

## Episode #124 of the PolicyViz Podcast with Eileen Webb

[00:00:00] Welcome back to the PolicyViz Podcast. I'm your host Jon Schwabish. Thanks so much for tuning back into the show. On this week's show, we're going to talk about data visualization interactivity and scrollytelling and all the things that move around on your favorite web site. And I was inspired to have an episode about this because of my guest's great article that she recently wrote for Source. So I'm really excited to have Eileen Webb who's the director of strategy and livestock at Web Meadow to help me talk about her recent article on Source, "Your Interactives Makes Me Sick," which is by the way, Eileen, a great title. And also all this other stuff about interactivity. So, Eileen thanks so much for coming on the show.

[00:00:41] Thanks for having me. I'm excited to be here.

[00:00:44] Yes and I'm excited we get to chat because I love this piece because you take a perspective on interactives that I hadn't really considered before. So it's great to sort of like I think our views line up perfectly but each from like different sides, which is great. But before we talk more about the piece and other things could you take a moment just talk a little about yourself so people know who you are where you're coming from?

[00:01:09] Sure. So I am a content strategist focused a lot on structures and systems, CMSs, and things like that. So if you're a person who writes, I am the person who advocates for you having a nice experience to actually put stuff into the CMS. My background is as a backend programmer for CMSs and then I shifted into doing strategy stuff because I like telling people what to do. And for the purposes of this conversation, another piece of background for me is that I have had migraines since puberty, really, so 25, 30 years at this point. I have chronic migraines which means that I have about 50-60 percent of my days are days that I have headaches, in any given month. And so I'm very sensitive to motion and bright lights and sounds and all kinds of things just all the time. I have a very sensitive neurology.

[00:02:08] Right. You're a sensitive person. I can tell.

[00:02:11] A delicate flower.

[00:02:11] Just in the two minutes we've been talking. So you've identified some of the triggers for yourself that trigger some of these migraines and clearly your work on making CMSs better and helping people make better sites, I would assume it's partly borne out of that. So can you talk a little bit about this article and source about how Web sites make you and others who might have vision or motion challenges how it might make that experience while I guess in your case nauseating.

[00:02:35] Yes, literally nauseating. So yes, I am a big nerd. I like data, I like data sets, I like graphs and charts and things. And so when people come out with cool scrollytelling articles I will often click over to them, and I'm like ooh I want to learn about Twitter bots or the Colorado River water usage or whatever stuff people are talking about.

[00:03:01] And very often as I start to scroll through the site there will be some kind of nifty fancy interactive feature that messes with motion in some way. Sometimes it's parallax, so there's things in the foreground and the background moving at different rates. Sometimes it is graphs where all of a sudden you're scrolling down and then the page starts to animate sideways. And those kinds of things are really hard for my brain to deal with. I can feel myself getting nauseated and so I end up either skipping past them entirely, but mostly I just end up closing that window. I don't literally skip all of those articles that I'm interested in. But they presented it in a way that I literally cannot process them healthily. So I started complaining about it on Twitter and then I decided to turn it into

an actual proper article and maybe give people some advice on how to avoid it.

[00:04:01] Always the right way to start is just critiquing everything on Twitter and then write the longer and more thoughtful piece. Right. Ok.

[00:04:06] I looked through a bunch sites of cool things that people had made in the last few months. And found some patterns in the way that in the way that things were problematic. Things are often problematic because we sort of mess with the physics of the browser. Like the browser actually has physics. Right?

[00:04:28] You scroll a certain amount with your finger or you press the arrow key up or down and and there's an expectation of what kind of movement that is going to trigger. And we've had years and years of training of: here's what happens when you move your finger a quarter inch on the track pad or on your mouse ball or whatever. And so when people mess with that it's kind of the same thing as being in – I just went to Universal Studios a few weeks ago, and so it's sort of like being one of those 4D rides where you put on the glasses, Star Tours style, where they make you think you're falling down a hole because they're playing with the physics of what you're looking at. But no one's doing anything nearly as cool as Star Tours on journalism websites.

[00:05:17] Well I guess I mean I don't know it was like for you but I went to Universal a couple of years ago and we went to the Simpsons ride, which is one those 4D rides and everybody got sick so I don't know how you made managed to do that at all.

[00:05:28] I took a lot of breaks. And frankly did not enjoy the rides that much. I liked the Dr. Seuss rides. They are about my speed. I was like aww Sneetches. Yay.

