

ALIA: So Bob, have you heard of this show on Netflix called love, death and robots?

BOB: Is that a TV show?

ALIA: Yes, Bob. I know you don't watch any TV shows ever, which one day will change in another podcast where I introduce you to all my favorite TV shows. But yes, it's a TV show. It's an animated TV show. Um, it's an anthology. I just started watching it. Um and there's something kind of weird that's been happening with the show. There's an episode of the show that has a pretty racy lesbian sex scene and Netflix users are finding that some of them are getting that particular episode with the racy lesbian sex scene in the beginning of their feed. And some of them aren't getting it until much later in the episode. So essentially people are getting different episode orders of this show. And I'm wondering why.

BOB: Yeah, and you're not the only one. Lucas Thomas came right out and said, I think that I am getting the gay-forward story because, I'm gay and that this might, the show order might be altered specifically because Netflix knows something about the people who are watching, which is a pretty strong assertion. Uh, Netflix completely denying that and said that the episodes are random and there's other people who have tested this and said, now I, they do believe that the episodes are random, but this is exactly the kind of thing that everyone is worried about online right now. These companies that I interact with, do they know more about me than I realize and ultimately are they doing something that's called **targeting**? Am I getting ads that are so specific that they're connected to the most intimate details of my life, like my sexual orientation or my political persuasion or how many kids I have or whether I might be pregnant or not. Those are the kinds of things that people are really worried about.

ALIA: So when I was reading the story about love, death and robots, I had a really strange thing happened to me. So I opened up my Netflix feed and Bob at the top of the feed when you, I know you're not a Netflix user, so I'm going paint a picture for you. When you open up your Netflix feed or your page, your profile. Um, there's usually a trailer right at the top for something new that Netflix is promoting, like a new show. There was this new dating reality show and I was super intrigued by it, not because I liked dating reality shows, but because it was all about queer couples and I thought, oh that's so cool. Go Netflix. And then later that night my husband opened up his Netflix feed and at the top of it was a trailer for the same show, but it was a totally different trailer and it featured all straight couples. And I thought that was so weird and it made me feel, it just made me feel a little bit yucky. And I don't know why.

BOB: Again, you're wondering what they might know about you and, and well, you know, we don't know a lot about this situation. But we do know that about a year ago, Netflix seemed to be using movie posters that were racially composed similarly to the viewers.

KELLY: Yea. So there was this situation where Netflix users were enticed to watch Love Actually with teaser images -- you know, movie posters -- that seems to match their race. So black viewers saw a black character, even if that character barely appeared in the movie. You

know the whole thing with Peter, Juliet, and Mark? Peter was on the poster even though we know the story was more about Juliet and Mark.

BOB: It makes you very queasy to think that a company like Netflix is specifically picking shows based on these intimate details of your life. And yeah, again, Netflix says it doesn't know what the race of its viewers is, but it does know what you watch, and it can infer an awful lot from that. It probably can infer that you're a person who is open to shows about queer couples, or open to shows with characters who are people of color for example. And that's enough to feel pretty spooky.

ALIA: It feels a little bit like I'm being manipulated, which doesn't feel great, right? But I also know that I benefit from targeting in so many ways, right? So like outside of Netflix, I benefit from the targeted ads that I get on platforms that I use, like Instagram or Facebook. Like I just ordered a couch because of an Instagram ad. My husband just got a new D&D app because of an ad on Google, but also this Netflix trailer thing and the love sex robots different order of episodes thing make me feel weird. And I think rightly so because Bob, beyond that, we know that targeting can lead to really scary stuff like the perpetuation of fake news in an effort to maybe influence an election. So Bob, what I want to know is when does targeting cross the line into scary territory?

ALIA: I'm Alia Tavakolian.

BOB: I'm Bob Sullivan

ALIA: And this is "So, Bob," the show that tackles questions about the unintended consequences of technology. The sometimes creepy, usually confusing digital stuff that makes you stop and go, wait, is my technology running me? What is happening to all of my data? Am I crazy for wondering about this stuff? We're here to tell you you're not crazy for wondering about this. I've got some major questions.

BOB: And together we're going to find some answers.

ALIA: Let's dive in.

**[AD BREAK]**

ALIA: Okay. Back to my question. So Bob, when does targeting cross the line into scary territory? Like how do we go from targeting is really awesome because I get ads that apply directly to me and the things I like and care about to scary targeting leads to potential cyber warfare?

