An Atlas of Minor Projects

A Collection of Cartographic Ephemera from 2019—2020

by Daniel P. Huffman
I make a lot of little random cartographic things in my free time. I get curious as to what an idea will look like, or I want to practice a new technique, or I just want attention and the thrill of receiving likes on Twitter. So I spend a few minutes, a couple hours, or a day, cranking out something interesting.

But most of these projects don’t really live anywhere. They aren’t significant enough to show off in a blog post or YouTube video. They aren’t made for clients, so they’re not going to end up in books or on websites. They just float around on places like Twitter, where they’ll be briefly seen, and then fade forever. Many of them don’t even exist on my hard drive anymore — once posted to Twitter, I often delete the files, to avoid cluttering up my project folders.

So I’ve decided to collect a bunch of these fragments into an atlas, giving them all a more permanent home. They are stronger together, and, when combined, form something that merits a more permanent place in my archives and on the Internet. I hope you enjoy, and keep a lookout for sequels in the future. I’m always making more cartographic curiosities.

Daniel P. Huffman
I created this piece to try and hone my skills in Blender, as I’m still pretty inexperienced in creating 3D oblique views. This doesn’t quite match up with the work of my more experienced colleagues, but it’s a step in the right direction. The terrain in the Upper Peninsula of Michigan isn’t exactly the most mountainous, but there are some interesting formations going on there. Unfortunately, I think the forest texture (which is pretty much everywhere) obscures some of the relief. It’s all part of the learning process!
Mimicking Isotype
February 2019

I love the Isotype design style that came about during the interwar period, and I’ve played around with it for fun on occasion. Here, I took a map that I was working on for a client (top left), and mused about what it might have looked like if it had been made in the 1930s or 1940s. This included trying to get the typography right, along with showing everything using a more limited color palette. And, of course, a staple of the Isotype style: using repeating symbols to convey quantities. As I recall, I actually copied the bird symbol from a design by Gerd Arntz, who created a lot of the icons originally used in Isotype books.

I also decided to give it an “old printed book” look by halftoning it in Photoshop. That’s a theme you’re going to be seeing throughout this atlas, as it turns out that I’ve been sort of obsessed with that idea in the last couple of years. I get better at it as time goes on, but this might be one of my first forays in that direction. I think. I can’t really remember.
Global Tree Density

February 2019

This is just a simple map showing global tree density as an elevation surface. Rather than showing a bumpy, continuous surface, I simplified things down into a series of steps that I represented with Tanaka contours (also known as illuminated contours). This was for stylistic, “cool factor,” reasons. But, if you ever have low quality raster data, Tanaka contours are a good way of getting across the general pattern of the dataset without being forced to show too many details.

Embarrassingly, I originally created this map in a projection that wasn’t equal area. Which is kind of bad, since this is a map of density. Fortunately, it hadn’t spread too far on Twitter before I realized what I’d done, took it down, and issued a corrected version.
Continuing my "fun with Tanaka contours" series, I decided to take the same idea as the tree map and just repeat it with some snowfall data.
And one more in this Tanaka contour series (as you’ll see elsewhere in this atlas, I often feel the need to make exactly three iterations of the same idea before stopping). This time I tried to make up an index of “snow impact,” which is just snowfall multiplied by population. Probably not the best way of getting at this idea.
Continuing my halftone adventures from the previous month, I decided to use them to construct some shaded relief. I'd seen a number of people who added yellow highlights to their shaded relief, or purple shadows, so I decided to made a separate halftone for each color and stick them together.
Pretty much the same as before, except this time I used Tanaka contours, which make everything cooler.
Halftone Relief: Part Three

March 2019

One last one of these, this time with some blue water thrown in. It should be noted that none of these images are particularly realistic from a printing perspective. It would be challenging to print bright yellow dots on grey paper (though I suppose you could manage it with the right setup). These halftones are mostly just there as a cool pattern, and not meant to make this look like a coarsely-printed map.
I can’t quite remember how, but at some point I came across a free library of game assets designed by Kenney (website: kenney.nl). I do not know much about this person, only that they create a lot of artwork and other items that you might find useful in game design, and then they give it away for free. Sounds a lot like they’d fit right in with the cartographic community.

In any case, Kenney released a set of over 1000 little 1-bit tiles that could be used to draw game maps, and I took a fraction of them and made this map of Michigan.
I sometimes listen to old radio programs from the 1950s, and after doing that for long enough, I eventually started to become very fascinated by the early history of radio networks in the United States.

For a long time, the most powerful broadcast organization was the National Broadcasting Company (NBC), and they actually operated several networks at the same time, each with a color-coded name. There weren’t many maps of which areas the networks covered, though, so I decided to make this one for Wikipedia. Fortunately, I came across some old documents to help figure it all out.

I’m still not satisfied with the shadows on the yellow line and text. Perhaps I should have just gone with a color that didn’t need a boost.
One more radio map for Wikipedia. This is of two very early radio networks. AT&T connected its radio stations using its existing infrastructure of phone lines, allowing it to send high-quality transmissions to large parts of the country. WJZ had to rely on telegraph lines, which were less suited to carrying audio signals. Later on, both networks ended up merged into a new National Broadcasting Company (NBC).