[00:05:41] So it's mostly this, contrary to what you would expect in some ways right like you mentioned earlier scrolling down to the page and suddenly the graph is moving in the opposite direction.

[00:05:52] Yeah, and there's also a lot of scroll jacking in general. So moving down the page, but the physics will change a little bit so that something in the left hand column is moving at a different speed than something in the right hand column. Usually for some sort of data effect right to show how a diaspora spread over a geographic area or to show how something moved over time or you know there's all kinds of things. Even in the original Snowfall, there was a whole set of 3D images of the mountain that would spin around and show where the avalanche happened. So something you do on the page triggers a huge amount of visual motion. That is very disorienting for someone who has any sort of visual processing issues or really any kind of nausea tendencies or motion sickness tendencies. And that's of course for me very acute all the time. But it's also the kind of thing that if you didn't get enough sleep last night or you're maybe a little bit under the weather or you were on a bumpy bus this morning or maybe you're on a train right now that's rocking back and forth. It's not necessarily someone who has like a chronic medical condition. It might just be someone who's in a situation where they're like, 'yep this is too much for my threshold'.

[00:07:17] I was going to ask, does it depend on whether you're at a desktop or whether you're on your mobile device, a phone or tablet?

[00:07:25] For me, it really doesn't. I think everyone's threshold is different.

[00:07:29] There are certainly times, because of responsive sites and because of the way that they are programmed, sometimes the implementation on one device will be problematic where the implementation on another device isn't. Which is part of why I think when I talked about in the

article little bit the idea of giving people the choice of whether or not they're going to engage in your interactive-ness because it really is up to the person. And it might be that on a Tuesday morning on their phone it's fine. But on a Thursday afternoon on their tablet it's not fine. As a creator you cannot predict that, right? You can't know everything about people's context. And so giving the user the choice for how they're going to experience your information rather than forcing something on them feels to me like just a more sane and helpful way to go.

[00:08:22] So when you think about choice in that way--let's take Snow Fall--most people listening in the show probably have gone through Snow Fall at least multiple times. So when you think about choice in the example of Snow Fall with the 3-D presentation of the of the mountain. Do you think about choice being the ability not so much that it triggers this motion in the 3D model or is it so that the user selects when that happens. Or is it more let's just make this a fully text based approach where it's sort of like a separate you know separate environment altogether.

[00:08:55] I think there's some of each and some of this is going to be what the effect you're going for is and some of it is going to be like internal political, like, in your organization who gets excited by which thing and what kinds of things get funded. Like realistically speaking there are all kinds of human factors in this. I think the the simplest way for a lot of these things is you put a play button on them or a pause button. I tend to like the idea that we should not assume consent in anything but especially on the web. We should start with things paused and let people press play if they would like to see motion because there are things that are actually completely fine for my brain to deal with as long as they're not unexpected. A lot of the kinds of animations in Snow Fall are obviously cool, right? Seeing the path of the avalanche is really interesting, but it needs to be on my terms. It needs to be where I'm say, OK I'm sitting in a place in a well-lit room, I'm ready to press play on this. As opposed to someone else just saying, "you got to this point in the article here we go!" At the same time I think we do tend to do a lot of stuff that is fancy for the sake of being fancy. And there are times when a text alternative and a well written alternative is a really viable option.

[00:10:16] One of the things I touched on in my article is the idea that we in 2018 right now with the state of the Web where it is, a lot of people on the Web are on a page because they want to read it. Not because they want to watch it or experience or immerse themselves in it, but because they want to read a story and I think we forget that sometimes, and we try to be super fancy and interactive to the detriment of letting people who want to read just read a story.

[00:10:49] I mean I think I don't know about your perspective, but I think there's been in some ways a pullback from interactivity, at least in dataviz where a lot of things seem to be moving back towards static graphs and I would guess that's because they're cheaper to make and they're easier to make and I'm not sure you get a lot of value of clicking on the column chart and seeing the tooltip pop up. But I'm not sure if if you see the same things in the lot of the lot of the work that you're doing in the websites that you visit.

[00:11:18] I think that is true among people who are paying attention, if that makes sense. I think there is a there's a subset of people who are caring about this stuff, right? And it's the same thing with responsive sites in general right now. I think it's the same kind of trend; for a while people were like, "look at all the cool stuff you can do! HTML5 is amazing!" And then people were like, "ohhh, it's actually really hard to do this well."