BOB: Could we just go back in time for a brief second to talk about how this all got started?

ALIA: Ooh, I love going back in time. Can we like time travel? Like for real reals?

BOB: Exactly. Yeah. Time travel noise. Back to the invention of Amazon. And what I think Amazon's big contribution to the creative field was, believe it or not, here I am conceding Amazon had one. The time tested way for you to find new bands, which is the most exciting thing, right, if you love music is, is a friend of yours saying, hey, I know you like the Beatles and the Who, I bet you're going to like this new band Queen, which I've just really betrayed how old I am. So that's how we all did it. And again, it's a great thing for somebody to introduce you to a new band or a new author. That's how it works. Right? Well, early on in its history, Amazon figured out that the best way to help people find authors that they might not ever come across is to say, hey, you know, we've noticed that 10,000 people who bought these same three books you bought also bought this fourth book that you probably never heard of. And you might like that too. These are recommendation engines and the term that was invented for that back then is something called collaborative filtering.

ALIA: Oh, that sounds so much nicer.

BOB: Collaborative filtering is like your best friend, and it's better at recommending books to you than even your best friend would be because it takes the power of all these people, the wisdom of crowds, if you will, to suggest to you a new band, a new book, even a new clothing line or something like that. And that's really cool. I think for the most part people see collaborative filtering as like your friendly librarian saying, hey, why don't you try this? And obviously the more and more accurate that the suggestions become, the more and more it feels like someone is just watching you or targeting you and targeting involves collaborative filtering plus a bunch of other things all rolled up into how can we actually, and this is the holy grail for advertisers always is how can we put that ad in front of that person at the exact moment when they're feeling transactional and ready to go. And that's what targeting is all about.

ALIA: Part of what I'm wondering is like is there a point where targeting gets so specific that it puts me in this box that I can't break out of like that I can't actually discover new things because the technology has me pigeonholed as this kind of person with this kind of taste that doesn't change.

BOB: No, you are exactly right. Alia, one of the problems that smart people identified immediately with all of these formulas is what's called the long tail problem. The dream of what we're talking about and in its best form, collaborative filtering, targeting, advertising, introduce you to brand new things you would never have otherwise encountered. And that's a great thing. But instead these formulas, the more data that they munch up, become these echo chambers. And so in the end it becomes even harder for something that's small and new to break into the algorithm. The tyranny of targeting is that what was intended to be something that surfaced new material to you ends up actually making it all the harder to surface new material.

KELLY: So what this reminded me of was the constant YouTube algorithm problems I've read about. Like along with many other issues, I've read that it's a lot harder these days to become a new YouTuber because the algorithm favors videos with millions of views and thus will suggest those videos to people. So what I've seen is that it's just so hard to break into the YouTube scene because of the algorithm.

BOB: Kelly, that's another very big problem with this. It's called the cold start problem. If you have no juice in the algorithm at the beginning, it's incredibly hard to get started. And once again, the great thing about this idea is an artist from nowhere could be surfaced, but in truth, in some ways it's even harder for an artist from nowhere to be surfaced by these algorithms.

ALIA: Another part of targeting that I find to be sort of creepy is that we don't actually understand it. Like, I couldn't sit here and tell you how targeting works. I don't know how they know all of the things they know about me and how they go about then choosing what I see and don't see. And that ambiguity, that sort of nebulousness is super scary to me.

BOB: The reason it's scary to you is somewhere along the line, we all imagine that Facebook knows about us what we told them. So if you volunteered your birthday and where you went to high school and who your boyfriend is, your brain can digest, yeah Facebook probably knows that. But what Facebook actually does and what all these tools do is they make inferences, and it's inferences where all the money is. They put you in a bucket by combining your zip code and maybe some offline purchases with some online activity. And they give you a name like urban scrambler which is a title for a 20-something who probably can't afford their rent, but they really want to buy a condo someday, for example.

KELLY: Ah sounds like me.

BOB: Well yeah. So they put you in these buckets and that's how they can advertise to you. But the value isn't in the information you've given them. The value is in what they've inferred from that information. And of course that's something you can't really access, and it could be wrong.

