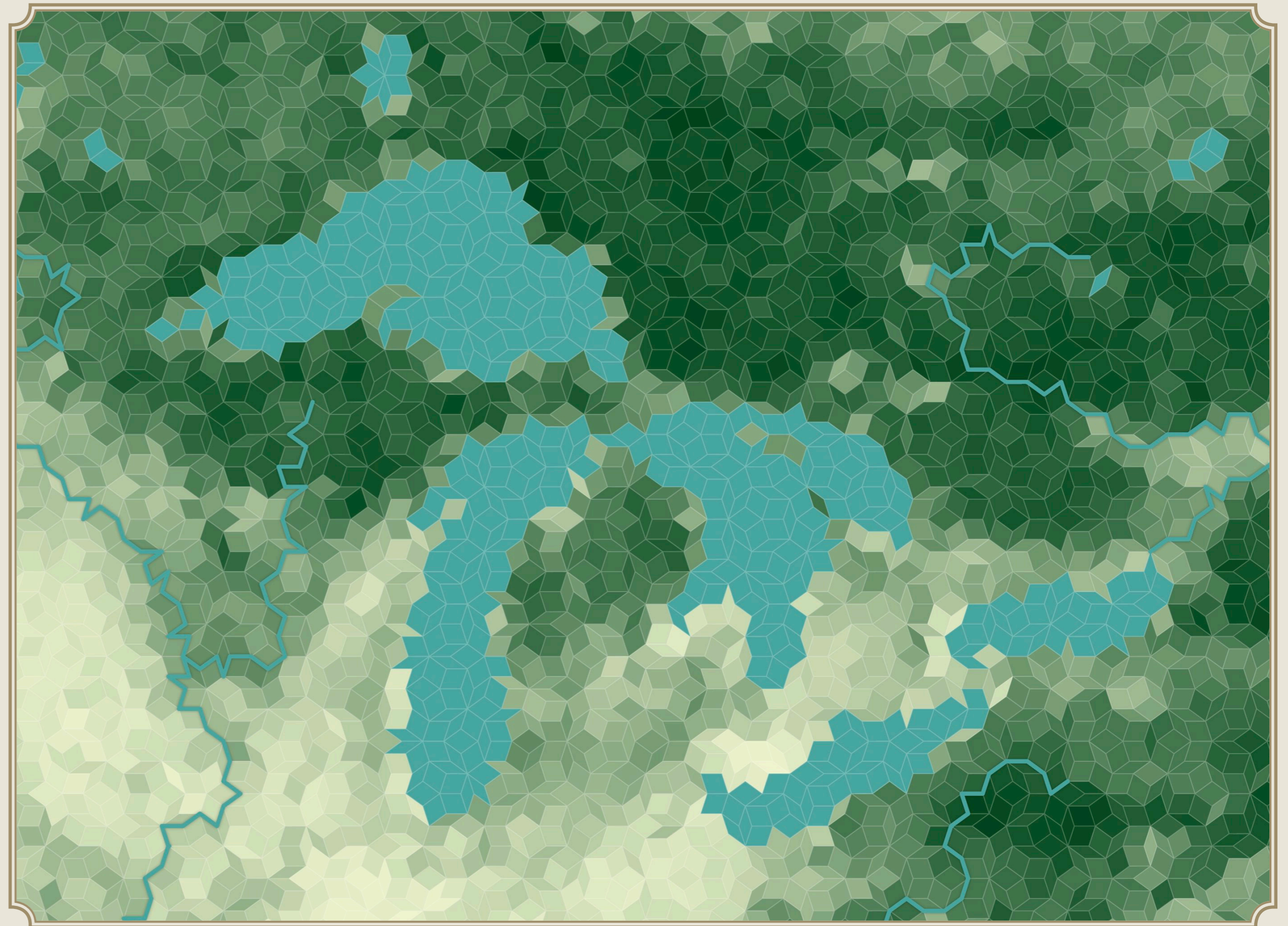
Penrose Forests

NOVEMBER 2021



ANOTHER PIECE FROM THE 30 DAY MAP CHALLENGE; THIS TIME the theme was “polygons.” I found myself going back once again to Penrose tilings, using them to bin a landcover dataset and depict the average percent of forest canopy around the Great Lakes.

As I said at the time, I would love to be able to make this in real life out of ceramic tiles, but that requires buying a lot of colored tiles and then precisely cutting them myself. And learning to lay tile.





Raster Fitzgerald

NOVEMBER 2021



ONE FINAL PIECE FROM THE 2021 EDITION OF THE 30 DAY MAP Challenge. Here, the theme was “raster” and I decided to pay homage to the original raster: television scan lines. It’s just a quick locator map with some bathymetry, showing where the *Edmund Fitzgerald* went down in Lake Superior. In my head I imagined it as part of a news broadcast.

However, after I poked around online to see what old television maps might have looked like in the 1970s, I found that they’re nothing like mine. But that’s often how it goes with cartographic (or other art) styles that evoke the past: they’re frequently an inaccurate representation of that past. They get some major elements right, just enough to look interesting. But it can be hard work to reproduce tools and techniques that are no longer in use, and so some details get left by the wayside.

Papers, Please

DECEMBER 2021

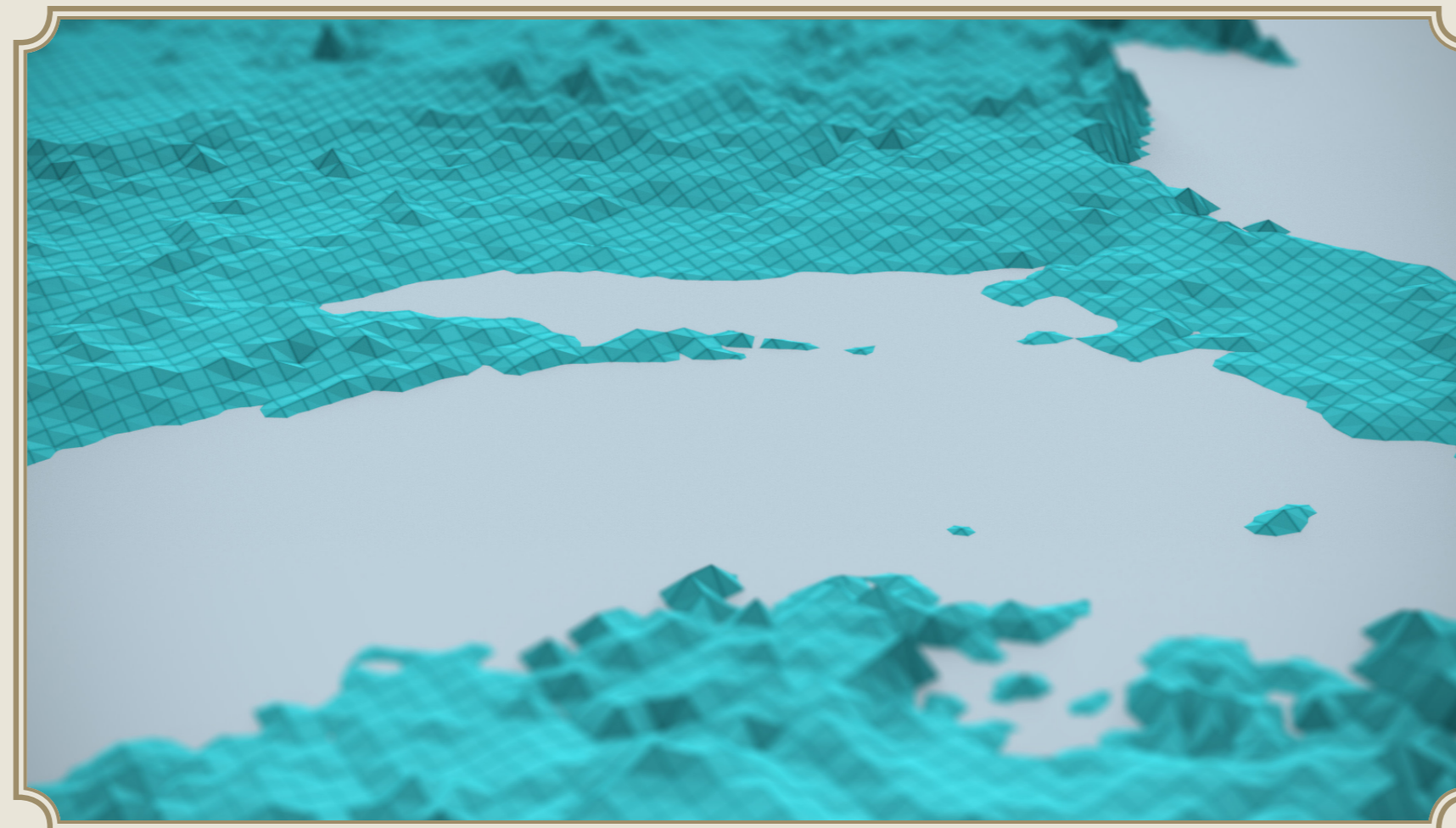
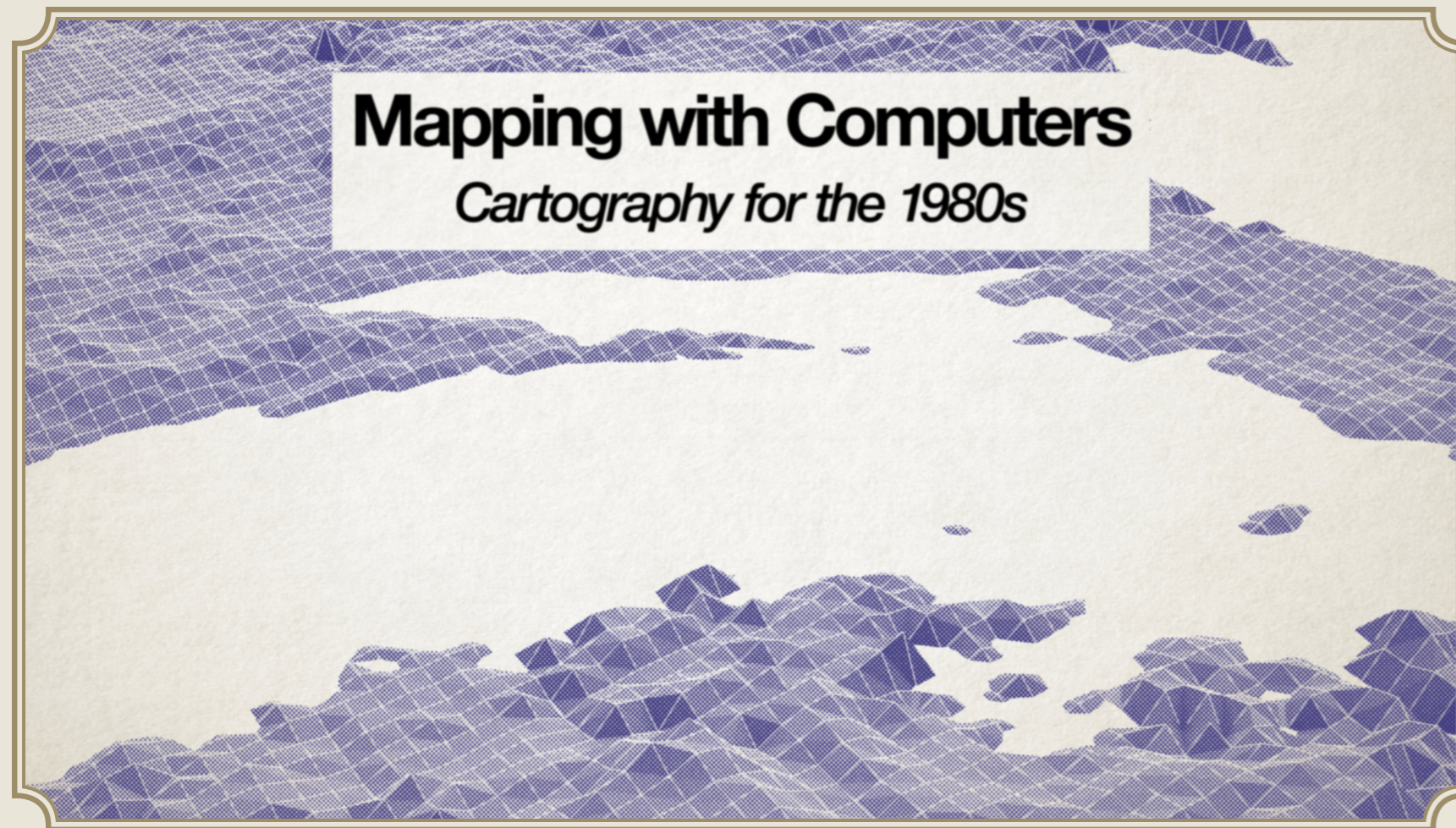


PAPERS, PLEASE IS A GREAT GAME, IN WHICH YOU STAMP THE PASSPORTS and other entry paperwork of people trying to enter a fictional country. It's as much fun as it sounds like. I spent many hours with it in 2017, and while I've not really played it since, I do think about it from time to time.

One of those times I was pondering it, I decided to make a map of the fictional world that it takes place in. There are plenty of other fan-made maps, so this is not a new idea. And, in fact, I borrowed some content from those other maps.