[00:11:46] And we do better with our budgets and our energy and our attention to be simpler, to do simple things very well instead of fancy pants for no reason. Or for a reason that is great but doesn't have an ROI that warrants the money and time and the attention. But I also think that we probably see that more because we care about that stuff. And I think that there's a much bigger number of people out in the world who are having their own journey of discovery and getting to a point where

they're like, "Do you know what you can do with HTML5?" and then wanting to do something really exciting. And I assume they're going to the point in a couple years where they're like, "ooh, this is harder than it looks." So we're seeing it as an early trend because we're nerds.

[00:12:31] Yeah I also wonder for the casual reader of data-driven news reporting that when they see the cool interactive thing on the Times or the Washington Post, they're drawn to that because everybody sort of gets excited about the cool, new shiny thing and they go to that cool new shiny thing. And you know it would be interesting to know how many of those people actually you know read the thing or you know get to the first cool shiny little bauble and then say, "Ok, I don't really care."

[00:13:05] And are the cool shiny things being put on the right things? Right? Like are we advertising things about, I don't know like convertible bond markets or something? That already has a niche audience that is complex data and so we're using fancy shiny stuff or are we using it for more popular stories?

[00:13:26] I feel like I see it a lot. Stories that are like that are just so niche that it's like this is great that you spent all this energy on this. But like I don't know who's right.

[00:13:34] I think that's right and I think your point about the ROI is really interesting. I was talking to someone yesterday actually at a workshop, what is the ROI to a dataviz? I'm trying to think about you know what does that curve look like? Because I don't think it's a line that sort of was curving downward right I think it you know there's like the bar chart you make an Excel real quickly and then you probably put a little more time into it and you get a lot more. The ROI goes up on that. And then there's a point where it's diminishing returns where you're making things fancier for no real payoff. And so those might be the interactive static graphs right, where like I can click on a line and that line highlights but OK really doesn't do anything for me. I get to these more scrollytelling super fancy things, but presumably there they have their own separate curve because they are in a different part of the funding and how much it costs to make those sorts of things.

[00:14:24] Yeah, and are those are those things that couldn't be told any other way? Sometimes a graph or a chart is incredibly illuminating. And then sometimes when you're like, "Yep that's pretty much the same thing you said in two sentences." This did not illuminate the heart of this story.

[00:14:43] I think that's the key question: when is it time to put big investments into these big narrative fancy things? And when is it not? And I feel like we still don't really have a great grasp on that.

[00:14:56] Yeah and it I'm sure it's different for every publication too, but the fact that I know of this is the fact. This feels to me like something that most editorial sort of guidelines don't even touch on. It feels to me like the choices are being made kind of a one-off where someone in the newsroom would get excited about doing some particular visualization. And there's not any sort of formal process to say like, is this the right visualization right now? And that makes sense because we generally don't build those kinds of guidelines and processes until we have enough experience with the outcomes of all of them to realize that like, oh sometimes this was worth it and sometimes it wasn't. And we're only probably just now getting to the point where there have been enough visualizations and interactive features over time in a single publication with a single editorial team to be able to judge whether or not it worked and was worth it. So that you could actually establish guidelines to be consistent about your decision making.

[00:16:00] Yeah I mean there was a time when I was interested in finding the standard data visualization style guides and it was amazing to me how hard they were to find. I mean there are

guidelines about you know what you put in the CMS and guidelines about, you know, how you write and how you do a headline and where it's placed on the page. But there was very few guides about what size is the title you know what colors do we use for the first three lines you know that sort of thing. And I would guess that you know just like you just said it's probably even less common to have something for interactives of what their styles and guidelines are.

[00:16:39] Yeah and what are our rules about, do we assume consent? Do we auto play things? Do we have pause buttons? And even just that obviously touches on so much stuff in terms of, are the pause buttons always in the lower left? Do you have to hover over them to see them? It ripples into lots of decisions, but I think a lot of people aren't really asking those questions yet.

[00:17:03] I think then there's the question of consistency across the site if you are you know whatever the New York Times and you have the pause button if that's your rule does that have to be applied 100 percent of the time? Or are there are there are exceptions to that rule and how do you make those determinations? So you've mentioned a couple of things that people can do to avoid the let's not make people get sick in terms of you know basically obeying physics which is kind of just a general good rule of thumb. You talked about consent--basically play buttons pause buttons letting people sort of choose when something is going to happen. What other techniques or strategies can people use when they are trying to think about these sorts of issues? And I would sort of broaden it not just for people who have you know sort of like you mentioned not just medical issues or medical concerns, but a broader group of people who just you know don't want to be scrolljacked and don't want the thing to spin around because it's really you know they don't need that they just want to know what is the point of this of this graph, of this story.