ALIA: Yeah. I think that's what you, you just brought up what actually is at the heart of all this for me, that I don't think I could articulate until this moment. And that is that at the heart of targeting is somebody or somebodies making money based on my data, right? Data that I didn't, I'm not making any money off of it. But like maybe that's just part of how the Internet works. I don't know, am I just like a total dummy for like being afraid of this?

BOB: No, I don't think so. And by the way, I don't think that everyone agrees that targeting works as well as people claim that it does. Here's the example I give to everybody. Have you ever had the experience of, of shopping for something and then it seems like that thing you're shopping for follows you around the Internet for the next three months? Well, let me tell you what is the single worst ad ever invented in the history of advertising? I searched for a drum online. I price it like a lot of people do. And then I go to my local shop and I buy that drum. So I

have the drum and then for the next three months, every ad I see on every webpage is the drum I have just bought. Random ads would be far superior to an advertisement for something that I have.

ALIA: And so then it's just. It's just the drum over and over again. It doesn't, it's not smart enough to know that you actually bought the thing.

BOB: Right right. So that's targeting, but it's really, really ineffective targeting. But at the moment, this is how the advertising industry is making its money by selling data. In some cases, snake oil, to retailers who are desperate to get in front of me and make me buy a drum that I don't need to buy it because I already have.

ALIA: Okay. I want to pivot for a second. So targeting, we've been talking about targeting in the context of advertisements, but targeting inherently just means narrowing down. As I understand it, it just means narrowing down a subset of people with similar qualities. And you're targeting them with some information. So what else could targeting look like besides ads?

BOB: Well, we already talked about YouTube just videos to watch or Netflix. Um, uh, Facebook does it with wall posts. Twitter does it, I mean depending on how you define targeting, Twitter does it, Instagram does it, all of these services have a huge problem, which is, so you're Netflix and you want people to watch movies. Netflix has uh, I don't know, millions of videos for you to watch. And at most it can put, you know, a dozen of them on a screen in front of you on a Friday night. So if it just did it randomly, that would be a terrible experience. So it's trying to make a better experience. Facebook has for years resisted something that a lot of users think they want, which is just a raw feed of all the stuff my friends are saying. Facebook says, and I think rightly in most cases, that if they did that for the 2000 people who are, you're friends with, it would be noise. You couldn't possibly get through it. So it tries to apply some intelligence and selects for you the things that you probably are interested in. That's what makes the service more engaging. Otherwise people would get overwhelmed and give up. So that's the philosophy behind somehow tailoring these experiences for you.

KELLY: So Bob, I have an experience that has made me uncomfortable [Kelly fades under]

KELLY PU: So long story short, because past Kelly was a little rambly. I brought up a counterpoint to Bob: what if the thing that's supposed to make my life easier online, actually hinders me? So there's this person I followed on Twitter. And Twitter kept "suggesting" their tweets to me, but after a while I didn't want to see them anymore, because quite frankly, I found them annoying. So I thought, hm, what if I just stop clicking on their tweets entirely? And Twitter got the message, and I never saw their tweets again, even though I still followed them! [audio fade back] on Twitter anymore. And that's also bad, right?

ALIA: So it's like Twitter is controlling your experience.

KELLY: Yeah.

ALIA: Like you don't actually get to have just a pure experience of Twitter. Like there's no such thing.

KELLY: Like in one hand it's great that I don't get to see this person's annoying tweets anymore, but on the other hand, it's like, well, maybe, you know, they're, they're giving me a different perspective on life that I don't have. So am I just curating it? Is it just being curated for me to just create this echo chamber?

BOB: so it might lurch in the wrong direction occasionally, which isn't the real, the world's worst thing, right? Cause sometimes it's good to accidentally have information that you don't agree with show up on your feed. But, but pretty quickly it'll erase that. And again, this is that long tail problem where it refines and refines and refines until all you are is in the world's most technologically advanced echo chamber. And that's not a good thing either.

ALIA: I think that's what I'm worried about here. I'm worried that targeting just creates this tiny box that we all live in that is like somewhat malleable but not really. And so it just perpetuates the echo chambers and it doesn't leave room for us to change, which is fundamentally human, And this targeting doesn't allow for that.

KELLY: Like, I don't know what I don't know that I don't like, you know. It's like, I don't know what I don't know.

ALIA: Yeah. Yeah.

KELLY: And so now the algorithm's making that choice for me saying, no, you're going to like this.

ALIA: Yeah.

KELLY: Well you don't, you don't know me. I could surprise you.