The shapes of the countries and a few of the city names are from the in-game map, but the rest is all constructed by me and by the fans from whom I borrowed. I used rivers and elevation data from southeastern Europe, as it seemed to fit the coastline of the in-game map pretty well.





Low-Poly Doodles

FEBRUARY 2022



WHILE I USED BLENDER FOR MAKING SHADED RELIEF, I DON'T OFTEN utilize its other 3D capabilities. I decided to see if I could figure out how to create a low-polygon style. Something very computer-y. It worked okay, though I've thus far not had occasion to make use of it on any future projected.

And, for fun, I made one into a halftone print style, like an old book cover. A trick I learned from Cameron Booth: if you want text to look 1980s, reduce the tracking so that the letters start to run into each other.

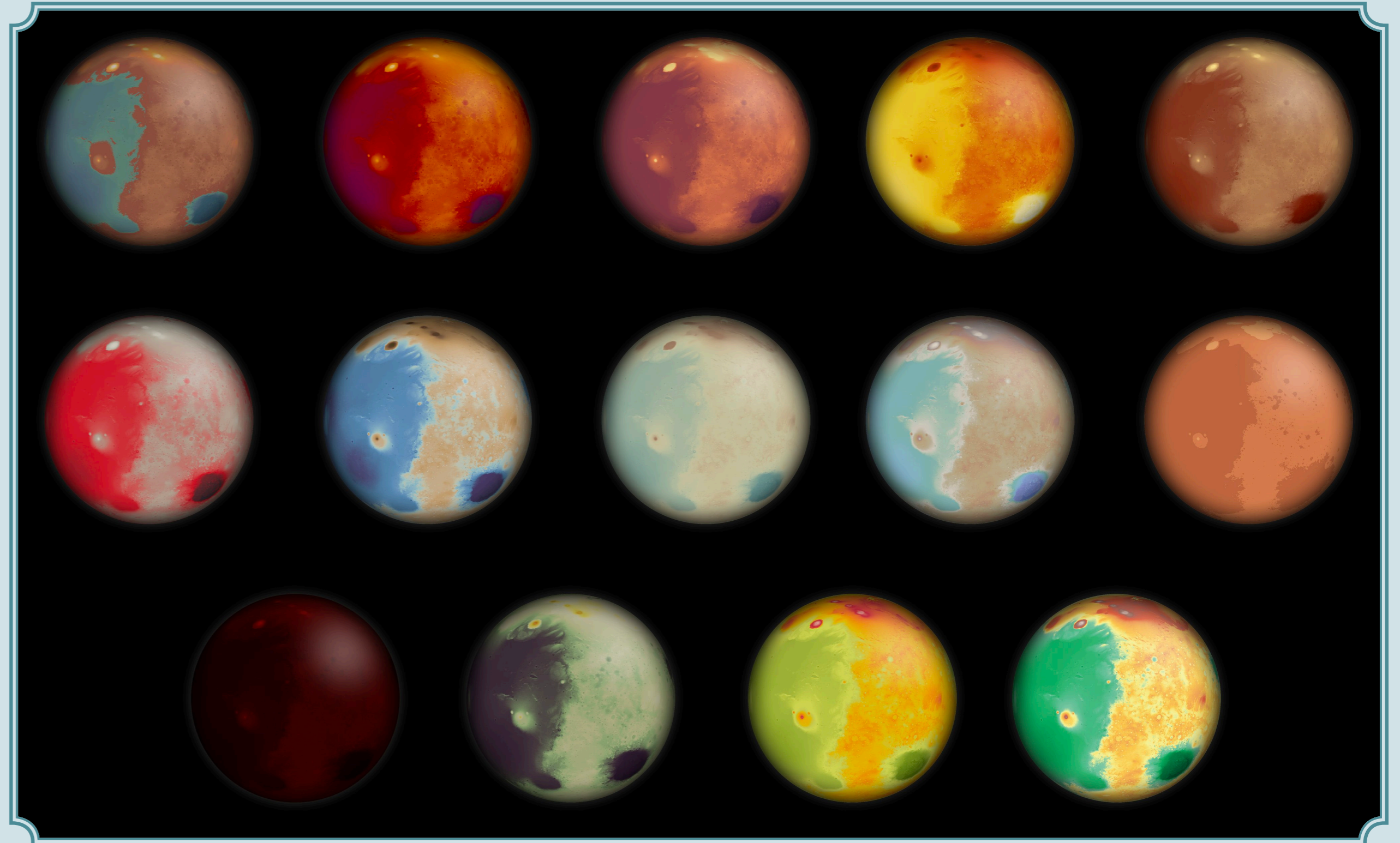
The Colors of Mars

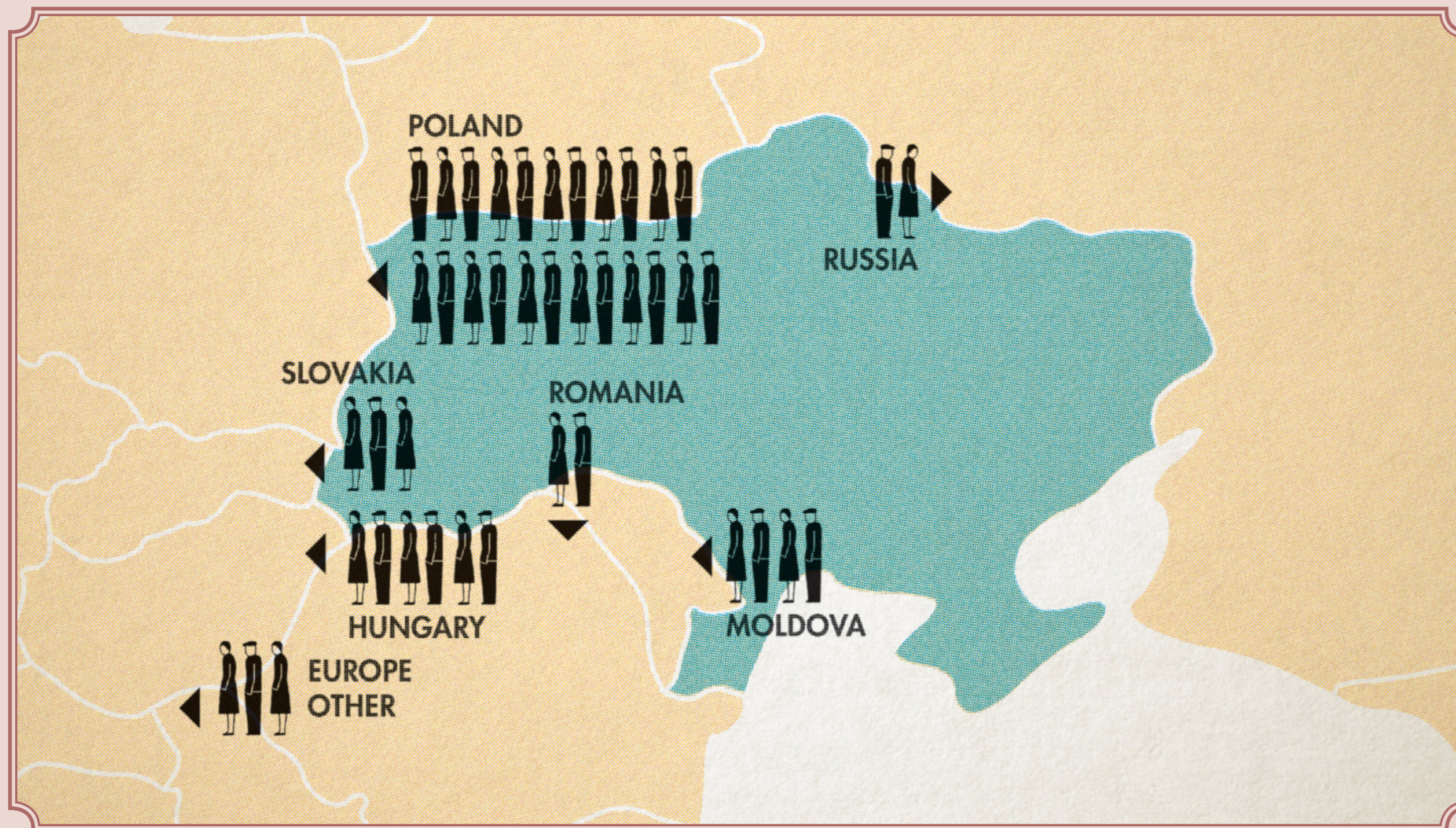
FEBRUARY 2020



I HAVE A PECULIAR HABIT OF COLLECTING HYPSONETRIC TINTING schemes for Mars. The non-rainbow ones, at least. So I keep my eye out for maps that show Mars elevations, and then I copy the schemes, and I document them on my blog. And then sometimes I make little arrangements like this one, showing off all the different schemes I've seen people use.

Fun fact: the highest/lowest points on Mars don't fit within an ordinary orthographic projection. So, I cobbled together a custom modified orthographic that covers *more* than a hemisphere by shrinking the planet's surface a little bit before projecting it.





Ukrainian Refugees

MARCH 2022



EARLY ON IN THE RUSSIAN INVASION OF UKRAINE, NEWS OUTLETS began publishing maps showing the millions of refugees fleeing to neighboring countries. Often, these maps represented this flight in the form of big arrows pointing from Ukraine toward its neighbors, making the refugees themselves seem like another invasion.

I got involved in a Twitter discussion with some colleagues about our dissatisfaction with this style, and this piece was my quick attempt at an alternative. While it has some of its own flaws, it is meant to try and humanize the people who were forced to flee. I borrowed the Isotype-style icons from the Gerd Arntz Archive.

I had Isotype in mind specifically because it was a style in use in post-WW2 Europe, and so it came to mind when I thought of the notion of refugees fleeing yet another European war.

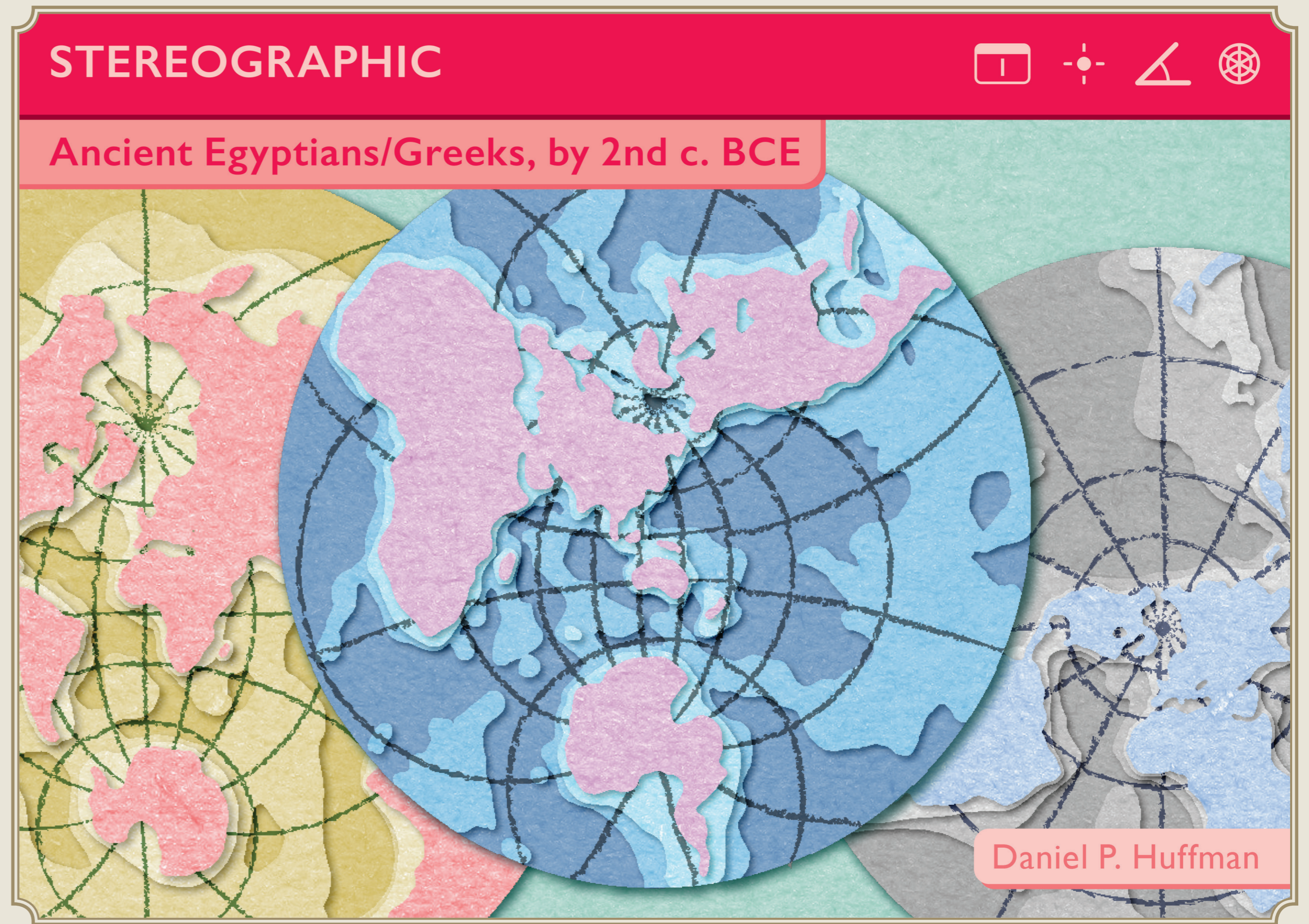
Projection Collection Cards

APRIL 2022



IN 2022 I ORGANIZED THE PRODUCTION OF A SET OF TRADING CARDS themed around map projections. I put out an open call for colleagues to create designs for the set, but I wasn't sure at first how many people would join me. So I contributed two of my own designs to help get the collection started. This also helped demonstrate to others what I was hoping to receive. Eventually, several dozen more people pitched in and we ended up with a total of 77 cards.

