Opinion Science Podcast
Hosted by Andy Luttrell

Belief Systems with Mark Brandt
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Andy Luttrell:
Facebook and other social media sites have really embraced the idea of social networks. I mean, the movie about Facebook was called The Social Network. But the idea of social networks goes back ages. It's really just a way of thinking about how people are connected. Like, here, let's build an imaginary social network right now.

Let's say there's this lady, Monica, and she's friends with Rachel. Just imagine Monica and Rachel floating in space, and draw a line between them. That line signifies that these two people are connected. Now we'll throw someone else into the mix…I don't know, call her "Phoebe." Phoebe knows Monica and Rachel, so we'll draw lines between everyone. And you know where I'm going with this by now, so let's just bring Joey, Ross, and Chandler in and draw lines between all six of these people. This is a super tight network—everyone knows everyone. But in theory we could keep building this out, adding in people who are friends with Joey but who are not friends with Monica—people who are friends with Rachel and Phoebe but have never heard of Chandler. And on and on…

What you end up with is a social network—a whole bunch of people and their connections to each other drawn up like a big spider web. And you can learn a lot by organizing things this way—how closely is everyone connected on average? Are some people more central to this network and others who kind of exist on the outskirts? Are there cliques and clusters of people? But we can also ask other questions like…what happens to the network if I pick a fight with Joey? Does that have even small consequences for Joey's direct friends? For the friends of his friends? And maybe picking a fight with Joey is a bad idea because he is very well connected…but I guess we can pick a fight with, I don't know, Gunther, who doesn't have a ton of backup.

Okay, but let's take this idea of a social network and make a few changes. This might seem weird, but go with it. First, replace the people with opinions you have. Like "Monica" becomes your stance on universal health care. "Chandler" becomes your position on raising taxes, and so on. Then the lines in our spider web that symbolized friendships become a reflection of how closely related these issues are to you. Does your opinion of universal health care depend at all on your opinion of raising taxes? And to you, is raising taxes at all related to same-sex marriage. Now the same logic of social networks, and all the mathematical properties that govern them—that still stands. It's just that now instead of Ross getting together with Rachel, we're seeing if our opinions

about regulating big business and our stance on environmental protection…if they've been hooking up. What we're left with is actually a pretty cool new way of understanding how belief systems work.

You're listening to Opinion Science, the show about our opinions, where they come from, and how they change. I'm Andy Luttrell. And this week I talk with Mark Brandt. He's an assistant professor of psychology at Michigan State University. And he's been studying people's belief systems by thinking of them like little networks of opinions that live inside our heads. It can be fairly abstract, so if you're getting confused, see if you can picture it like the kinds of social networks that I was just describing. But I think you're really going to enjoy the perspective Mark brings to this and why thinking about belief systems in this way actually helps make sense of all the ways in which people use and change their opinions.

Andy Luttrell:
You know, I was trying to think of what this belief systems stuff is, in terms of the broader picture of the stuff that you do, and I sort of just see like a general trend of moral convictions, and political ideology, and belief systems. There is that throughline, like you've done a lot. You've produced a lot of work over the years. And it is sort of coherent, which is nice, so kudos on that.

Mark Brandt:
Surprising to me, as well.

Andy Luttrell:
But how did that happen? What is the seed of it for you, that you go like, well, this is the thing that I'm chasing to try to figure out?

Mark Brandt:
Yeah. So, it wasn't always so coherent. This is kind of a little hard to reverse engineer, but if you look at my CV when I was first applying for jobs, it was like, "Here's this project over here. Here's this project over here. And here's a couple other random things that I did." Because I would kind of flip back and forth from one little project to the next, just because I get bored and then do something else, and then I'd get excited about the old thing again and go back to it, and stuff like that.

At a certain point, somebody told me that it might be wise to focus a little bit more and I'm still not 100% sure that that was necessarily good advice, but the thing that it does is it actually makes it way easier to write papers if you focus a little bit more, which I had no… Nobody told me about. Because you don't have to relearn a topic every time you write a paper, which is a time saver as it turns out to be. But the thing that I kind of like looking back on, maybe what ties things together is that I kind of just want… I'm interested in how these belief systems, or these ideologies work and how we can get a handle on that. I don't think that's an easy thing to do and it's kind of an amorphous question to begin with, so there's… you know, the upside of that is you can study it from any number of angles.

