Hi! I’m Nadieh Bremer, a freelancing dataviz designer (under Visual Cinnamon), focusing on the more “creative” side of visualization & one half of the dataviz collab “data sketches”. Ask Me Anything!

NBREMER R/SCIENCE

Hi fellow dataviz enthusiasts! My name is Nadieh Bremer and these days I freelance as a data visualization designer, under the name of Visual Cinnamon.

Since July of 2016 I’ve been doing a personal collaboration with Shirley Wu called data sketches, creating an elaborate visualization each month, during which I created works about the words spoken in the LotR movies, all Olympic gold medal winners, the fights in Dragon Ball Z, a “breathing” Earth and more.

In 2011 I graduated as an Astronomer (still very much drawn towards the subject, either in data such as in this exoplanet visual and HR-diagram, or in design elements, such as in Royal Constellations). I then became a Data Scientist for Deloitte Consulting where I gradually discovered my passion for the visualization of data (and Self-Organizing Maps), making complex things accesible to non-experts. From December 2014 I finally decided to go heads-on into data visualization, and started freelancing in 2017.

I find myself focusing on making non-standard visualizations that convey a lot of information, so people can also find their own stories beyond the general point the visual wants to make, while also being visually appealing to draw people in. But I also like to experiment with web techniques that haven’t quite found their way into dataviz, such as the gooey effect and other experiments.

And finally, I enjoy diving into the world of data-art every now and then with works such as The art in pi & Marble butterflies.

I’ll be back at 18:00 CET / 9:00am PST to answer your questions. Proof that it’s me! 

Update: Here now and answering questions!

Update: And done! All questions answered, thanks for tuning in, hope some of the answers were helpful.

Hi Nadieh, I am a big fan. Am even more amazed by your background and how you came into Data Viz. I consider myself reasonably skilled when it comes to technical expertise- such as the Tuft basics, Gestalt, Tableau, d3, programming in general. But I really struggle to come with ideas (and execution) for a personal project. So my question is- how do you get the inspiration and/or the ideas to build something informative and aesthetically pleasing. I look at datasets, make a few barcharts/scatterplot but then get stuck. My background is Computer Science, if that helps.

hawkeyehurdler

Thanks! Yes, finding the idea to build the visual around I find one of the hardest things to do. There are a few things that I do to come up with ideas, in no particular order:

- Does the dataset itself give any “guidance” on what might fit it: cyclical data such as years could become a circle, my visual about Dragon Ball Z was about fights, so ranking them from top to bottom seemed logical, using the different sagas to then step towards the right was the next step.
- Does the topic of the data give guidance: a visual about the Olympic games could be 5 circles.
I keep several Pinterest boards with inspiration during the design phase I browse through these boards, keeping my goal and data in mind and then try to "fit" my data into the examples to see if any would make sense and appeal to me at that point.

But overall: sketch your design on paper first! And actually sit back and take the time to think about designs and try to create at least 3 different ones.

Hi Nadieh. I often use your projects to show others that data visualization can be more than bar chart and line charts. At the same time, your visualizations are perhaps not the easiest to understand at first glance. How do you balance between creating some beautiful and artsy while still communicating data in a good way?

ostedog

Very true! I'm not know for complying with the 5 second rule :) I love adding a lot of data and context into my visuals so people can really dive into them.

However, I always think of my audience though. For some client work I've made much simpler designs such as line charts. For my personal work (I seem myself as my audience then) I go more extreme and experiment to see what works.

But the best way to test is to ask others if they can make sense of the dataviz once you have a base structure standing. If that's ok, I try to add the extra layers of detail that can provide context, while trying to not make it too overwhelming.

Hey, I recently found your work through Shirley. I love your creativity and how out of the box some of your ideas are! It's really great!

But maybe because of this I'm also wondering do you ever feel pressured to keep one-upping yourself in your work? Is the creative process stressful? Like, do you ever wish you could just do regular old corporate pie charts for a change?

184942758372

Well, I don't particularly feel that I need to "one-up" myself, on a day-to-day basis I am more looking to achieve the same level of satisfaction with an end result that I have with some of my favorite projects. But on the longer term I do always strive to improve my skills (be it design or technical), so hopefully the quality of my works will improve on average :)

But I do find coming up with a design stressful, more due to "will the client like this or not?"

And I still make quite a few line charts (although never pies) during client work. Perhaps never in a dashboard style (but more with animation, storytelling) ;)

Hi Nadieh, thanks for taking the time to do this! I saw you & Shirley speak earlier this year at OpenViz conf and absolutely fell in love, not only with your work, but with your process to approaching new projects. It's also really inspiring to see such badass women be at the forefront of the field. My question for you is how did you balance working full-time and continuing to develop such intense visuals in your spare-time? I've struggled with pushing myself to spend my free time working on projects when I've spend all day working on similar things at my job and am curious as to how you were able to find a balance.

Thanks so much!
raspberry and lime

Thank you! While I was still working full-time for an employer I basically just spend 80% of my free time on my personal projects, that includes weekends. I have no kids, don't like to hang out in bars and watch movies mostly on the couch, so there's not much else to take away my free time.