There’s a bunch more to this story, so go read Wikipedia.
In 2019 I created an atlas using the cyanotype process, which uses the sun to create blue-colored prints. Then I organized a world tour for the book, letting people sign up if they wanted me to send it to them for a few days. For fun, I decided to make this quick map (again using the cyanotype process) showing the places that the final book was bound for.
In a conversation with my colleagues Meghan Kelly & Lauren Tierney, I was told that people would watch a video of a map being labeled. So I decided to give it a try, and produced an 11-minute video that was just a screen capture of me silently labeling a map, accompanied by calm, royalty-free music.

I decided to go for a fairly simple map this first time around (you’ll see more of these later on in this atlas), while making sure I would have the opportunity for a few different label styles, and some nice curves.

This image is a little fuzzy because it’s a screenshot of the video; I didn’t save the original Illustrator file.
I have a peculiar habit of collecting hypsometric 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.
As I mentioned earlier, I love Isotype. Once again, on a whim, I decided to take a map I’d made for a client, and try and simulate what it might have looked like if it had been done decades earlier.

When I do perspective or orthographic maps, I rely on shading to try and communicate the curvature of the surface. That’s harder here, where I’m working with flat colors. But I think the grey bands at the end of the globe do the job sufficiently.
My Apartment
March 2020

At the start of COVID-19 lockdowns, many people began making joke maps showing their “commute” from their bedroom to their home office. I did not join in, but seeing all these maps of people’s homes made me realize that I had never seen a floor plan for my apartment. So I spent a while measuring everything to produce this piece.

I am not great with very large scale mapping — I often feel like my efforts end up flat and boring, and that I would benefit from learning some of the skills of a professional illustrator.
Since people had liked the first one, I decided to make another map labeling video. This time, I made a much larger, more complex piece. The final video ended up being 42 minutes long, which is probably why far, far fewer people watched it. Attention spans only last so long.
I climb trees for fun, and really started getting “serious” about doing so in the summer of 2019. During the winter of 2020, while waiting for it to be warm enough to climb again, I decided to document all the trees I’d climbed in the previous year, and the rating I’d assigned to each.

I used a style heavily inspired by Isotype design, and gave it a period-appropriate halftone, too.
Since most of the trees I climbed were in my home of Madison, Wisconsin, I made this larger-scale map, as well. If you look closely, you can see a small, intentional registration error between the ink colors. Just to help cement the “something printed in an old book” look.
The states, arranged in order of their "cartographic efficiency" (the percentage of a rectangular page layout they take up, assuming north remains up).
I don’t get to use colors in the pink family nearly as much as I like. So, I decided to make a few quick pieces exploring this part of the color space. And I halftoned them, because that’s what I do when I want things to look cooler. But (for two of the pieces, anyway) the halftones are not the traditional CMYK inks; they are instead pink-ish spot colors.

This first one is a re-working of an older client project, using lavendar and coral inks.
Pink Things: Michigan
April 2020

For this one, I re-used a shaded relief image that I had sitting around, with yellow & magenta inks.
Pink Things: Perspective

April 2020

One final map in this series (once again, I had to get to make sure I did three of them). This one is the only one that was entirely custom, vs. a repurposing of existing pieces. I described the ink colors here as “watermelon” and “dusty rose.”
Here's the Beaver Archipelago in Michigan, with a nice curved perspective, and given a halftone. I mostly made this as part of an animation project: I wanted to see what it might look like if you animated a bunch of halftoned frames. It did not turn out great. But the static map looks pretty decent.
Back in 2018, I made some maps on my typewriter. After about a year and a half, I decided to revisit that idea, and here’s what I ended up with. I’d never really tried to show a thematic dataset before. Fun fact: I mis-typed one of the rows. I typed `======..====..` instead of `========..====..`, but I decided to just let it go. Maybe I’m growing out of my detail-obsessiveness (I am not).

Since this was done during COVID lockdown, this is just a photograph of the map, rather than a nice scan as I would ordinarily do. You’ll see this come up again in some later typewriter maps.
For the third chapter in this series, I built this map of passenger steamship lines on Lake Michigan, borrowed from an old report by the US War Department. I really like the colors on this one.

I kept the palette limited, but this also meant I had to come up with ten distinct line patterns. It was a real challenge, but I think it came pretty decently, given the limitation.
This one isn’t a map, alas. But, it is an interesting experiment with an unusual halftone pattern: eyes. Stay tuned, because this idea of weird halftone shapes will come up again a little later on.