Since the point was to show off the projection, I really only needed land, water, and a graticule. To make things more visually interesting, I played with over-the-top styles that I wouldn't likely get to do on most any other map, such as construction paper cutouts.



EQUIDISTANT CONIC



Claudius Ptolemy, ~150



Daniel P. Huffman

Projection Collection Cards: Part 2

APRIL 2022



AND HERE'S THE SECOND CARD THAT I CREATED (TO ENSURE VARIETY, I LIMITED ALL CONTRIBUTORS TO ONLY TWO CARDS). HERE, I WENT FOR A "METALLIC" LOOK THAT'S INEXPLICABLY ON A STAR FIELD BACKGROUND. IT JUST FELT LIKE A GOOD AND VISUALLY INTERESTING IDEA, AND I STAND BY IT.

Useless Projections: Double Apple

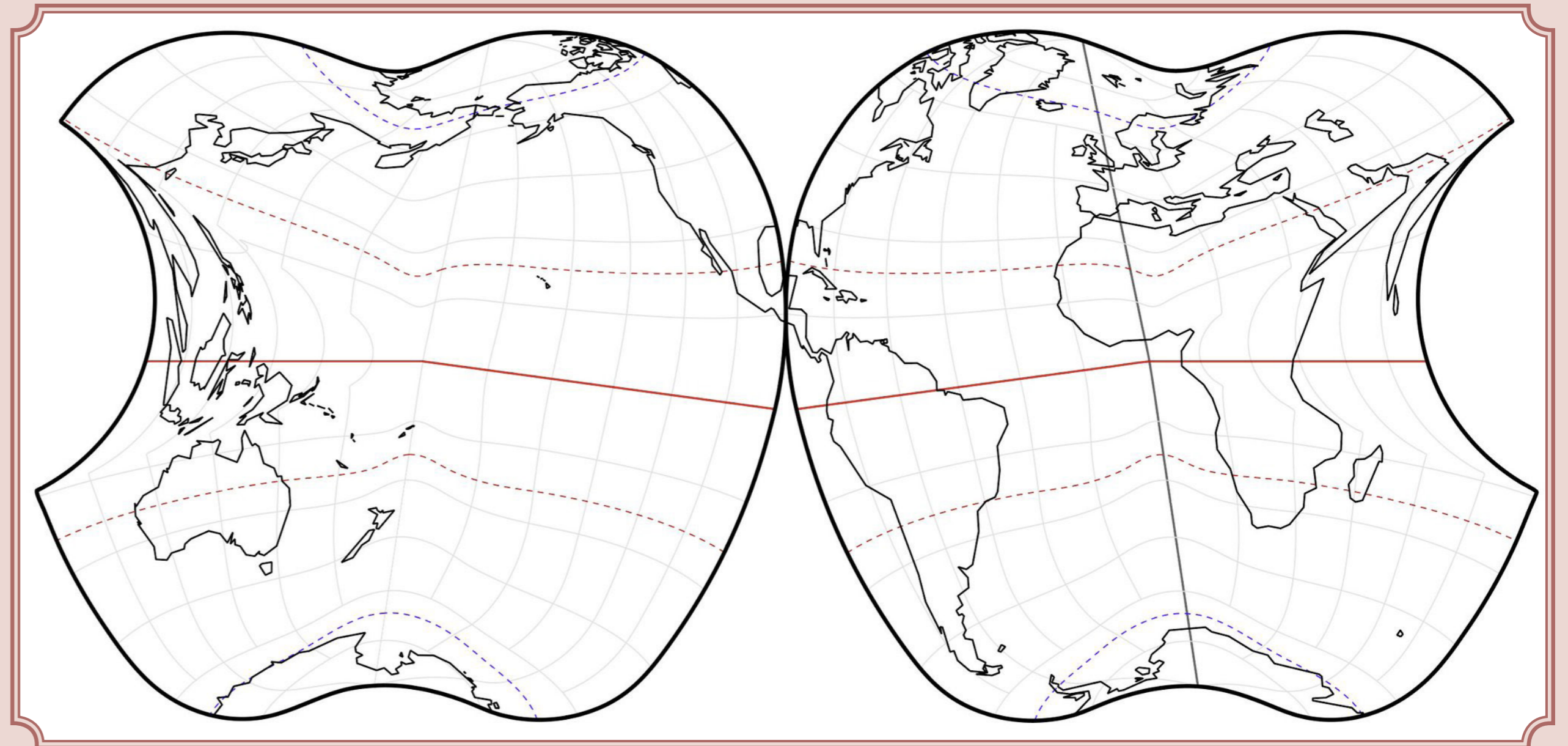
MAY 2022

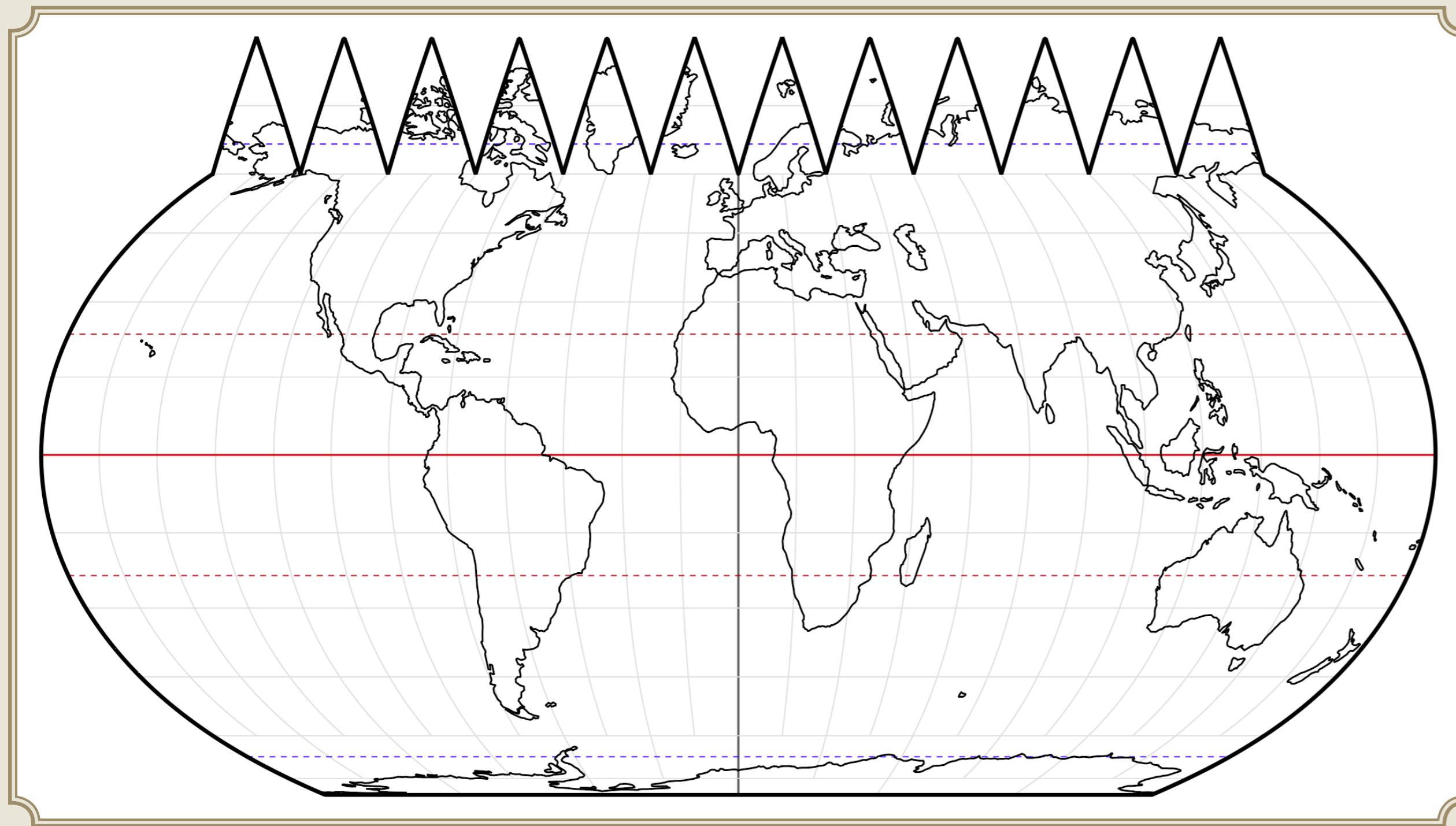


THE PROJECTION COLLECTION CARDS HAD, UNDERSTANDABLY, GOT-
ten me thinking a lot about projections and looking at the many,
many projections that were out there. In Geocart, a piece of specialty
map projection software, there's an apple-shaped equal area projec-
tion that was invented by daan Strebe, Geocart's author and an all-
around projection master. He probably created it just because of its
fun shape.

I idly wondered what it would look like if, instead of a single apple,
there was one for each hemisphere.

I left the resulting map looking pretty Geocart-default, as I was
mostly focused on making the projection work. But, it was good
enough to amuse me and my colleagues on social media, and even-
tually led to the creation of more oddities. Someday I may take these
Useless Projections and style them up a bit more.





Useless Projections: Equal Earth with Spikes

MAY 2022



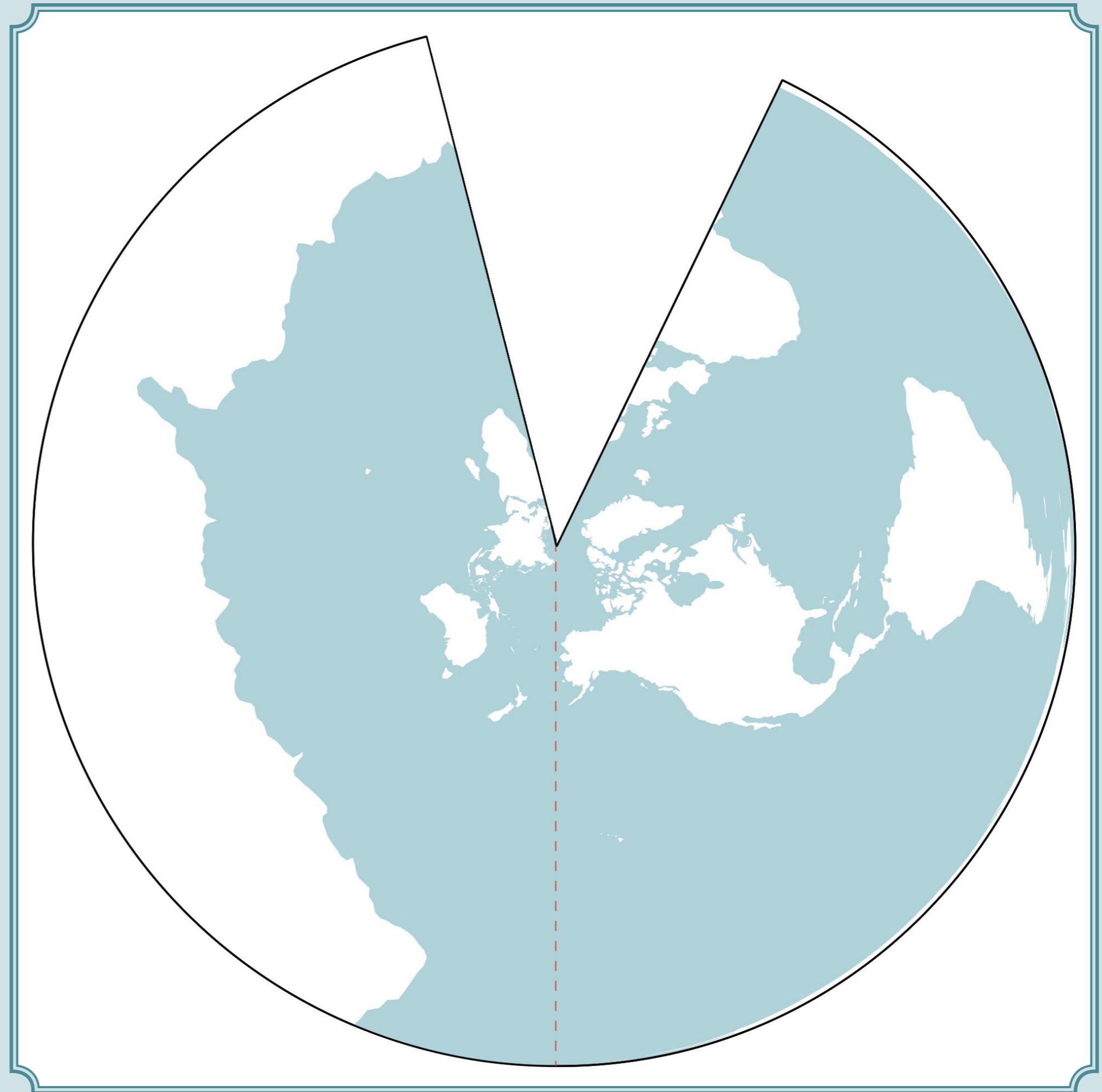
THIS IS PROBABLY THE BEST OF THE BUNCH. ABOVE A CERTAIN LATITUDE, I just switched from an Equal Earth projection to an interrupted Sinusoidal projection. I shared it on Twitter and some people suggested that perhaps I should have put the spikes on the bottom, instead (or on both ends).