I actually started freelancing full time since July, and I actually find it more difficult to work on projects in my spare time. Since I'm already working on projects I like during my day, I'm less driven to also make more in the evening. Whereas before it was a need to do things I truly liked that I couldn't do at work

What does /u/elijahmeeks need to know about dutch cuisine?

ostedog

Yes! Very important! He needs to know that we really don't have any.... It's horrendous, mostly dry potatoes, cabbages, some meat Only our drastically fried food is good: kroketten, bitterballen, or our candy: stroopwafels perenoten, but beware the "drop"

I remember reading that you did not take on projects that where about dashboards and organizational visualizations. Is it hard to find interesting projects as a freelancer? Is there any projects that where on behalf of customers that are availavle to the public?

ostedog

Yes, I've made so many dashboards already, and they typically need to function with lots of different and changing data, which means that you can't go all-out in your design. Until now I've had the luck to not having to search for clients. I answer the emails that come in. I don't get that many emails about new projects, maybe 1 every 2 weeks, but it's been enough.

That doesn't mean I don't do sales, I just don't do it directly, I instead try to do it through making personal projects for my portfolio and talking at meet-ups and conferences

I made BeautifulInEnglish for Google, worked with Zan Armstrong on The Baby Spike for Scientific American, and working on a few things that should come out soon ^

Your work is so beautiful and I think you used a bar chart once (but you put it in a circle pack) so do you think that professional data visualization practitioners can use any of the layouts or techniques you've used or even the color schemes or gifs or do you think you're in a completely different sphere of data visualization away from dashboards and reports?

elijahmeeks

Thanks Elijah! Although some of the data layouts that I use are rather particular to that dataset, I actually think that most could be used for other datasets as well: the "bat"-plot, the "loom", the Avengers co-workings. These might not be normal, but they are by no means super specific to the data that they show. To be honest, these 3 example I think would be material for dashboards under the right circumstances

Color schemes are very dependant on both the client and the data, so that's always a tricky one. I typically default to my "dark rainbow" and then start to deviate from there
Hi Nadieh, Thanks for taking the time! As a data scientist, I am a fan. Your work leverages new technologies & tools allowing data exploration beyond the superficial by a broad base of users. My question: Data visualizations are growing rapidly in use. For example, they are commonly included in say, journalism. This allows more people at large to understand & engage information. However, there are some people who have visual limitations. How do we maintain data visualization accessibility for persons with visual impairments and disabilities?

Lsanders.io

I feel that this hasn't been truly figured out yet for visualizations. I typically tell people to make sure the conclusion of the visual is accessible as a title (or something similar) attribute. Perhaps they might not be able to dive into the specifics and details, but at least that way you give a means for the visually impaired to follow the story that the visual is trying to tell

Hi Nadieh! Long time fan of your work and what you do for the community. My question is about a call to action; many of the most impactful visualizations I've seen are the ones that left me wanting to DO something. Has this factored into your design, and are there any notable visualizations that have left you wanting to get involved or take action?

quantum_relic

Hey! I think I know some of which you have in mind, such as the "Gun Deaths" visual by periscopic or the "Let's free congres" by Tony Chu. Most of those I saw were actually very much about American concepts that I either couldn't act on or were not part of my real life in the Netherlands. And as I've said before, I'm exceptionally bad at giving examples, haha. I am however always very stricken by the visuals that make it SO clear that global warming is happening like this, it makes me want to smack it around people who are still denying it. They actually also make me feel very sad, that I might want to hide from them, because what can I really do, except not have a car, recycle and these small bits... -_-.
I guess if more of the environment vizzes actually had a call to action I would be able to do something and feel just a little better :)

Question from a friend: Can you remember a time where the use of statistics dramatically changed your opinion on something? A scenario where the stats disproved many of your preconceived notions about a topic?

zonination

Damn, wish I wasn't so bad at remembering particular examples :S I'd say definitely yes, but let me come back to this while I try and sift through my memory

What would you consider to be the best example of a good data visualization? What about the worst?

zonination

I'm so bad at examples.. Hmm...

The best: They are both easily insightful and mesmerize you to dive into them, such as this, or this, or this

The worst are data visualizations that mislead, that (purposely or accidentally) make the user think that something else is going on: The ones on purpose: the typical Fox News bar chart that doesn't start at 0
so the difference between two bars looks MUCH greater than it is. The "accidental" ones: using a 3rd
dimension for no good reason: all of those horrible 3D options in Excel or PowerPoint

Have you ever tried doing something in 3D (and not as a pie chart)? Can you see data visualization
 coming to a VR or AR near us in the future?

ostedog

Nope, never. For now I'm sceptical about them. I haven't seen a good use and I can't think of one
either (although, I haven't really tried, mostly because I feel no desire to start coding AR/VR yet). Flying
around a city where bars come out of the ground to show something like mean income sound cool, but
are they really better than their 2d counterparts? (visualized differently)

Hi Nadieh,

Do ever plan on writing a D3 Cookbook?