[00:18:07] I think a good thing for people to sort of remember is that reading is reading is real big on the Web. And there's a reason many of us like things like Pocket and RSS feeds and stuff like that because they give us a stripped down version of otherwise fancy pages and sites. And so give people that without making them go to a third party service. If you have a really fancy interactive interesting version of a story then make sure there's also like a text version that doesn't try to be interactive, doesn't try to be fancy and moving, just an alternative. That's a nice thing for people who are feeling neurologically overwhelmed. It's also really important for people who are on a data-capped plan, which in the United States is going to be, lower-income people, people with disabilities, communities of color. Any other sort of intersections of those groups, people who are living in rural areas with crappy cell coverage, or on indigenous reservations. If you are forcing them to download real big pictures and big graphs and auto playing videos, that's costing them actual dollars on their cell plan; there's a literal economic cost to those people. And so giving people an option to just have the words. And if you can't tell the story with just words, I feel like that's a bigger problem to solve. It's great visuals as an assist but if the story can't be told with just words, that feels to me like something that needs to be addressed as a larger approach to your story. What do you need to break down further to make this work as a story?

[00:19:56] I think that's right on. You know the a few years ago I don't know if this one comes up into your list of things that that make your head hurt. But the New York Times of the Yield Curve project a few years ago where it was like this 3D contour map and I was reading it on my way to work and I was on my phone. And in the New York Times app it was just, I think five or six static images, and it was really neat. And the story was really good and it explained it really well, but I couldn't figure out why people were so excited when I'm looking at my Twitter feed. And when I got to the office and opened up in the browser you were able to move the whole thing around and you know you could twist and you could turn it. But for me, you know just having those six static images with the things that really told the story well and now I feel like, now that's probably a couple of years ago already. Now I feel like the ability to have the same project on multiple devices, multiple platforms is that much easier and yet maybe it's too much flash.

[00:20:55] That also speaks to me about the idea that you should make sure that the less interactive versions of your story are not second-class citizens, in that it would've been nice for you, reading the more static version--which still had a great story--it would have been nice for you to know that there was going to be interactivity if you viewed it on a different device. That sounds a little bit like "This best viewed in Netscape Navigator 6", but there's the idea that just because someone's reading the text only version on their phone doesn't mean that they are completely uninterested in fancier, flashier version that maybe have some video content as well. If you're going to give people a text version, let them know what's different between that version and the other version. Otherwise they might not be getting all of the information and maybe at some other time they will be interested in it.

[00:21:52] Yeah. Yeah that's great. I mean these are all great. So I want to before we wrap up I want to ask what else you have to work on. I'm going to guess that writing this this piece probably took you a bit of time because a lot of the things that you share are a little flashy and you know even a little flashy for me. But I'm curious what other things you have.

[00:22:12] You know what's funny is that when I was writing the piece, I didn't take those screen captures myself and I wrote to my editors and I was like, "Hey, I don't actually know how to do the screen captures, do you want me to learn?" And they were like, "We'll do it because it would make you sick." And so we'll do the screen captures, which is nice, thank you. And then they wrote me back a couple hours later and they were like, "I totally made myself sick. I'm not even a person super sensitive to this but going back and forth through the scrolls was a really, really difficult for me." And I was like, oh, ok, yay.

[00:22:47] Point proven. Check.

[00:22:51] Yeah, otherwise I'm on Twitter a lot. I'm a consultant so people can hire me to help them figure out CMS problems and stuff. I'm actually in the midst of writing--it's not really a book, it's more like an essay collection--about, it's a little bit about being human in a tech world. And the teams that we work on and being human and vulnerable and having to deal with our own kind of personal psychologies in team contexts and in product contexts and things like that.

[00:23:19] Great, well, I'm going to keep my eyes open for that one and I'll make sure to share of course the Source article for those who haven't seen it and link to your Twitter feed so people can follow and watch along and maybe even get back to you about the strategies that they use or maybe fail to use and want to use to enhance their pieces. So Eileen thanks so much for coming on the show, it's been super interesting.

[00:23:42] Thanks for having me.

[00:23:44] And thanks to everyone for tuning in to this week's episode. I hope you learned a lot and may rethink some of the things that you're including in your data viz projects. So thanks for tuning into this week's episode. You have comments or questions or suggestions please do let me know on the site or on Twitter. So until next time this has been the PolicyViz podcast. Thanks so much for listening.