But one thing, so I have this work on ideology and prejudice, and for practical reasons this is interesting because people are interested in why people dislike people they disagree with, but the

kind of interesting theoretical aspect of that to me is kind of what we can learn about ideology and how ideology works when studying this topic. Some theories predict kind of one pattern of results, others predict another, and we can get a sense of what's… kind of open up that black box of ideology by studying how it emerges in this other type of domain. And so, although the kind of practical things don't really give a sense that that's what's in my head when I'm doing these, this is kind of why I find these theoretically interesting, is just there are these cases where you can kind of try to open up the black box of ideology, or belief systems, or whatever you want to call it, and figure out how they work.

Andy Luttrell:
Was this a feature of like when you started to go down the road of doing research in psychology, like that was the driver of it? Or did this sort of unfold over time? You were like, "I don't know, people think stuff and I'm curious about it," and then like, "Oh, one of the things that I think about are their other political beliefs."

Mark Brandt:
Yeah. Most of the story that I told you now is almost entirely postdoc reasoning on my part. When I applied to grad school, I was totally naïve on almost all these things. I in fact didn't really want to study politics at all, because I found it stressful. I still do. It's just kind of the studying of it and the watching it on TV are different things. And originally, I was kind of interested in like kind of in a vague sense group behavior and things like that, in part because I went to a lot of concerts and shows and you kind of watch these things develop, and it's just like they're unique experiences, and trying to figure out how those things worked. I never really did anything with that for a variety of reasons, but that's kind of where I started with, but then went just kind of… You know, you take the opportunities that are presented with you, and this was interesting, and so just kind of kept plugging away.

Andy Luttrell:
Yeah. I see that there's a lot of the time, the people who do political psych work strike me as like they would have been political scientists or have gone into politics from the beginning, and I always think, "Well, for me, I never actually…" I was not politically engaged at all until I started to study attitudes. And then I was like, "Oh, you know where people talk about attitudes a heck of a lot is in this political sphere." And so, kind of de facto this work becomes political psych work. I don't get the sense that you were politically driven and that was the goal, but it just sort of is a nice arena to think about this stuff.

Mark Brandt:
Yeah. I'm substantially more politically active now than I was when I first started and probably even… The last 10 years, I've probably ramped up my political activity more than I was anywhere before that. Just wasn't something that came… Just was annoying more than anything. It still is, but it's actually kind of why I'm more politically active now, is because I find it annoying, and I don't think it needs to be.

Andy Luttrell:
Yeah. I was wondering, so in the work that you're doing these days on belief system dynamics, it's framed as political belief systems, and so I wonder before we get into what actually these are,

is there a special reason to think of belief systems from the perspective of politics? Is it unique to this arena that this stuff plays out? Or was this just like a convenient place to start talking about these questions?

Mark Brandt:
Yeah. I think it's a convenient place to start, so I think you can study belief systems from a number of different angles and kind of framing topics, I guess you could call them. So, I've done some work on religion, for example. I think religiosity obviously is related to politics, yet different from politics, and I think a lot of these kind of general ideas and methods that we're trying to develop for political belief systems, you could use for religious belief systems and would be excited to see that kind of work. I mean, there's gonna be other kinds of belief systems too, so I could even imagine something like people's beliefs or their belief systems surrounding gender, and feminism, and these sorts of things. For some people, those are gonna be really tightly linked to their kind of rest of their political beliefs, but for other people these might be just entirely separate kind of packages of beliefs and how they're related. And so, I think you could use it to understand these more specific packages of beliefs, but also how it's related to maybe a broader set of beliefs.

So, yeah, I think I study it in politics. This is where tons of the work has been done and the kind of work I was familiar with, so to me this is like the "easy" entry point, but I think it has broad applicability to anything that kind of fits the kind of broad definitions and stuff that we work with.

Andy Luttrell:
So, to sort of unpack that idea of a belief system, defining belief is its own challenge, but let's assume we know what beliefs are. What does it mean that they operate in systems? What do we gain?

Mark Brandt:
Yeah, so we call them belief systems in part just because of historical happenstance, but when I'm thinking about belief systems, I'm typically thinking about… You could just call them attitudes and I'd be on board probably 100%, so just if you call them attitudes, that's fine. So, if we have an attitude, the idea with a belief system is that you have this attitude, but it's not just a standalone attitude. It's connected to other attitudes. So, at least in a lot of research, and actually a lot of polling that you'll see on the news and so on, attitudes are assessed kind of individually. It's like your attitudes about a certain artist, or your attitudes about food, or your attitudes about a political issue, or whatever it is, and it's that's kind of the core thing.