Big fan all the way from Uganda.

mattykuch

Thank you! Haha, I have to admit that it takes me sooo long to write even a blog post that I'm freaked
out the by prospect of a book, hehe. Besides there are so many good ones out there already, such as
by Scott Murray or Elijah Meeks, I really have nothing to add. However, a book about data sketches... ;)

What are the tools you would recommend for a beginner?

bikermong

Doing dataviz, I think its important to also be able to handle, prepare and analyze data. I use R for this,
but python also works fine (and I know others that can do a lot with node.js packages alone). In R you
can start doing interesting dataviz already with ggplot2 and Shiny

Tableau can also be interesting to get a sense of the data, but if you then truly want to build out more
creative designs that fit your data and are (far less) limited by the options a program provides, I would
recommend d3.js. But just start with adjusted examples from others. With each new visual that you
create, you'll learn new skills that you can then use on your next project

Hey Nadieh - love your work.

I'm a graphic designer/web developer with a growing interest in dataviz, so the design and execution
side of things comes more naturally to me. However, I feel like the statistical analysis side of things is
more difficult for me and also more difficult for someone to learn in their free time. What advice would
you have for someone to study and learn the analysis side of things without going back to school for
it?

I just can't

I can definitely recommend you to read the 2nd book by Alberto Cairo called The Truthful Art, it is
focused on dataviz but with a deep dive into the statistical side of things, without getting too technical
Hi Nadieh

When did you get interested in making these data visualizations? Also what has been your favorite visualization?

storms002

It came very slowly and I didn't notice it truly until after I had been doing quite a lot of visualizations already. As a data scientist at Deloitte I noticed that after a few years I wasn't feeling the same enthusiasm in doing the analysis. To spend another 5 hours to get an extra 1% in accuracy. But then during a conference I saw Mike Freeman giving a talk and he called himself a "Data Visualization Specialist" and suddenly it hit me "You can do that?! That's a thing on its own??" and from that moment on I knew that was were my passion was and that it was something I wanted to strive for and become

Favorite dataviz: damn difficult, there are so many great ones. I very much like this, this, this, this, this, this, ... I should probably stop there, haha

If you could highlight one thing that seperates you from the rest of the data visualization crowd, what would it be?

ostedog

A focus on supplying context, adding more levels of detail even if the chart is already making the main point of the visual clear to its viewers. I feel that supplying extra context will make it even more useful for the audience to place the insights into the larger scheme of things or better understand it

What is one thing that you think everyone doing dataviz should spend more time on, and why?

ostedog

Sketching out their designs on plain paper. I think that most people go straight from data (or idea in their head) to the tool/computer. And then they are limited by the options of the tool, or mindlessly click one of the standard available options

No! Instead try to sketch out on paper how you would think the design should be! What is the question you're trying to teach people? What data is needed to achieve that and what other info could be interesting to share? And how would you combine that? Sketching on paper frees you of all obstacles of a tool and once you have a more advanced design in mind, there are so many more things possible with any tool than you may think. Someone on the internet has figured out some hack for you. It takes more time to "make the tool do things it isn't really supposed to do", but you'll be creating better dataviz

I know you keep Pinterest boards for inspiration, but where do you source your pins? What makes something stick out enough for you to pin? And which Pinterest board is your current favorite?

sxywu

I keep a keen eye on my Twitter, which is where I get most. I only follow people that I truly find interesting and I use tweetdeck to keep lists -> I have a list for visualisation, journalism, creative.

Once a year I take a few hours to browse through the entire showcase of the Information is Beautiful
Awards which gives me a lot of new ones.

And when I'm looking for particular inspiration for client assignments, I often stumble upon new things I'd missed and add those as well

Always be open to Pin! ;)

Hi Nadieh! Huge fan (: Your visualizations are known to be beautiful, but they're also very insightful and very rigorous when it comes to the data. You never compromise the accuracy of your data or the statements you make about your data - do you think that actually informs the visuals you come up with? Or are they pretty separate parts of the process?

sxywu

Haha, thank you! I learn A LOT about the data during the cleaning, preparation and analysis phase. And that definitely informs my design. I know beforehand what insight I want to show people (or what variables to visualize for people to find their own stories) and I NEVER intentionally want to deceive people into the wrong conclusion. Knowing things such as the "regression towards the mean" do help me to stay away from the typical statistical pitfalls and how to transform my data into different ways to make the true insight appear

Also, who's your all-time celebrity crush?

sxywu

ALL the Chris'es, Pine mostly - And Gal Gadot

Hi, big fan as well, you are definitely an inspiration. What is an area you are trying to improve in? Or an area you'd like to pursue further through your freelance work?

campkels

Thank you ^_^ I'm always trying to improve my coding skills actually. I come from a data science background so all JavaScript is self taught. I still can't wrap my head around build systems and node.js, hehe... I try to use my freelance work to try out new techniques or frameworks on a project :)

But more specifically, getting better at WebGL is very high on my list now. When I see what some people make with that, it just drops my jaw, and the possibilities for dataviz with lots of data (which I like) are just endless! This will probably have to be a personal project though, since I can't "sell" this skill as of yet