Useless Projections: Why Not Both?

MAY 2022



ON ONE SIDE, WE HAVE A LAMBERT CONFORMAL CONIC. ON THE other, an Albers Equal Area Conic. This time I removed the graticule, because it did not align at all along the cut, and so looked terrible.





Useless Projections: Greenland Oblique

MAY 2022



ONE FINAL ONE FROM THIS SERIES (FOR NOW). I MADE ALL FOUR OF these on subsequent days, but eventually my inspiration ran dry. Here we have an oblique view of the world, with the edges mashed in so that they form a roughly Greenland-shaped outline.

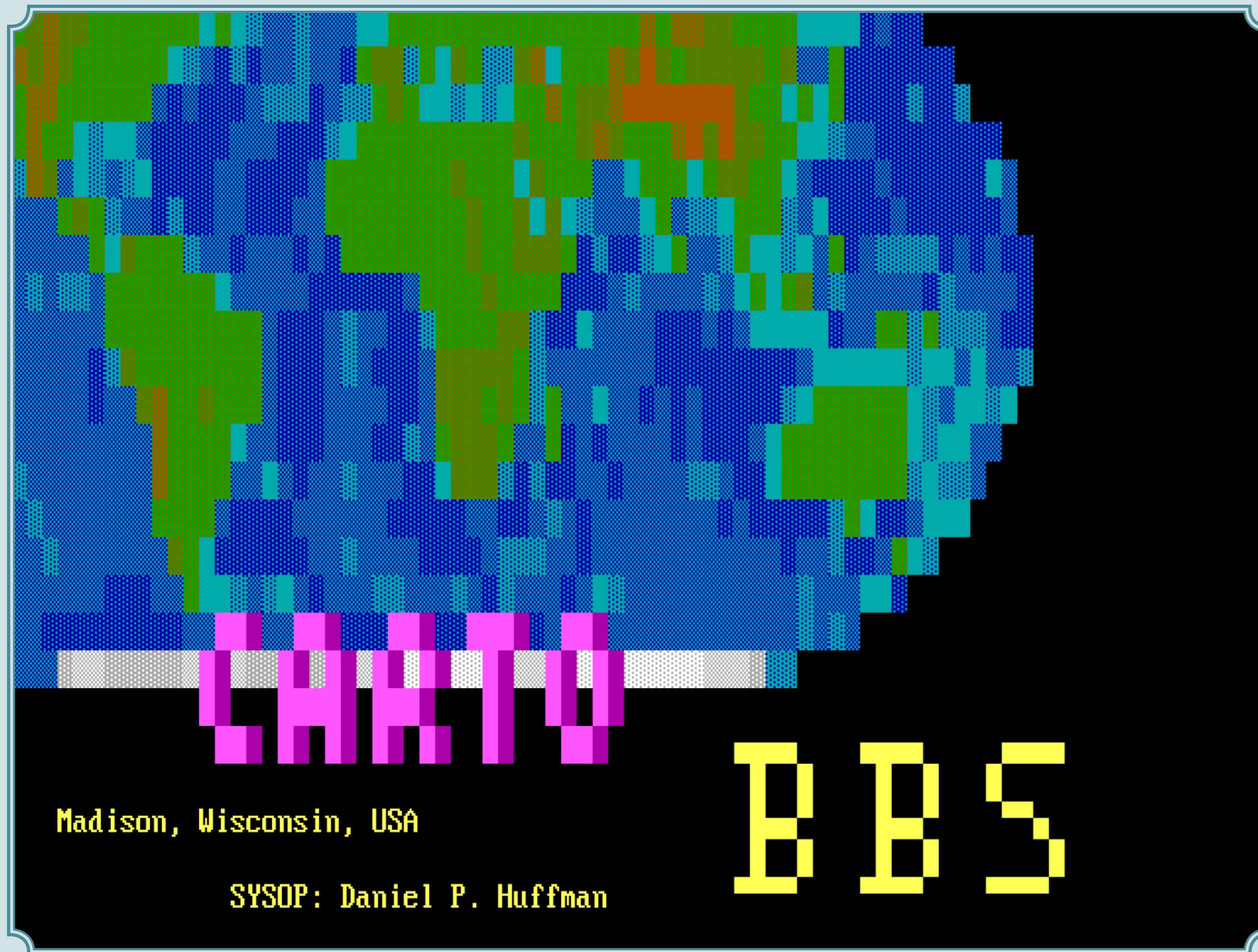
Atlas Travels (Again)

AUGUST 2022



IT HAD BEEN ABOUT A YEAR SINCE I MADE MY LAST MAP OF THE travels of my cyanotype atlas, so I put this one together to show its crossing of the Pacific.





ANSI Things: BBS

NOVEMBER 2022



IN LATE 2022, THERE WAS MUCH PANIC ABOUT THE FUTURE OF Twitter, since its billionaire owner was driving it into the ground. Many of my colleagues were abandoning the platform and wondering where we would meet again. One jokingly mentioned BBSes, and so I decided to mock up the login page of a BBS for cartographers.

“BBS” and “ANSI” might not make any sense to you, and explaining them properly would take far too long. The absurdly short version: imagine a text-only internet from the 1980s/1990s that only has a few local people on it. And any art can be made only of blocky pixels utilizing a limited palette (ANSI refers to the standard set of characters used in drawing). BBS culture and art was amazing and I *highly* recommend you look more into all of it.

Also: I made this using TheDraw, which was my go-to program in the 1990s for drawing in ANSI. To make the process easier, I first planned out the map in QGIS and Adobe, however.

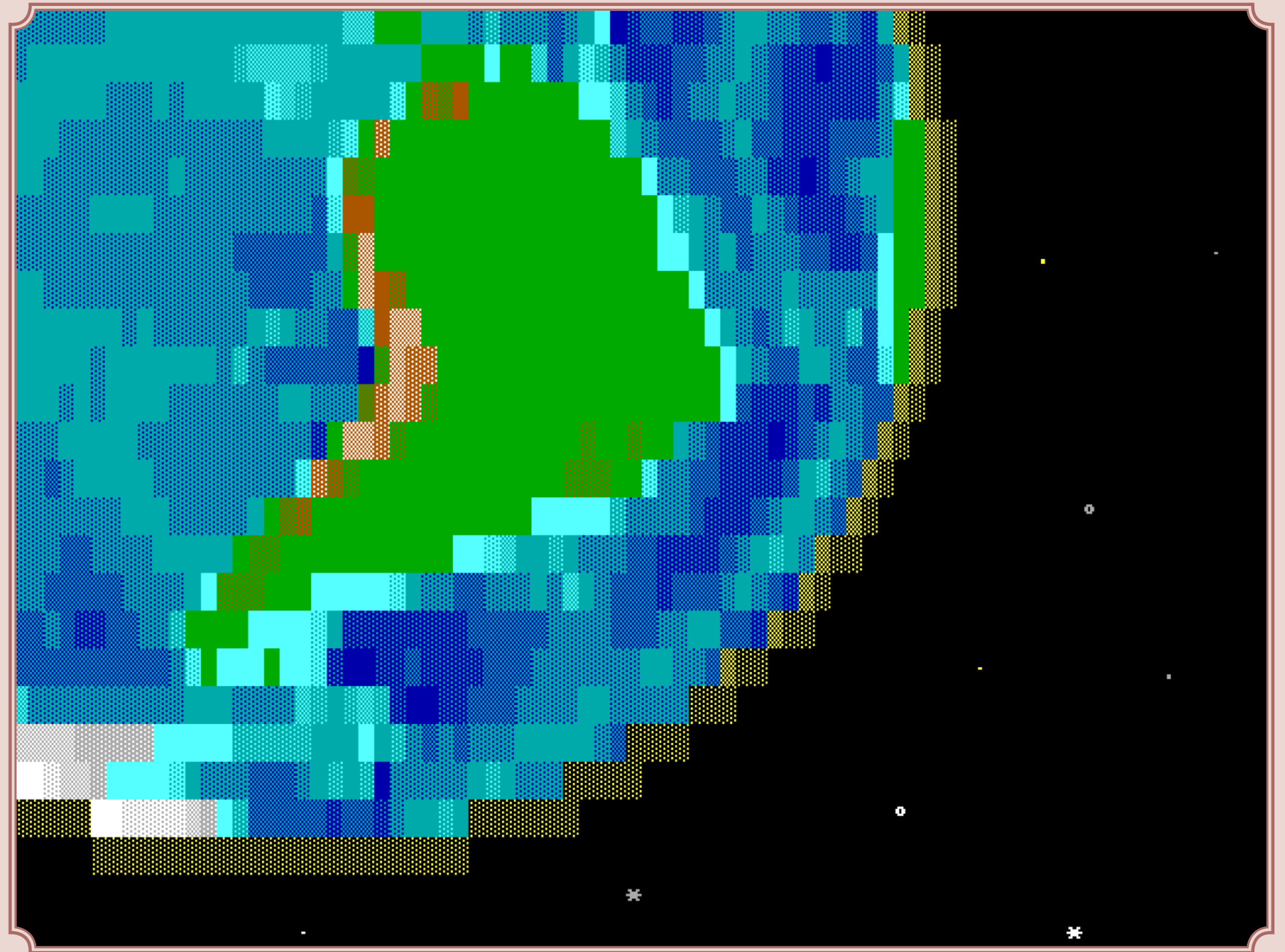
ANSI Things: Globe

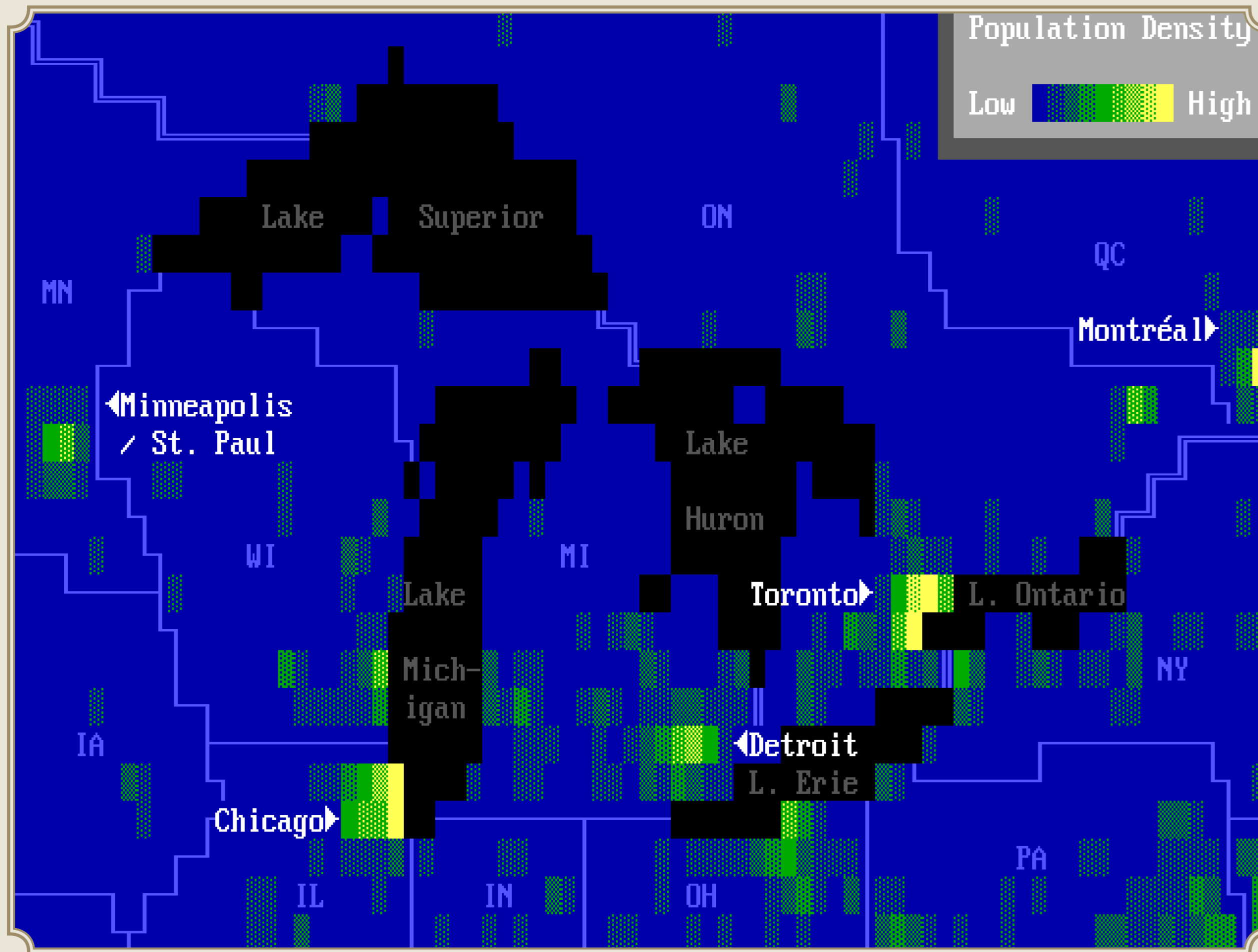
NOVEMBER 2022



I HAD FUN PLAYING AROUND WITH ANSI, SO I KEPT GOING. ANSI stands for the American National Standards Institute, and in this context it refers to a specific standard set of symbols that were used to draw artwork on computers in the 1980s/1990s. If you look at the image, you can see how it's made of what you can think of as basically characters in a specialized font: some solid blocks, some grids of dots at different densities.