And what we're saying and we're kind of like proposing that we need to look into more is not just the kind of standalone attitude, but also the attitude in its relationship with other attitudes that the person also has.

Andy Luttrell:
So, I mean food and artists are probably not the kinds of attitudes that make up a system, so like if we get an example of attitudes that would be connected in this way, can you be more concrete?

Mark Brandt:
Yeah, so for a political… So, I think you can just draw circles around different kinds of attitudes and think about how they might be related, and so I think you could kind of maybe have some fun thinking about how different food attitudes or art attitudes are related. But I think with the idea here is you have political attitudes, you might have people's attitudes about abortion, and same-sex marriage, and gender reaffirming surgeries, and let's see, adoption by same sex couples, and then you also have like tax policies, and social services, and welfare, and affirmative action, and immigration, and so on. So, you have all these different kind of clusters, these different political attitudes, and the idea is is that some of them, or maybe all of them for at least some people, are related to one another, so that my attitude about abortion might depend in part on my attitude towards social services and my attitudes about same-sex marriage or something like that.

And that my attitude there is not just influenced by all the other things we already think influence attitudes, but also by their… kind of how they're related to other attitudes that the people hold.

Andy Luttrell:
And my impression is it's not so much just that like by happenstance like, "Oh, I took a picture, and all of these happened to be in the same room." But like they're actually informing each other, right? So, like how would you characterize the actual nature of the relationship between these attitudes?

Mark Brandt:
Yeah, so there's different ways that this can kind of play out in an actual fact. When we model these things, and we do this with some simulations, so this is like we're baking this into the model, but the assumptions we're making is that they kind of… They influence each other and likely have a reciprocal influence, so it's not just like the influence or the causal direction goes from one attitude to another, but rather it goes from one attitude to the other and then kind of back again, and that these kind of pushing and pulling forces influence the belief system dynamics. How they become connected, there's a few different ideas about this that are floating around within the political science and political psychology literature.

So, one is that some of them are just gonna be logically connected in some way. Maybe not a super strict logic, not like a logic in the sense that the philosophers would like us to use the word logic, but maybe my opinions on abortion are in part influenced by my opinions about social services because if my… I might have more liberal or conservative attitude about abortions depending on the types of social services I think new mothers can have access to, for example. You see some of those arguments that float around in debates about abortion, and so that might be a causal link for some people or logical link for some people.

It could also be the case that there's some people, some links between attitudes are essentially caused by what other people are doing and the other attitudes people hold, and there's a lot of different variations on this theme, but the kind of quintessential example is that if I see a politician who I know is conservative and has conservative views on immigration and conservative views on tax policy, and then I see them kind of express pro-Russian sentiment in the current war, I then kind of… I update my own belief system to say, "Oh, okay, so this pro-Russian sentiment for the

current war is also related to the conservative side of these issues." And it kind of builds bridges between those issues.

Now, it might also be the case that then I see a liberal politician do the same thing, though that would maybe weaken those kind of clear linkages between those issues, but you kind of watch what other politicians are doing, what they're expressing, and the positions they support, and you kind of just see how things are connected out in the wild, so to speak. And this can also potentially build some of these links in people's belief systems.

Andy Luttrell:
Yeah. I often wonder, like how did certain positions become liberal ones and conservative ones, right? Which is what these two influences are really kind of about, like one, the version of the world that sometimes makes sense to me is that at one point a bunch of people in D.C. got together and said like, "All right, we're gonna have a draft. What positions are you guys gonna take? What positions are we gonna take?" And it just was like a trade. And there was like, "Okay, here it is, now here are the liberal positions and here are the conservative ones." But the more logic-based connections that you express say that like no, there's something natural about these positions that would make them cohere together, and one way maybe to post that is to ask like if we just scrapped the current political system and absolutely started over again, would you expect the same… based on this kind of connectionist idea, would you expect that the same positions would ultimately end up being the liberal ones and the conservative ones?

Mark Brandt:
Probably not, in part just because you see in the current world the same issues across countries aren't the same, so like there is this experience I had where I was working on a paper with some colleagues from New Zealand, and I think I'll get this story right, but if people from New Zealand hear this and… just then let's pretend that it's just a grain of salt story as opposed to actual truth. But anyways, had this experience working with them where we were working with data from New Zealand and basically I needed to go through and code which of these items need to be reversed scored just so that higher scores indicated more conservative positions, which is a really standard thing that we do when we're cleaning data in this domain.