The photo is of me, and it was taken by Andy Woodruff (who regrets what I did with it).
In this typewriter map, I decided to try and do a perspective view. I don't think it's entirely successful. There's just not enough resolution on the typewriter to convey the curvature of the earth.
Two more typewriter maps, these ones of Aotearoa (New Zealand). Here, I was trying out the idea of a coastal vignette. I think it sort of works. Again, though, I’m probably pushing the whole medium farther than is useful.
Cities and Towns Sharing Names with States

October 2020

Having learned that Mark Twain was born in a Missouri town named “Florida,” I became curious about how many other places in the United States shared a name with a state. There were way more than I expected. So many, in fact, that I decided to cut out non-exact matches like “Kansas City,” just to keep the final map manageable.

This was mainly an experiment in trying out a new style. I’d been watching a lot of videos on YouTube by Kurzgesagt, and this map’s look is heavily influenced by their work. My color palettes are usually more restrained, and I had never really played with flat shading before, so I decided to try that, too. There’s some blobby shading on the water, and I made swathes of the map lighter/dark. A new set of tiny decisions to obsess over and feel uncertain about.
As mentioned earlier, I climb trees recreationally, and I also assign ratings to each tree that I’ve been up. This time, I took a different approach as compared to the 2019 map: I binned the trees using a hexagonal grid, and I went with a wildly different style.

I made this for the 30 Day Map Challenge, organized by Topi Tju-kanov. There’s a theme posted for each day, and people are encouraged to create something that fits the theme. I participated for the first time in 2020, and while I did not make thirty maps, the challenge prompted me to make a few fun items.

The theme for this one was “monochrome.” Instead of using the whole greyscale ramp, I decided to see if I could cram all this information into a pure black-and-white representation. I think the end result is kinda fun, though probably not easy enough to read. It’s one of those things made more for the benefit and enjoyment of the designer, rather than the audience.
I also made this piece for the 30 Day Map Challenge. The theme for this particular day of the challenge was “3D,” and so I decided to turn a non-elevation dataset (percent forest cover) into an elevation surface for fun. I don’t think I even remembered that I had previously explored that idea in 2019.

The end result looked sort of bland, so I made it monochrome green and halftoned it.
This quick map shows the results of the 2016 United States presidential election in Wisconsin. However, instead of showing the vote based on counties or precincts, as is often done, I showed it based on Level 4 Ecoregions designated by the Environmental Protection Agency.

This is mostly for amusement and to satisfy curiosity. When I put this on Twitter, Bill Morris rightly pointed out that "there's a risk of steering straight into environmental determinism with these comparisons."
For some reason, you can review, and give ratings to, natu-
ral features on Google Maps. So I prepared a couple of maps using
these datasets for the Great Lakes region. The first one, here, just
looks at the average rating score. The range of values is pretty tight;
most of the people who care enough to leave a review of a lake or
river also happen to be fans of that place.

This was another piece for the 30 Day Map Challenge, with the
theme of “water.”
People Unhappy with the Great Lakes
November 2020

Inspired by the @subparparks Twitter feed, which tweets out real 1-star reviews that people have left on national parks, I decided to copy the idea and see what negative comments people had left for the Great Lakes (plus a couple other lakes nearby). A lot of reviews are made in jest, but I tried to pull quotes from ones that seemed earnest.
This is an idea that sat the back of my mind for years before I was finally able to get it working. It’s a highly simplified way of expressing the concept of a watershed — imagining them as barriers, with terrain sloping toward the sea. All those pesky elevation details are erased away and replaced with gentle inclines.
One common thread in a lot of my maps is an appreciation of the forms given to us by nature. For example, not just thinking of an island as a physical place, but actually admiring the geometric shape that it makes on the map page. Here, I decided to take Te Ika-a-Māui (North Island) and use the shape of the island as a halftone fill — to create a shaded relief map of the island.

I’m interested in doing more of this in the future. We use dots, squares, diamonds, and all kinds of other shapes on maps, so why not see what can be done using the shapes of geographic futures? They’ll probably mostly be novelties like this one, but I think they still give us something to think about.
Thanks to the Atlas of Design, I’ve become familiar with some of the great cartographic work being done by the folks at Le Monde. Ordinarily, when admiring works by others, I just sit there stewing in envy and feeling inadequate. This time, though, I decided to turn that energy toward learning. I made this piece so that I could practice borrowing some of their aesthetic elements and mashing them up with my own.

Borrowings include colors, the pointy island labels, and the subtle tint indicating vegetation (which I made too subtle). There’s also a bunch of dots, as that’s one of the features I find most charming in the Le Monde maps I’ve seen. This piece also includes a gratuitous halftone, but this time at a much finer resolution than I usually do.

This is the last piece that I made for the 30 Day Map Challenge. This was done on the final day of the challenge, when the theme was “A Map”— as in, make any map you like.
I've long been curious about the many definitions of the Midwest. So, here's roughly every business on Yelp with “Midwest(ern)” in the name.

It's an imperfect measure. Some of these may be branches of Midwestern businesses; there's “Midwest City” in Oklahoma; Texas has a “Midwest” region; etc. But the pattern is still interesting, and enough to convince me (a lifelong resident of Michigan & Wisconsin) that Missouri may, in fact, be a Midwestern state. Still not sold on including any of the states west of there, though.