I was never great at ANSI art in its heyday, but now I have tools to help me do a little better. Here, I actually began with QGIS and Adobe Photoshop to create a globe. Then, I took my globe and reduced its size and color palette in Photoshop until it matched what could be made with ANSI art. Then I drew it out character-by-character in TheDraw.





ANSI Things: Population Density

NOVEMBER 2022



MY EXPLORATIONS WITH ANSI ART ENDED UP MUCH LIKE THE WAY I explored typographic mapping a few years ago: once I had the basic idea, I tried out many variations to see how far I could push it. Here, I wanted to see if I could assemble a workable thematic map. I used the different character patterns (and the very very limited set of colors allowed in ANSI) to try and create a usable gradient. I'm pretty pleased that I was able to get one that almost looks like it could fit in ColorBrewer. On this one you can also see that the ANSI set of characters also has a series of single and double lines, which were an important component of a lot of ANSI art.

As with all the others, I planned this map in QGIS and Adobe first, and then figured out how to draw it out in ANSI.

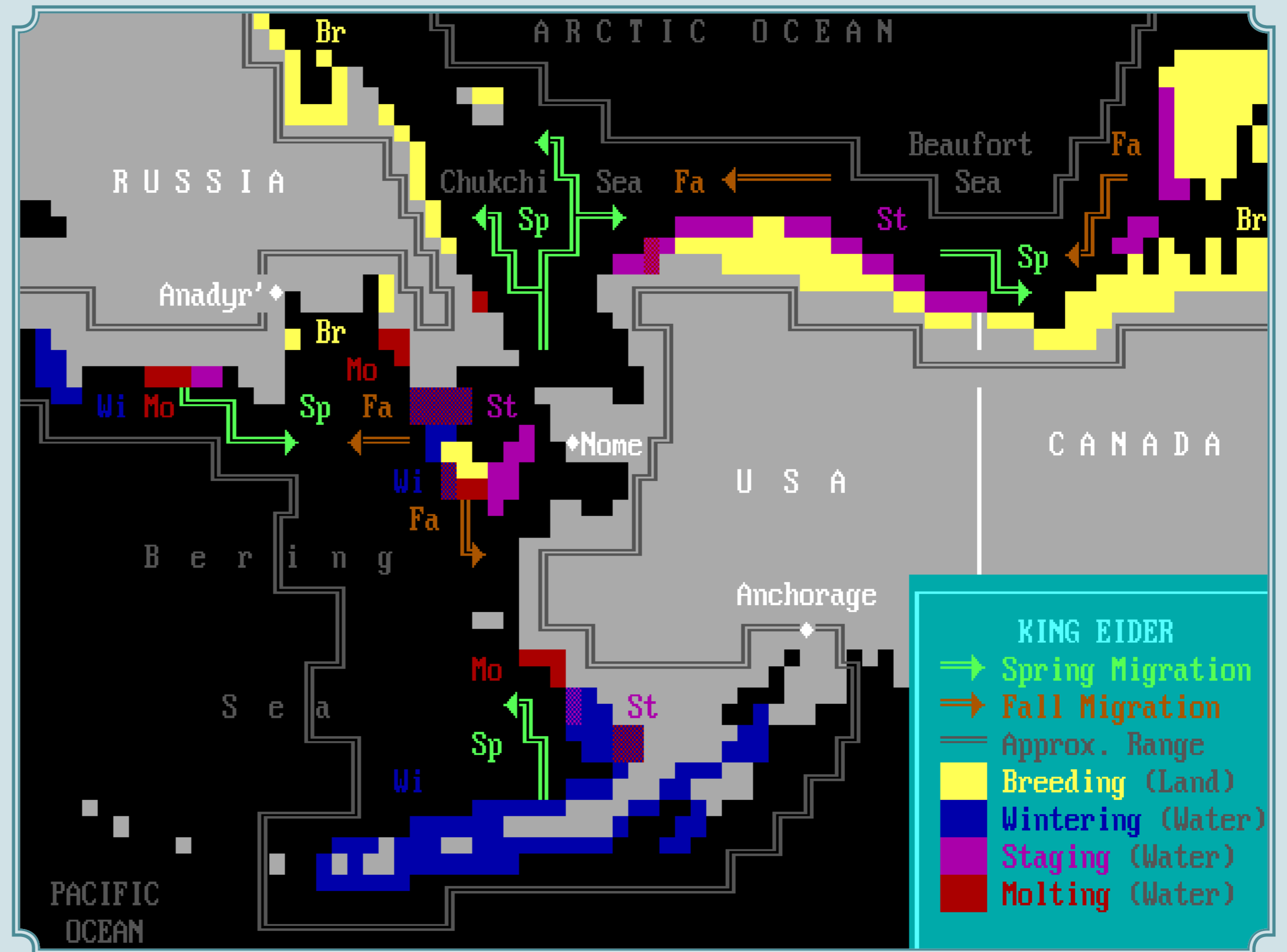
ANSI Things: Alaska

NOVEMBER 2022



MANY YEARS AGO, I PRODUCED A SERIES OF VERY COMPLEX THEMATIC maps for an atlas produced by Audubon Alaska. These maps showed a great deal of information about the lifecycles of birds, mammals, and fishes in the Bering, Chukchi, and Beaufort seas.

So, as my final challenge, I decided to see if I could take one of those maps and make it work within the extremely limited confines of ANSI art. It came together remarkably well. I had to drop some of the data: there's no information on sea ice, or elevation/bathymetry information. But there is still a lot going on here, on a piece that's only a several dozen characters wide.





OLYMPUS PROVINCIAL PARK & Tharsis Montes Natural Preserve

Olympus Provincial Parks

NOVEMBER 2022



MAYBE THIS ISN'T A "MINOR PROJECT," AS IT DOES APPEAR IN MY portfolio. But it really only ever got released via Twitter, and never made it into my blog. The idea of creating a midcentury-looking poster of a preserve on Mars was stuck in my brain for many years. After a long period of dreaming, and failed attempts, I was finally able to get it working. All I needed to do was wait enough years to develop the knowledge and skills to solve the problem.

There's no real fictional backstory to this map, and so that's left to the reader to fill in. Why a "provincial" park instead of a planetary or national one, for example? I don't know. It just sounded good.

See if you can spot all the references to Bradbury's *The Martian Chronicles*.