And there was one item that was about essentially increased infrastructure spending, and I was like, "Oh, that's a liberal position," which in New Zealand is not the case. In New Zealand, that is more of a conservative position because spending on infrastructure and expanding highways, this is really not great for the environment. Which makes sense, like that also… Yeah. On board. I get it. I get where that's coming from. In part, it's just where different countries are at with thinking about the environment, also where they're at with their infrastructure, also where… what sides of issues politicians wanted to take. I mean, and so I think what issues are gonna come up as being the liberal or conservative will just depend on other features of the environment, like what are the things that need to be changed, what are the things that need to be conserved, are gonna be different depending on the precise situation and so things will get packaged differently in part because of that.

Andy Luttrell:
So, the idea of a... You know, and maybe we can jump in a little more concretely to talk about this as a network, which we're kind of indirectly doing, but it sort of seems like this belief system idea is just like a useful tool for thinking about the way that ideas come together. But it's sort of just a stock model, right? That's gonna look different for you, as for me, as in the U.S., as in New Zealand, and so like what does that stock model that we can sort of adapt with new puzzle pieces, what does it mean that that is a network model of a belief system?

Mark Brandt:
Yeah, so a network is really just a way to describe something where you have things connected with other things, and typically more than one, and so the plumbing in your house is sort of a network between the different sinks that you might have, and your hose outside the house, and the drains, and all these other things, but also connects into the plumbing network of your city, and all the pipes, and whatever goes into that. Transportation networks are another pretty obvious example connecting cities with highways, or trains, or whatever it might be. Here, the idea is that rather than connecting cities with highways, we're connecting attitudes with these links between them, and the idea is that just that rather than just being a single attitude or even just a pair of attitudes, there's many different attitudes that are potentially linked in these networks together and are playing off of one another.

So, I guess by calling it a network, in part we get some theoretical pull because it makes it more obvious that we can draw on some network science type things that are out there. But also, it's just a way of describing a bunch of things that are all kind of interconnected.

Andy Luttrell:
Yeah. That's nice. It's both conceptually and methodologically useful, like conceptually the pretty pictures that are hard to convey here on audio are very clearly reflective of like how the pieces are expected to fit together. But it also just happens to be the kind of system that people have worked out a bunch of math for and so you can then go like, "Oh, great. We don't have to invent a new math to figure this out. We can just steal the math, use it to understand these political questions, and then construct a sense of how these things play out in the minds of real people.

Mark Brandt:
Yeah. I mean, and for me, I'm not a mathematician. I was the kind of person who discovered that stats was in psychology and was somewhat annoyed, so like this is... But so, by taking something where we can at least work with something that's a little bit off the shelf is useful for this. It gives us this kind of suite of tools that we have access to if we start thinking about things in this way.

Andy Luttrell:
I was wondering, because the use of network methods have kind of exploded across the social sciences, and so I was curious, like how much of this was like, "Oh, here's a fun way that people address issues. Could I apply it to this interest I have in political ideology?" Or was it really just like, oh, it started with a loose conceptual sense that like, "Oh, this is how ideology works," and then, "Oh, good. There's a method out there to do this?"

Mark Brandt:
I guess it was a bit of both for me, at least. I mean, there's other people who are working on network models of belief systems that I've actually kind of came across independently of my own work because nobody's using exactly the same search terms and things like that, and they're often not psychologists, so they're not showing up in the journals that I am most attuned to. So, this kind of idea has kind of popped up I think independently in a few different spots. How I came across it personally is that my next-door office neighbor, he's the kind of person who helps make departments gel by going door to door and just kind of randomly starting conversations with people, and he's like… He just stopped by quick, and it was like, "Hey, have you seen this new work on psychopathology networks by Denny Borsboom," who's a professor at the University of Amsterdam. And I was like, "No." And he's like, "You might be interested." And then he kind of left.

And so, then I kind of read over one of their earlier papers that was around at the time and as I was reading it, it was just one of those things where I was like, "Well, if I just kind of swap out their specific terms for psychopathologies and I swap in political psych talk stuff, you could write the same paper and make many of the same points and it would be sensible." And that's kind of… I was like, "Okay, this is this thing in this other domain. I think we can use it to explain this." And then from there, you kind of have to pick up other things just because it's not a quite one-to-one map and there's other method stuff that happened in the meantime, but that was kind of how I got in. I just read something else and then was like, "Oh, this works. We can do this."