ALIA: Yes, there's no room for surprise. You're exactly right. Yeah.

BOB: Let me play old guy for another second here, so I'm, I'm old enough to remember touching newspapers. And when you would page your way through the A section of a newspaper, there would be, you know, seven, eight stories on a page and you wouldn't just see the politics stories because you only clicked on certain headlines. You would, even if you were flipping past to get to the sports section, there might be a headline on something entirely unrelated to you, like an opening at the new arboretum or something that would catch your eye. And like all the sudden

there you would be. I have a term for this, I call it accidental encounters with information. And they are often the most delightful kind of experiences. You didn't go looking for that, but you found it. I mean, it's like making a wrong turn in a city in Europe and ending up having more fun than you expected. Algorithms have ruined this for us. We no longer encounter things that we don't expect because they've refined our pathways, you know, Google maps, it gives us the most efficient route to everywhere we go, which is nice, except you don't find a pub you didn't expect to find, thanks to Google maps. It's funny, we started out talking about white targeting might be creepy, but now we're just talking about why targeting might be limiting.

ALIA: So maybe the question is different. So maybe the question is, so Bob, when does targeting cross the line into limiting my experience?

BOB: I think that's a great question.

KELLY: I used to love this website. It's, this conversation reminded me, when I was younger and uh, on the Internet, I used to love this website called Stumble Upon where

ALIA: yes,

BOB: Oh yeah.

KELLY: You would filter it by like different topics that you liked, but then you just click, click the little stumble button and it'd be like, what about this website or this website or this website you might like. And it was just really fun. That's what that reminded me of is like, let me just stumble upon.

ALIA: Does that still exist? Does Stumble Upon still exist?

KELLY: I don't know.

ALIA: I'm going to Google it right now. Just we're here, you guys, we're all here in the room.

KELLY: As a kid. I loved scary stories and spooky things even though I got terrified by them, so I like would always..that's how I got all my scariest, spooky like haunting stories I like would click Stumble Upon and there'd be a random website dedicated to that.

ALIA: You guys, I'm going to read to you what Stumble upon says, okay, stumble upon.com. Hi. Stumble Upon moved to mix. Come join us. New from our team. Mix lets you curate and discover the best of the web. The more you use it, the more it knows what you'll love. Get started below. God dammit, nothing is sacred.

KELLY: No! So I can't click my little button

BOB: That is crushing

ALIA: Your button is dead. Kelly. Stumble Upon is dead. It's now called Mix and it knows what you'll love.

KELLY: But I wanted to know what I loved. I got to pick it. That was the difference. I picked my topics, and if I wanted to learn something new about a new topic, I'd click on it and then it would give me new websites about it.

ALIA: I know, I'm so sorry.

KELLY: Just like fast research.

ALIA: This is really depressing.

KELLY: I'm so sad about it

ALIA: So Bob, I'm assuming you have someone for us to talk to about this.

BOB: I do, his name is Jules Polonetsky and he's a lawyer and he's the CEO of something called the Future of Privacy Forum. ~~Uh~~, the Future of Privacy Forum is an industry group that's often, um, it's a nonprofit, but it's often, uh, trotted out in panels and discussions about privacy. And he's there generally speaking, to represent the advertiser's point of view. Um, you know, most of these conferences, you'll find people like me who are perfectly willing to beat up these technology companies. ~~Um~~, but I think you'll find him pretty even handed, and he's there to make sure that people understand what it's like on the other side of this equation. So he'll explain to us, uh, both the good and the bad side of targeting.

ALIA: Okay. I'm really excited that we're going to talk to him because, yeah, he's, he's coming at this from the advertiser's point of view. That's very interesting. Um, I'm going to tell you right now, I don't know that I trust him yet.

BOB: He's pretty, he's pretty smart. So, um, but he's also, he's a very good advocate. He's really interesting to listen to.

ALIA: Okay. Well, we'll see, Bob. We'll see.

[AD BREAK]

ALIA: So, Bob and I sat down with Jules to really understand this whole targeting thing....

JULES: I'm Jules Polonetsky, I'm CEO of the Future of Privacy Forum. We're a not for profit that works with the chief privacy officers of companies, with academics, with civil society to try to



work out reasonable practices. We're optimists about what can be done with tech and data if you have responsible, reliable, safe, practices in place.