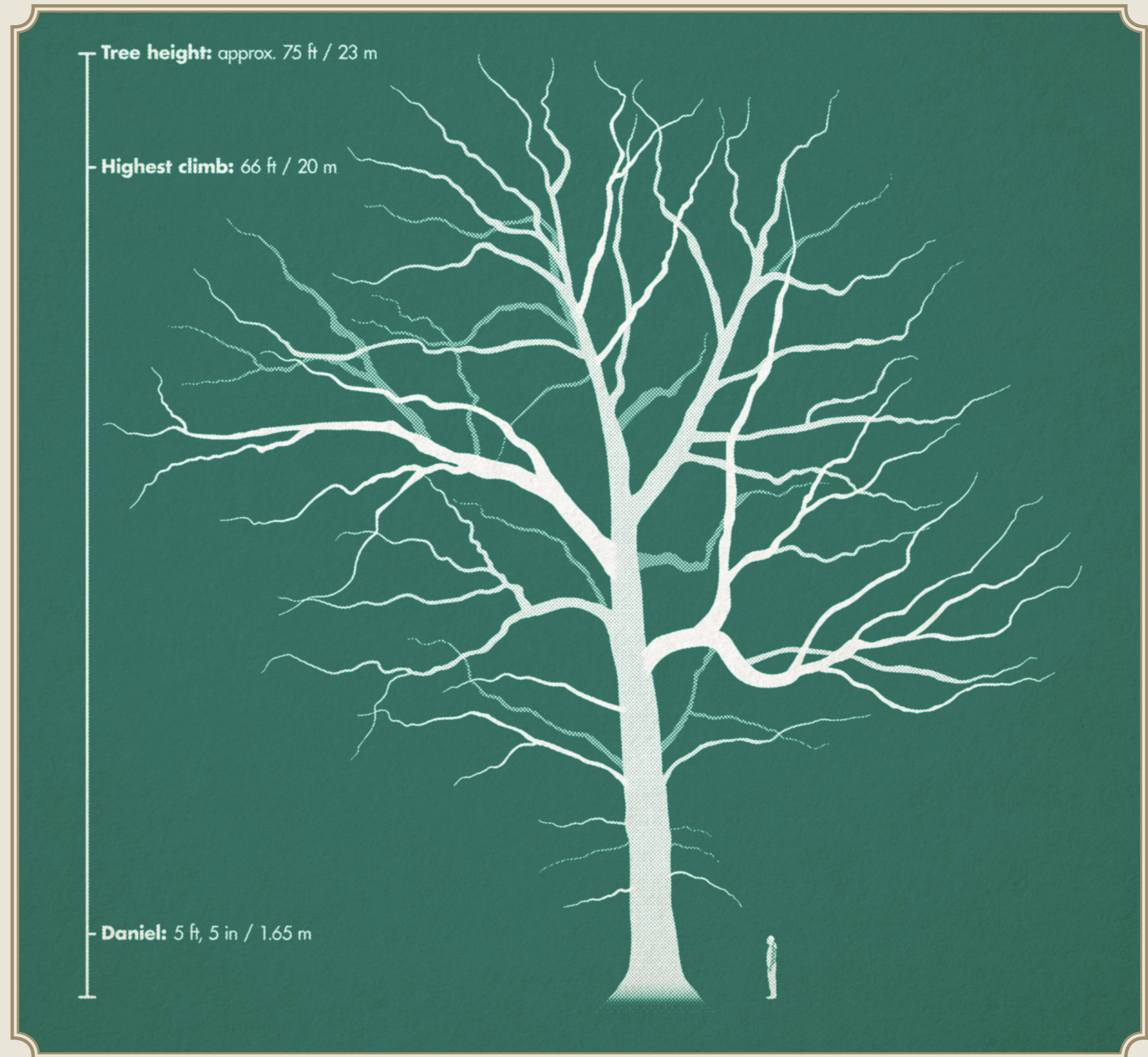
The Great Oak

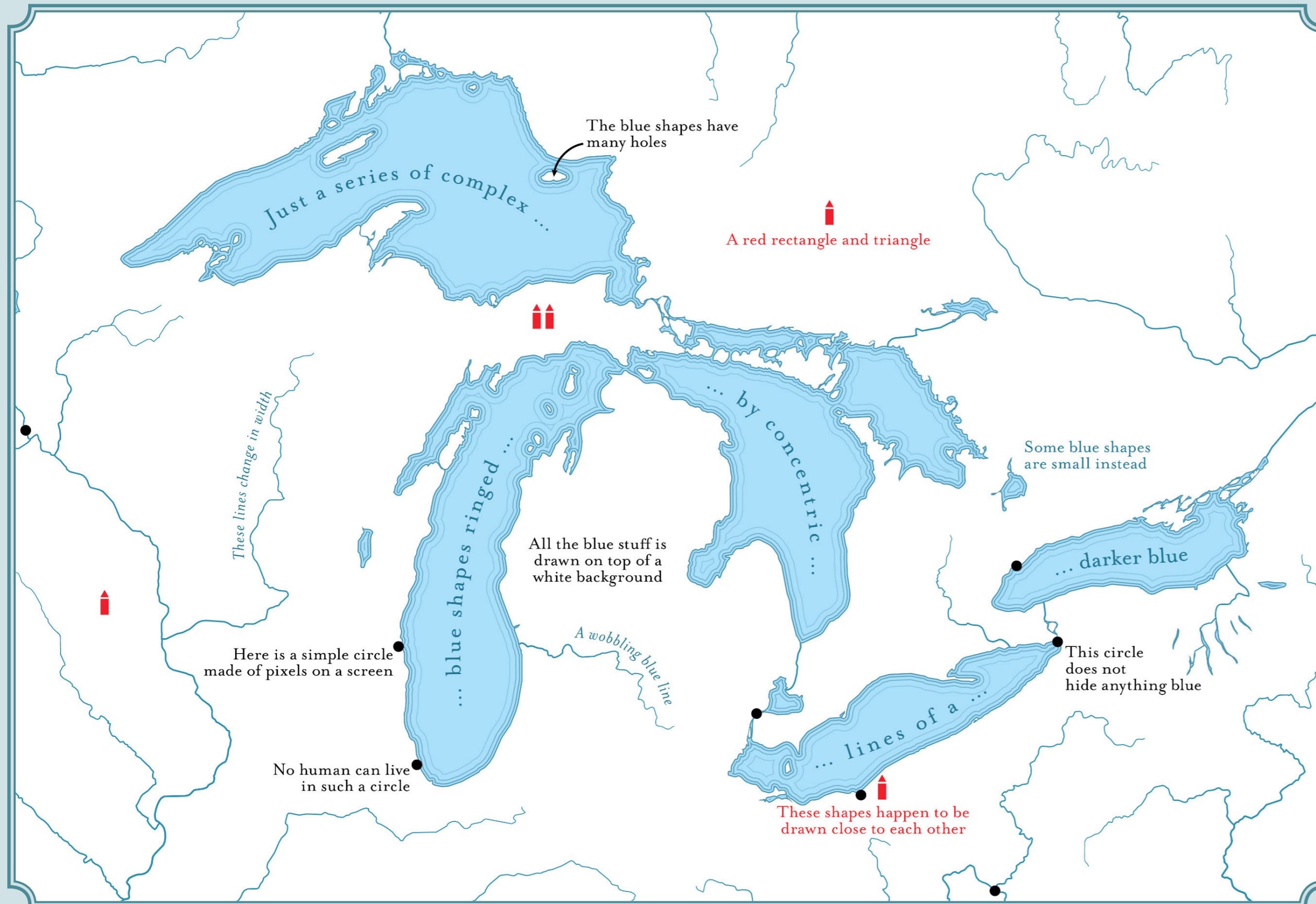
NOVEMBER 2022



NOT A MAP, ALAS. OR MAYBE IT IS, DEPENDING ON HOW LOOSELY you want to think about that term. Here, I drew out a diagram of the largest tree I have climbed, and compared it to my own height. I have no particular ability to draw trees, so I simply photographed it when it had shed its leaves, and then spent a very long time tracing many of the branches off of the photograph.

It actually turns out that this image is a bit inaccurate. I now estimate the tree at closer to 70 feet, and my highest climb is 67 feet.





A Bad Map

NOVEMBER 2022



I MADE QUITE A LOT OF MY MINOR PROJECTS IN THIS SAME MONTH, it seems. Here's one I produced for the 2022 edition of the 30 Day Map Challenge. The theme was "a bad map." And I have some problems with that theme. Our cartographic community unfortunately expends a lot of energy on criticism of "bad work" that has been shown time and time again not to encourage people to be better, but to instead simply drive them away.

I made this piece (based on an idea I'd been kicking around for years) to give an alternative take to the concept of "bad mapping." It's a bad map because it continuously pushes you away from interpreting it as more than an arrangement of colored lines and shapes. It's inspired more than a bit by my love for the works of René Magritte.

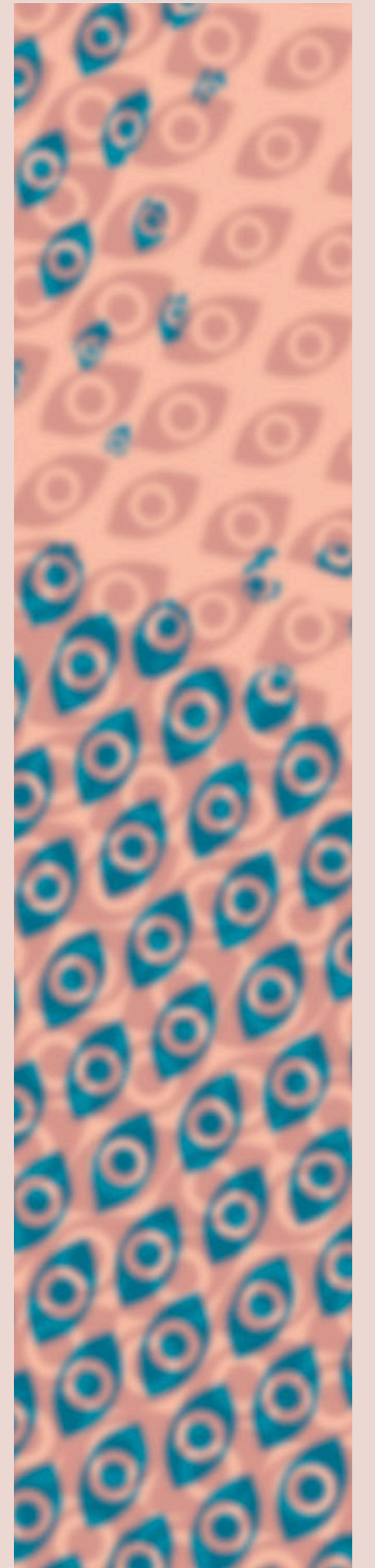
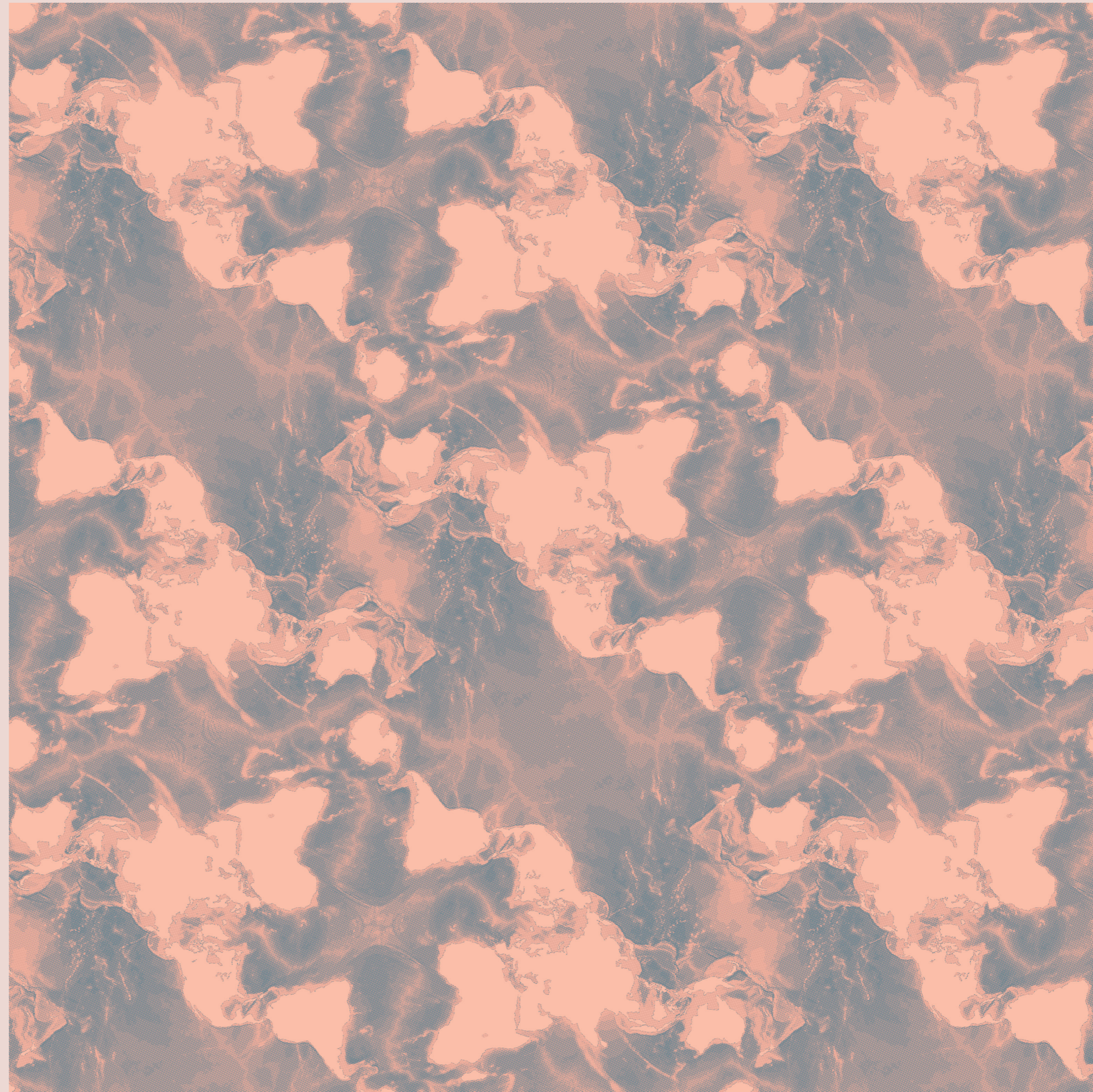
Argus Shower Curtain

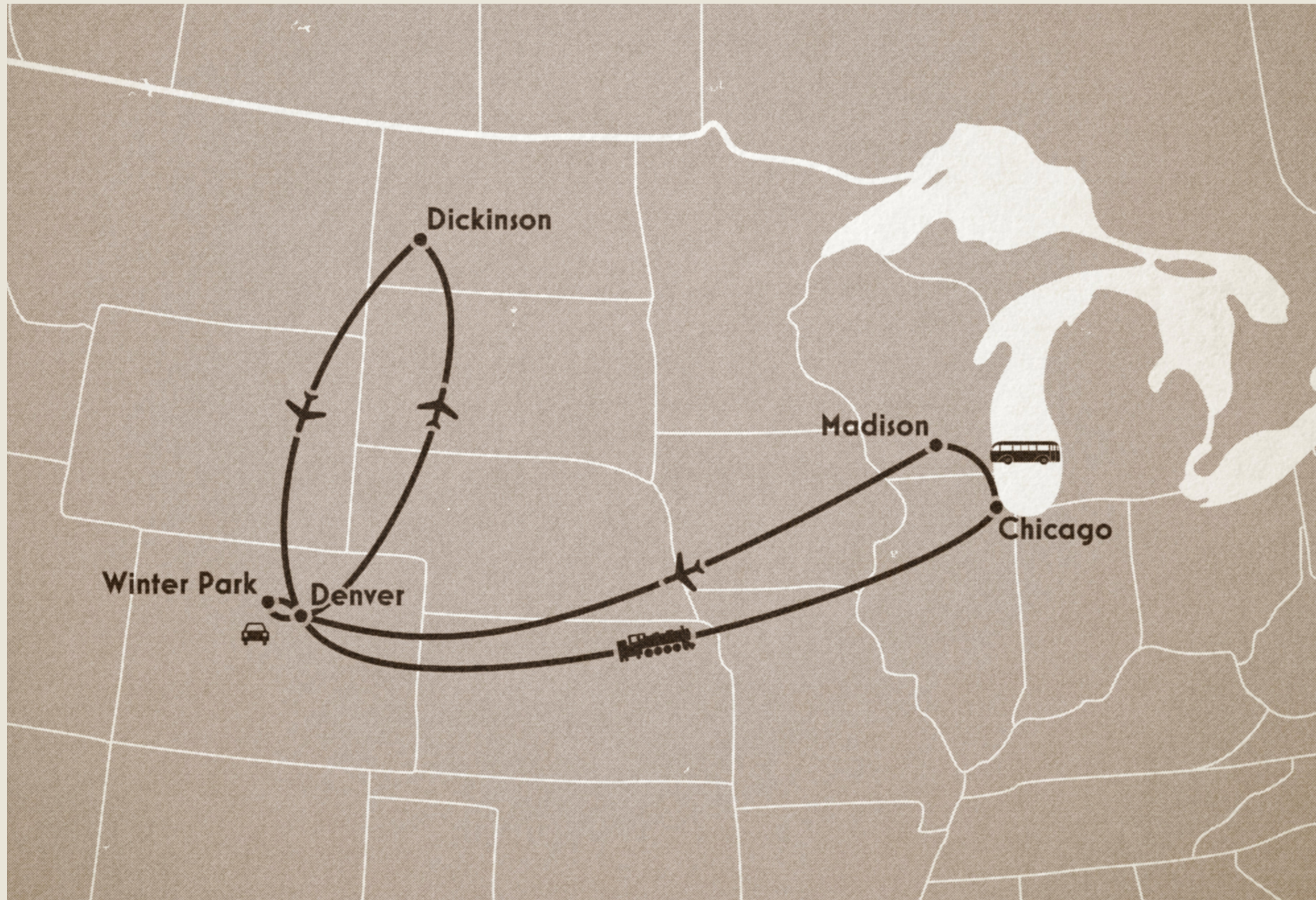
FEBRUARY 2023



A FEW YEARS AGO (AS SEEN IN THE PREVIOUS VOLUME OF THIS series), I played around with producing halftones using a pattern that looked like eyes. It was weird and creepy and fun.