Andy Luttrell:
And the cool thing is what it does, in my reading of how you describe it, is by being able to put all these pieces together in this kind of like sensible-but-new way, it makes sense of other things that hadn't really been considered together before. And so, could you give an example of like once we have the sense that like, "Oh, maybe all this stuff is operating like a network of connected beliefs, and attitudes, and identities," now we actually have a centralized way of understanding other stuff. So, like what is some of the other stuff?

Mark Brandt:
Yeah, so in this paper where we try to flesh out these ideas as much as we can, what we did in this paper is we kind of looked through what I refer to as the belief system literature. I don't think that's a real thing per se, but it just is a neat way to kind of draw a circle around some things. And just kind of looked for what are some regular findings, and by that I mean like things that just kind of people expect from this literature. There's probably more than what we identified, but we identified that seem to make sense with how we were thinking about things, and so one is that you find that people who are particularly politically knowledgeable and who are engaged in politics have really consistent belief systems. And what I mean by that is that they tend to have all liberal or all conservative positions on a topic.

Your average American doesn't pay any attention to politics, is very politically disengaged, and does not have consistent liberal or conservative positions. And I say that because I suspect that anybody listening to this podcast actually is pretty politically engaged, pretty politically knowledgeable, so they're not normally interacting with these other people, but they are out there and they're most people. But so, one way to explain, though, how we explain that with the network

models is that for people who think more about politics, there may just be stronger connections between these issues. And there's some data out there that kind of suggests that this might be happening, and so if we simulate some network models with the links between the attitudes being particularly strong, you get really stable belief systems that don't change much and you get really consistent belief systems, where everything's either liberal or conservative. And that's two things that you kind of expect to find among the politically knowledgeable. They have these consistent attitudes, all liberal, all conservative, and also pretty stable attitudes over time. So, we're able to kind of bring those things together with this network model, but then there's other sorts of findings that are maybe a little bit different, so there's this other set of findings that… The kind of general premise is that… Well, the somewhat challenging thing is that every… each of these things has their own kind of theoretical backstory, so trying to do this succinctly, I guess, but… So, there's another finding that in general, when you change a person's attitude on one issue, it doesn't seem to have very big effects on other issues that you might think should change. And even from a network model, at least if you're me, you kind of go into it saying, "Oh, that means they're connected, and so then if I change one it'll change things that are connected to it." And my naïve intuition is that that should be true.

What we find with simulations is that it does happen but it's really rare and it doesn't happen very much, and part of the reason that it doesn't happen very much is that the other attitudes within this belief system kind of hold all the other attitudes in place, so that you have your kind of target attitude that you might use persuasion, manipulation on, or whatever it is, and you might change that targeted attitude, but then the kind of indirect effects to the other connected attitudes, its neighbors in the system, those neighbors are not just connected to their targeted attitude. They're connected to other stuff. And unless that other stuff also moves, they're gonna kind of get held in place, and so there are some specific situations where you might expect change, but you shouldn't expect these really big cross-attitude changes from our network model.

And that's also what you find in the data. You don't find… There are some. They happen sometimes. But they're not these big, consistent effects, and I think that's kind of an interesting thing, so we use the same kind of math to simulate these things and we are able to account for this. Things don't change much when you manipulate one attitude to another. And we kind of can integrate these political knowledge and stability and consistency effects.

Andy Luttrell:
So, this is a case where the assumption that there would be this spillover effect comes from a very, very, very simple version of thinking about these things as networks, so you're like, "Oh. Well, there's a connection between people's immigration attitudes and their gun control attitudes, let's say, and so like if I can nudge someone to be a little more pro-immigration, that should naturally just sort of spread into this other attitude and make them a little more pro-gun control, as well." But what you're saying is like yeah, but that's not a network. That's two things. There's like a whole bunch of other stuff that over time has gotten glued on and connected, where you go like, "Okay, you changed one out of the 20 things," and all those other 18 things are coming down to bear, and so like the network is gonna settle back into its old rhythms, right? You can't expect dramatic change to an entire belief system from one intervention, right? That's basically what you're saying, right?