When my partner needed a shower curtain at her new apartment, I offered to make a custom map, and to make it more interesting I went with weird halftone eyes. Unfortunately, the print quality on the final product was so poor that you couldn't tell what was going on, only there was some sort of vague pattern.





April Journeys

APRIL 2023



BESIDES MAKING SIMPLE FLOW MAPS OF WHERE MY CYANOTYPE atlas is going, I sometimes enjoy making them for where *I* am going. Once again, I leaned into the Isotype style and borrowed a couple of my icons from Gerd Arntz.

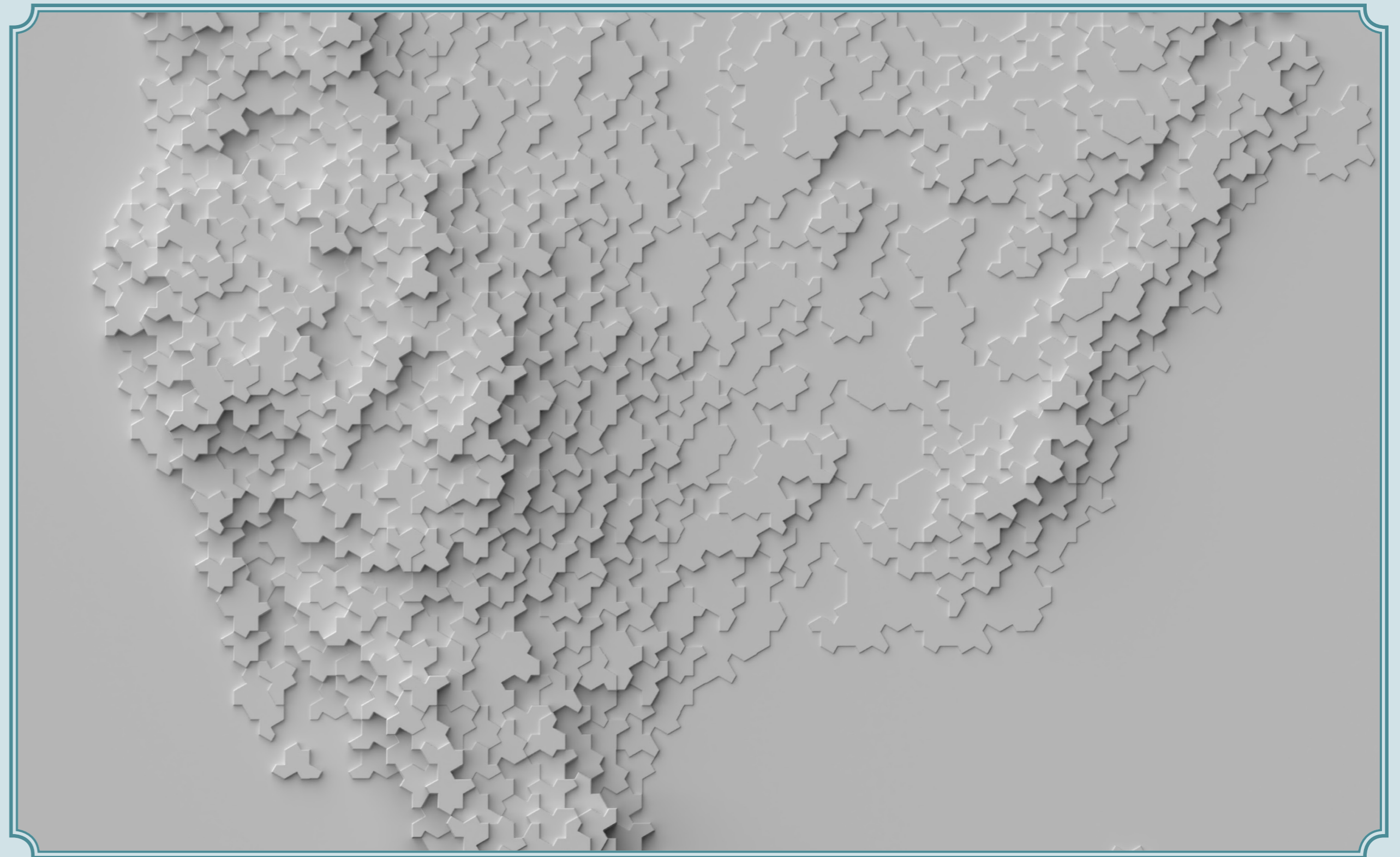
Einstein Tiles: Relief

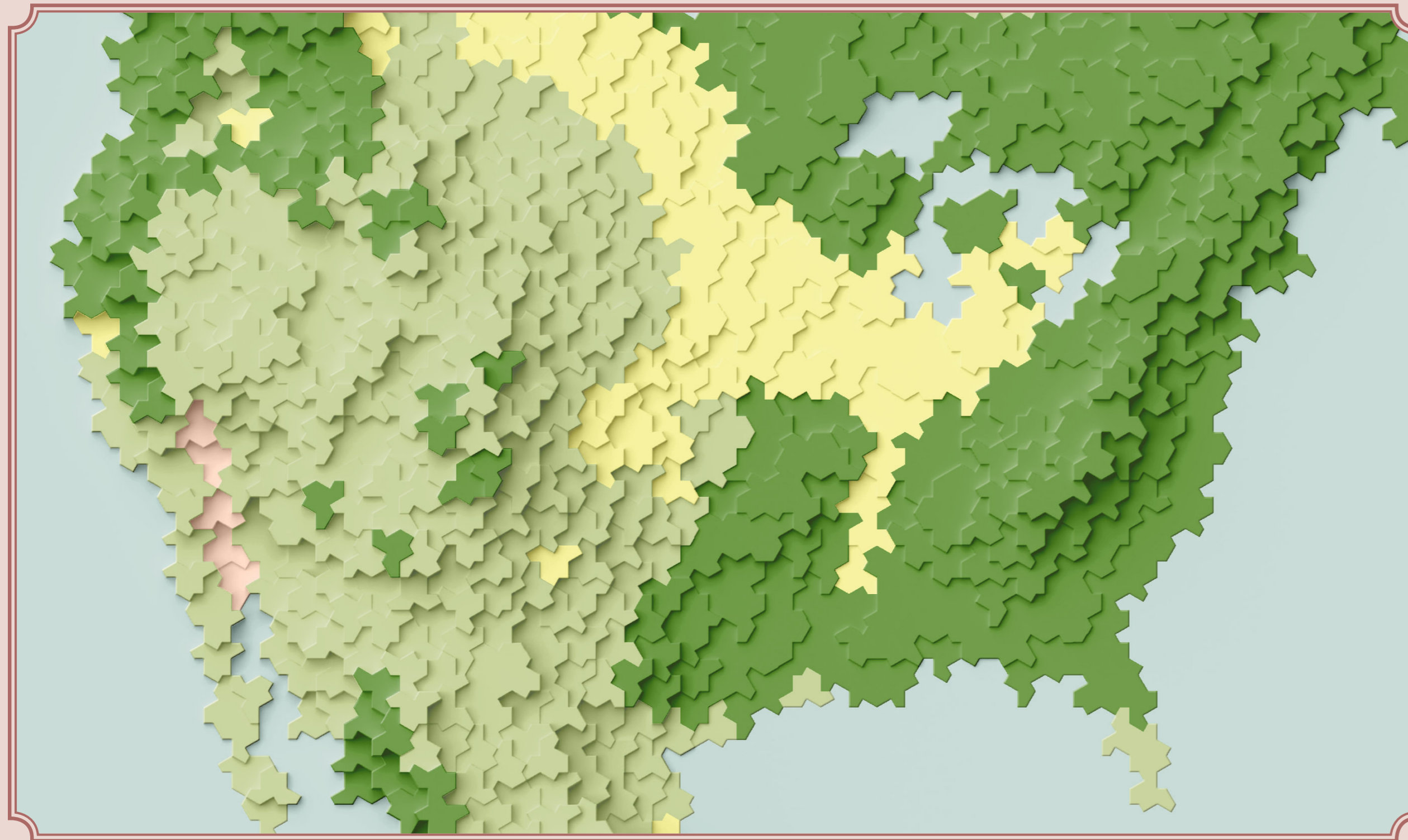
APRIL 2023



I'VE MADE PLENTY OF PIECES WITH PENROSE TILES, INCLUDING some in this atlas. However, in early 2023 I began to hear about the newly-discovered einstein (“one-stone”) tile. Unlike Penrose, which requires two tile shapes to produce an aperiodic pattern, an einstein tile requires only one.

To see how the new tiles looked, I made a couple of simple maps that were similar to ones I'd done in Penrose tiles. I began with a simple shaded relief.





Einstein Tiles: Land Cover

APRIL 2023



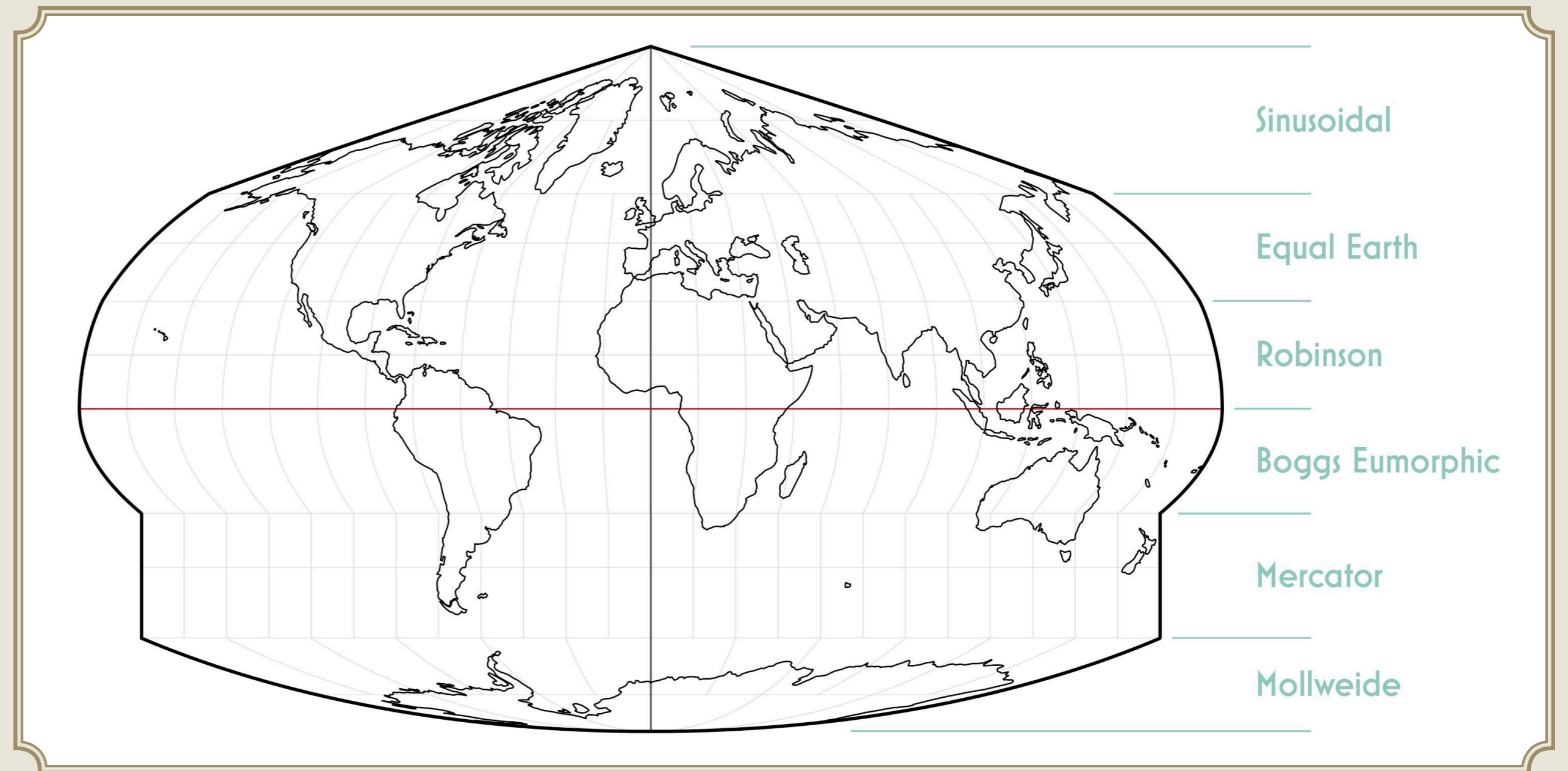
I ALSO PAIRED MY RELIEF WITH A COLOR A SCHEME SHOWING THE most prevalent type of land cover per tile. I did all this einstein tile work in the context of conversations with my colleagues Kenneth Field and John Nelson, who attending the 2023 Mountain Cartography Workshop with me. Eventually, this piece made its way into a blog post that Ken wrote up, alongside some of his own creations.