Mark Brandt:
Yeah. Exactly. I mean, it's one of those things where I think as… Maybe other people with different backgrounds have different intuitions on this, but I think part of this is I think just the… I think my intuitions as a social psychologist don't work well here and part of the reason I think they don't work well is that our typical studies in social psychology, we take people into a lab, or an online lab, but some relatively well-controlled place, and we try to minimize all outside influences, and then we look at the manipulation of one thing on an attitude, or maybe two attitudes, or whatever, but in fact, we can't really minimize these outside influences to some huge degree, and in this case the outside influences are just other attitudes that people have. And you can't bring people into the lab, at least with political attitudes, and kind of manipulate one political attitude hoping that it maybe manipulates a secondary attitude, and then hold constant all of their other… all these other attitudes that they have in their head. You can't. That outside influence, outside the experiment influence, but inside the participant's head, isn't really something that we can control for and is something that's kind of just happening all the time.

Andy Luttrell:
So, I could never do a study that's only about same-sex marriage, right? Because that study is necessarily about more than that if we buy this belief system perspective.

Mark Brandt:
Yeah. I think so. And I think the way to even think about that is like so people's views on same-sex marriage is also gonna be connected with their attitudes about their friends who are gay, and it's gonna be connected to their own sexual identity and who they're attracted to. It's gonna be connected to… and those are just maybe the things that are pretty obviously connected to it, I think, but it might also then be connected with like their identity as a democrat or a republican, as well as their other potential values about equality, and social justice, and so on, and so you can bring people in for an attitude study about that, but these other factors, assuming we're onto something, would also play a role in that there's not really much you can do about that. And kind of if your goal is to remove their influence, I don't think there's a way out.

Andy Luttrell:
That sort of speaks to another feature of the way that you've constructed these models, which is you might go into something like this and be like, "Okay, well, we found the 20 most common political issues and we set up a network of those, like how are all those issues connected to each other?" But the belief system networks that you've constructed also include things like identity, right? And so, you'd go, "Well, that's not sort of prototypically the way that people talk about ideology as a network of attitudes, and so why…" I mean, what you alluded just kind of speaks to it, but why does identity also need to be part of the model, too?

Mark Brandt:
Yeah, so my official answer is that political identities are clearly important to understanding how people understand politics and so excluding them is excluding something that is obviously important in the research literature and just like if you watch the news it becomes clear. My less official answer is I just think that their identities are usually attitudes just by a different name anyways, and so to me I'm like, "This is all the same."

Andy Luttrell:
Okay, so in what way is an identity, like I'm ready to buy it, but I don't see it.

Mark Brandt:
Yeah, so I think it's like… So, like for a democrat, which is easy for me to use because it's a way I identify myself, like I can say it's just a positive attitude towards a group that you belong to.

Andy Luttrell:
So, does that suggest that this kind of like affective polarization, sides hate each other, is really like definitionally redundant with identifying in that way?

Mark Brandt:
I mean, I think it gets pretty close. Yeah. Which is okay, but you know, there's still something to be said about… There's also people who will say that they're democrats who dislike democrat… I mean, there's exceptions. But I think they're pretty darn close to each other. Alice Eagly and Shelly Chaiken, and I think they have a handbook chapter on attitudes from… I don't know, late '90s. And part of what they… They kind of make the case that essentially everything is attitudes. They're like values are attitudes, identities are attitudes, attitudes are attitudes.

Andy Luttrell:
Sort of my orientation is similar. Coming up in a very attitude-centric grad program, the ethos was very much like everything we're doing is this. And I have a print of it here, but in another handbook chapter, Gordon Allport refers to attitudes as the most indispensable construct in social psychology, essentially meaning like, "Eh, basically this is everything." And it is useful in a sense because I think what your belief systems approach kind of suggests is that like, "Hey, if all of it is kind of mapping onto the same sort of stuff, we can incorporate lots of psychological constructs into these networks without having to dramatically change the rules of the game." Right?

So, in that way, you're just sort of operationalizing liberal identity as a positive attitude toward liberals and then that becomes a belief in the network. The question I have, though, is how much do you think that this is a reflection of the realities of how our brains are built versus it's just a very useful and powerful way to organize past findings and generate new predictions?