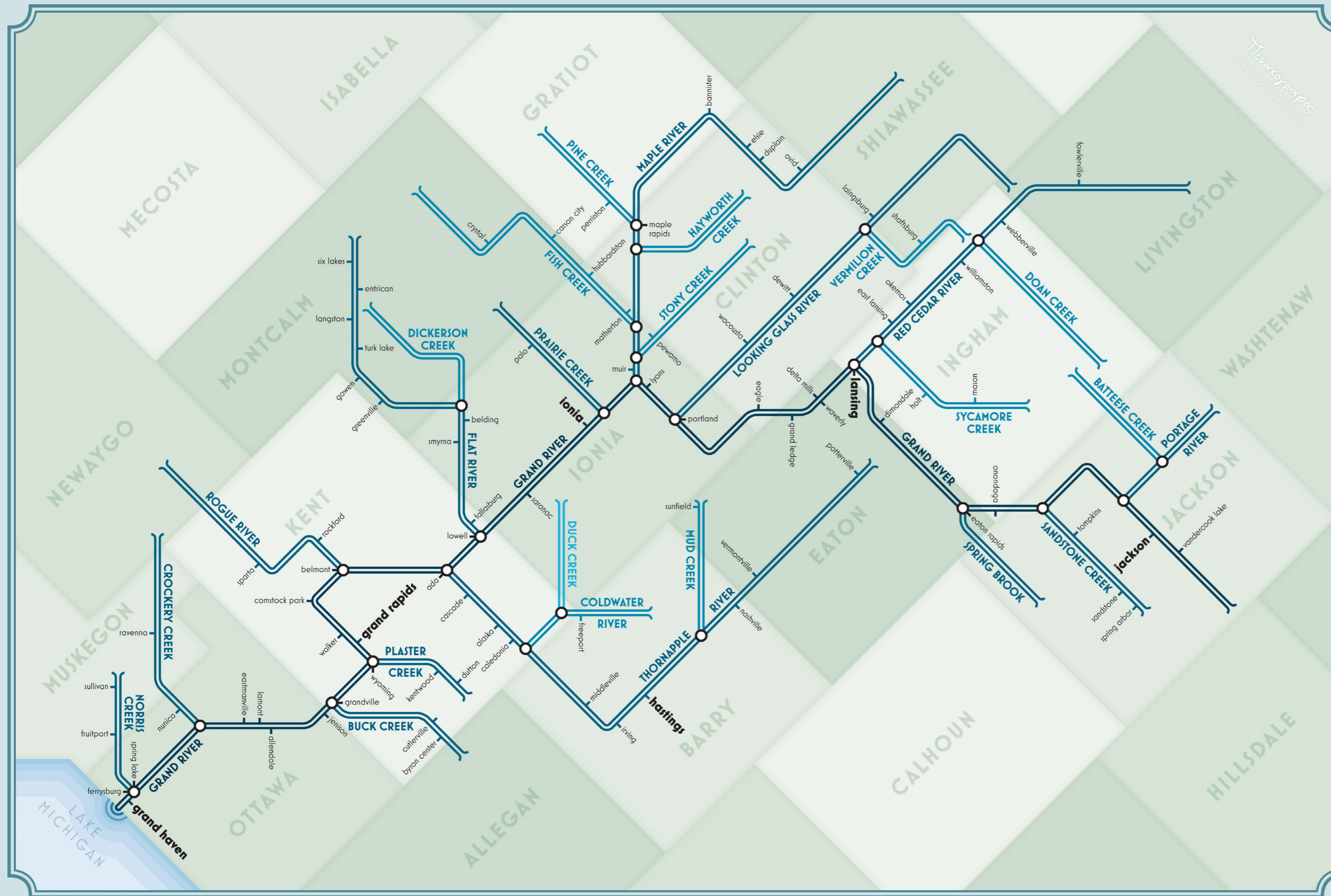
Useless Projections: Layer Cake

AUGUST 2023



I WAS STRUCK BY A BIT OF INSPIRATION AND RETURNED, OVER A year later, to my Useless Projections series. This one is a simple layered amalgam of several pseudocylindrical projections (and one cylindrical one). There are so many such projections, that you could produce endless variations on this concept.





Grand River

SEPTEMBER 2023



I'VE MADE QUITE A NUMBER OF RIVER MAPS IN THIS "TRANSIT MAP" style over the years, including a whole atlas of them. But I'd never done one covering the watershed into which I was born. While visiting the area, I promised to make a transit-style diagram of the Grand River for friends & family there. I usually make these with north toward the top of the map, but it would have looked pretty visually unbalanced.

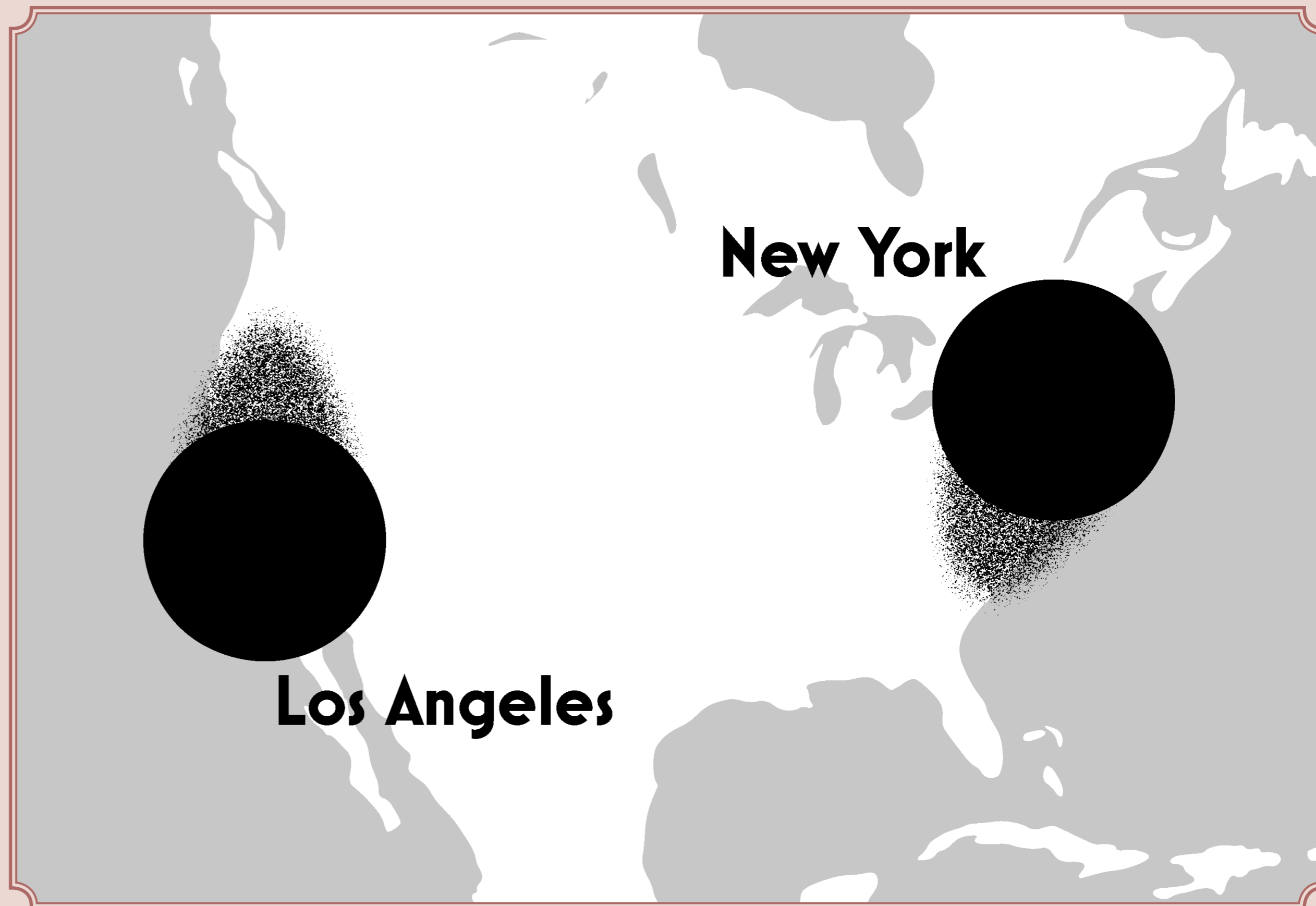
30 Day Map Challenge: Part One

NOVEMBER 2023



I'VE LONG HAD A MIND TO EXPLORE MAPPING FROM A STANDPOINT of my love of Surrealism (see my 2022 “Bad Map”). Most of my ideas are half-formed, but I did manage to actually finish a couple of pieces as part of the annual 30 Day Map Challenge.

Here, I wanted to play with absurd scales, which make us more aware of the arbitrary nature of map symbology. Think along the lines of Magritte's *The Listening Room*. The giant dots cover the areas of interest. The scatter of points near each is meant to be some sort of shadow, but I don't think it comes off quite like that. I will possibly revisit this one another day.



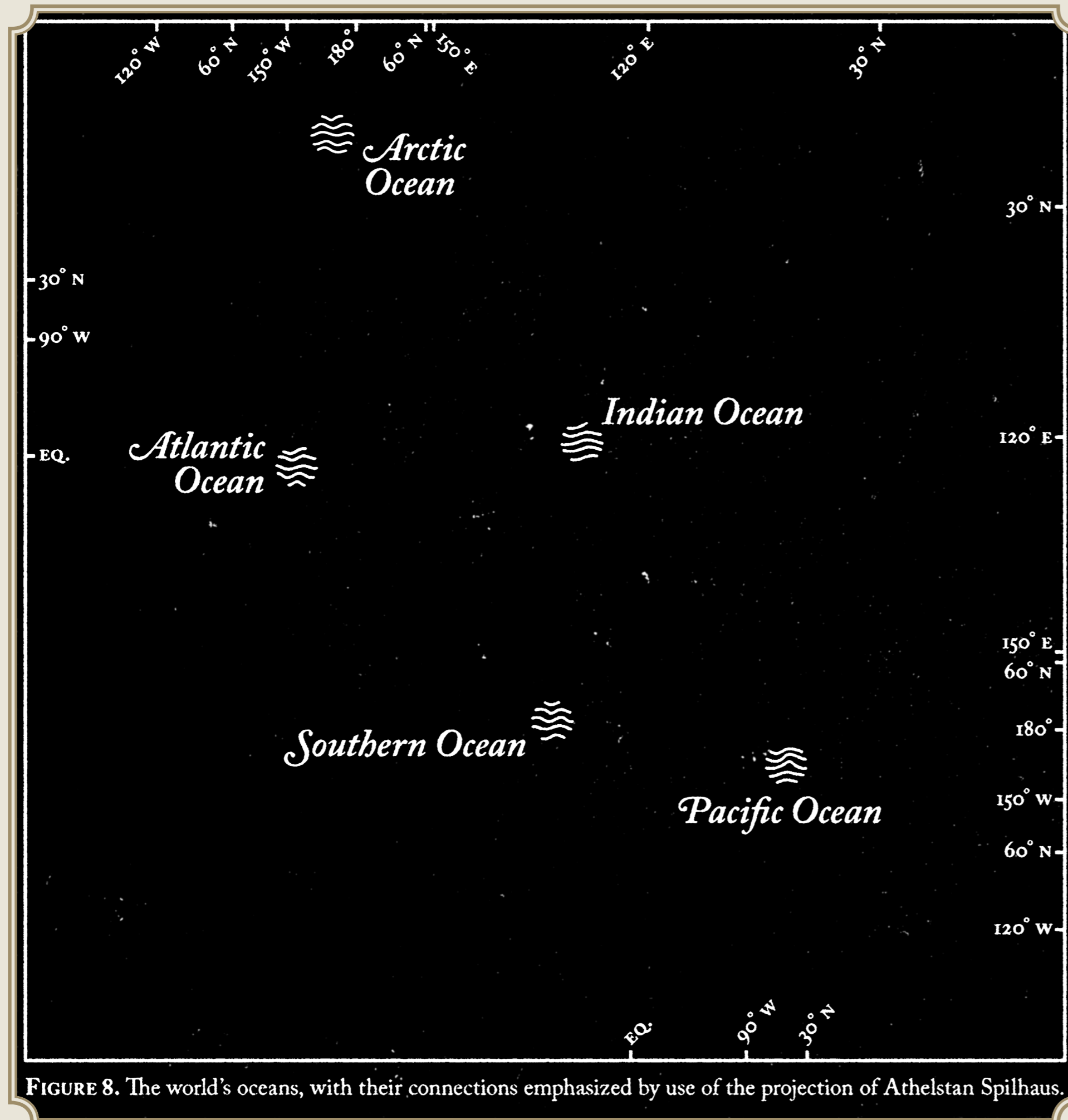


FIGURE 8. The world's oceans, with their connections emphasized by use of the projection of Athelstan Spilhaus.

30 Day Map Challenge: Part Two

NOVEMBER 2023



I ONLY MADE TWO PIECES FOR THE 2023 EDITION OF THE MAP Challenge. Both were done on Day 1, where the theme was “points.” This one is my favorite of the two. Again, prompting the reader to think about the falseness of map symbology, I decided to depict the oceans as points, rather than polygons. I took the trendy Spilhaus projection, commonly used for showing oceans, and simply marked points that were roughly in the center of each one. It’s accurate, but useless.

The points are wavy, but I may someday revisit this and just make them solid. But overall I’m pretty pleased with how it turned out.