Mark Brandt:
Yeah, so the reason that I'm most interested in it is because I think it helps us organize past findings and make new predictions. I'm kind of of the spirit where if a model works, don't think about it too much. Just keep seeing where it works and if it stops working and something works better, then go ahead. Abandon it and take on the new one. I think there is… I mean, at the same time, we do want models to be constrained so that they're not just totally divorced of how the brain works. That seems like we should have some ground truth in that way. And so, I think it is at least a reasonable approximation to how the brain works. I mean, it depends on the level of abstraction and these sorts of things, but if you look at how people learn stuff and learn connections, the phrase you learn in intro to psych or intro to cognitive psych or whatever, things that fire together wire together. In some ways, this kind of idea that you have different attitudes that maybe you see them connected in politicians and so they become connected in you. I think that is potentially an

instantiation of this kind of general idea that things that fire together are activated together, that they wire together and become connected.

Andy Luttrell:
So, one of the things that I find interesting about this is that we're still in fairly abstract land, right? These are all still computer simulations and they're built on what we know about how people respond to things. But at the end of the day, a lot of this… Not all of it. I mean, you have papers where this centrality… You can sort of find characteristics of people's beliefs based on how we can sort of eyeball the network that might live inside their head. But like generally, so far this is like a mathy simulation. And is that fine?

Let's say you just stop now, and you go, "I think we got this." What do you think the value is of taking this… It's not very typical to take this approach in psychology, especially now. But what's the value? Why do you see this as being a useful approach?

Mark Brandt:
So, I think it's useful to think about… We're talking about this work that's summarized in this personality and social psych review paper, and I think it's useful to think about what would that paper look like without the simulations, and that paper without the simulations would be like, "Hey," of course this is gonna be me selling it so that my side wins, but whatever. It's like, "Hey, here's this idea. Attitudes are connected and they're not just independent. They play off of one another. And then if we think that this is true, here's findings that would fit with this." And then I could just kind of try to convince you with my narrative that this is the case.

I think that would have been… Personally, I would have been less convinced by that in part because I think people can construct narratives to explain almost anything. I mean, in some ways the whole problem with fake news is people's ability to construct narratives about almost anything. So, I think that would be a little bit less convincing. Also, the spillover stuff, I really mean I did not… That was not my intuition. If I was just kind of thinking it through with Mark's brain alone, and well, my co-author, Willem's brain, we were just thinking it through, I don't think we would have gotten there. And then we would have had this anomalous result that we would have… It would have been this kind of paragraph in the discussion of the paper saying, "You know, there are some unexplained results that we'll need to work through. Here's one. And here's how it's a problem."

But it turns out we ran the simulations, and it wasn't a problem because our simulations mostly mapped onto what people had found. And I think that would have been… Yeah, that would have been an awkward paragraph to write, but instead it was something that turned out to be really useful for us, which was nice. So, I think that's kind of… To me, it's like, "Well, what is the alternative?" And it's these narrative reviews which many people have written. I've written them myself, so it's not like I'm against the format, but I think you can get to different places and they're a check on your intuition. It's like I'm saying I think this is how we can describe belief systems as working. If you take me seriously, here's some code to run on your computer and here's what this thinking predicts.

It also gives you a way of checking where you go wrong in the process. Let's say I have this idea about how the world works and then I form a hypothesis, and then I test it, and then the data don't come out as expected. It's unclear where I went wrong. Was my study wrong? Was my hypothesis wrong? Was my understanding of how the world works wrong? We don't really know where we went wrong because for the spillover idea we've been talking about, my how the world works hypothesis would have been wrong without the simulations. Now I know because of the simulations where it went wrong in that kind of chain of events, and I think that's a pretty powerful tool. It gives you a better sense of where thinking might be going wrong and where the thinking is leading you with these otherwise somewhat squishy kind of terms that you have when you're doing these narrative reviews.

Andy Luttrell:
Do you think more theory development in the social sciences should be accompanied by these kind of formal models?

Mark Brandt:
I think to the extent it's possible, that would be nice. I think one danger is they give a false sense of rigor too, like it's really nice to be able to say, "Here's a bunch of math. Go for it everyone." But just because you can put math to something doesn't mean it's particularly rigorous. It could just mean that it has different symbols, which isn't… letters are already symbols, so any… I don't have any good example of this, but there's definitely times when like to pick on economists, economists will add math into all sorts of stuff that doesn't need it I think, and they'll sometimes be like, "Well, you know, if we assume this," and it's like, "Well, you're just assuming two things are equal. We don't need math for this. That's not really…" You're giving me the sense that this is some deep model and it's a pretty straightforward thing.

It's kind of like you want to just kind of be clear about what it is. It's also the case, you know, it's simulations. It's all fake data. It's not like we're designing it to show particular results in that sense, but it's not real people are responding to real things. And to really test models, we need that. But I think they're a way of checking our intuitions for these theoretical models and kind of formalizing some of them.

Andy Luttrell:
So, what is next for this one?

Mark Brandt:
So, there's a few different things and directions we can go. One of the things in the paper that is a problem with the current way we're doing studies in this area is that basically none of the methods allow us to estimate what these networks might look like for a person. So, we have the methods that do exist, they typically are taking cross-sectional data and then they correlate stuff together. And then you do some other fancy stuff, and you can get a sense of what the network might look like. But it turns out that these are super poor measures of what's going on in any one person's head. They're better sense of like where societal decisions are, which is an interesting, important… Don't want to dismiss societal divisions, but it doesn't get a sense of what's going on in any one person's head, and that's really kind of we're assuming that everybody has their own belief system and there might be some similarities, but there's also gonna be some differences. And these

methods just don't allow for that, and we have some data suggesting that basically there's… It's unclear if they're accurate at all, basically, which is sad, I guess. Demoralizing. I don't know.

Andy Luttrell:
This is supposed to be the uplifting part of the episode.

Mark Brandt:
So, that's one side, because I don't like to just stop with the simulations, because a part of me is like at the end of the day, we're trying to understand real people's attitudes and behaviors. We don't get that with just simulations. They're useful, but they don't get you that. The existing methods I think are poor to the degree that they should be basically abandoned, which is annoying. Because also I'm including my own papers in this, so this is also like not just shitting on everybody. It's also me.

And then, so then to try to fix that, we have a paper that is in press where we try to… We're working on validating a measure that allows us to at least hopefully get at some of this internal belief system or whatever you want to call it. And so, in this newer paper, what we do is we have a few different studies, but we show that this measure of an individual's belief system, we can reproduce actually some of the results that we see in the simulation paper, so we find that people are politically engaged, they have more kind of tighter networks than people who are less politically engaged, and there's a few other kind of ones that are a little bit more complicated, but it suggests that it's a valid measure. It's measuring what we want. The outcomes are about what you'd expect. It reacts to manipulations how you would expect it to, so it seems to be doing what we want it to do.

So, now that we have this paper saying that hey, this is maybe not a totally bad measure, that we can use this to try to learn some of these other things, and so we can have a little bit speculation on what some of these other things are and try to map this out a little bit more. But that's kind of the where we're at now, so we kind of destroyed the measure, so then try to have another measure that fills this gap, and then now maybe we can use this other measure to go and learn things. But we'll see what happens.

Andy Luttrell:
Well, we took a dip there, but that was the optimistic conclusion I was looking for.

Mark Brandt:
Yeah. I was getting there.

Andy Luttrell:
Okay, good. All right, I should have trusted you. Well, thanks so much for taking the time to talk about all this stuff and we'll keep an eye out for all the stuff that's next.

Mark Brandt:
Cool. Thanks for having me. I really appreciate being here. Super fun. Also, my very first podcast in general, so this was quite the experience. To the extent that I'm allowed to plug anything-

Andy Luttrell:
Sure.

Mark Brandt:
… I want to plug our Minority Politics Online Seminar series that we've been doing for the last… I guess almost two years now. We have people from political science, both Americanists and comparative politics, which I'm told for political scientists is an important distinction, as well as social psychologists and political psychologists come and talk about work related to minority politics and intergroup relations. I think people who listen to this podcast would be interested in this seminar series, too, but if you Google Minority Politics Online Seminar series, I think you should find it and it's about once a week. It's nice.

Andy Luttrell:
Nice. Yeah. I'll put a link in this when it comes out too, so people can go straight there. Save yourself some Googling.

Mark Brandt:
That's right. Make things efficient. Easy for people.

Andy Luttrell:
Yep. All right. Thanks, Mark.

Mark Brandt:
Yep. Thank you very much.

Andy Luttrell:
Alright that'll do it for another episode of Opinion Science. Thank you to Mark Brandt for taking the time to share what he's been up to. For links to Mark's website and the research we talked about, check out this episode's notes in your podcast app or on OpinionSciencePodcast.com.

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Thanks for listening, and I'll see you in a couple weeks for more Opinion Science. Buh bye.