BOB: Could we just start with what is targeting, what does it mean and how does it work?

JULES: You know, the advertising model in the world on TV, on billboards, worked a certain way. Companies wanted you to learn about their brand. They wanted you to feel good about their brand. Coke should make you feel like you're having a great day. And that model worked. And to know whether it worked, uh, you would, you would survey people, you'd poll them, maybe you, maybe you were a Nielson family and we watched TV, we had billboards across the country and we could actually ask you or track with your permission, whether or not the fact that you saw those Coke ads made you feel fuzzier and you know, bought coke at the store. When media started moving online, you had this real challenge. I mean, you probably spend some time on the web today. Most of us spend some amount of time. You see any good banner ads? You probably can't recall.

BOB: They're my favorite, are you kidding?

JULES: You probably can't recall one unless maybe it popped in front of you. And it was in your way, right? But clearly these work, because advertisers are spending a huge sum of money, how do they know they work? Well the way they know they work is they're tracking, all right, they're using cookies, they're using mobile ad identifiers.

ALIA: Bob, can you explain what cookies are?

BOB: Yeah. It's just a string of letters and numbers that goes in a little text file on your computer and it is like having an identity card like a driver's license or social security number for your computer physically for your device. So, generally speaking, each website you visit or other tools you visit on the Internet, drop their own cookie onto your computer. So every time you go to yahoo.com, yahoo.com says, oh look, there's Alia, and I know that because of this long messy string of characters in a text file on her computer. But fundamentally a cookie is a small piece of text that's put on your computer that's used to identify you as you surf the Internet.

JULES: And so the genius or the problem created by the tracking, the cookie related tracking, was that it gave advertisers in this new medium a way to really precisely know that users we're seeing and measuring and responding to ads. So before we get to the targeting, it's important I think to understand that the infrastructure that then led to all this targeting was initially built for what the early ad tech leaders, Kevin O'Connor at DoubleClick and Linda Merriman. They thought they were great heroes because what they did is they said, advertisers, why are you spending your money on AOL, uh, on Lycos, on Alta Vista? We represent tens of thousands of small sites but add it up. They're big. [Audio fades]

ALIA: Jules goes on to explain the history behind targeted ads. DoubleClick would operate as a network that would do the buying and selling of ads for the little guys--people with niche sites and blogs who wouldn't have the infrastructure for an ad sales staff. And since it was anonymous, people weren't upset about it. But . . .

JULES: Well, what a big surprise it was when the backlash came when DoubleClick purchased Abacus and planned to link what you did in catalogs, things you bought in catalogs and your name and your identity to your online web surfing. Abacus was a co-op of all the catalogs. And so the catalogers of the world share information not with their direct competitors but with other catalogs that are not competitors that yeah, you buy, you buy golf clubs? Well maybe you're a good, you know, customer for sweaters.

ALIA: And then targeting got more and more specific. (I would say more and more creepy). Jules tells us that essentially a profile is created for you based on all of the things you purchased and the websites you visited.

JULES: Well, here we are, 20 years later, I became the chief privacy officer at DoubleClick 20 years ago to deal with this flap when DoubleClick bought Abacus and advertisers and consumers and regulators and everyone got really upset about this saying, what's going on here? How do- this feels very personal to me. This feels very targeted. How do I know you're not discriminating against me? How do I turn this off? Why aren't you telling anybody about it? Can't you do more to let people know?

ALIA: Yeah, it seems really complicated. And you know, on the one hand, I love targeting because I get ads for things that I like. Right. Uh, but on the other hand, something about it feels a little bit creepy to me, like you said and, and I'm wondering, I like, it sort of makes me feel like I'm being put into a box that I can't break out of. And what I think we're wondering in this particular episode is at what point does targeting cross the line from super useful to everybody involved to a little bit scary or creepy or uncomfortable?

JULES: I'd argue the problem is less how much data or how intimate, but whether we believe that the companies we're dealing with are doing it for us to help us and serve us or for them to get their benefit to sell stuff the way they want it in the way they need it.

ALIA: It doesn't feel like a possibility at all that I would ever be able to trust these big corporations with my data.

BOB: or be in a position to say, okay, you're like, like so. Alessandro Acquisti, who's my favorite person in this subject matter, he's a professor at Carnegie Mellon and he talks about what's called the privacy transaction. So a website says, give us your phone number and in return for that, we'll give you a discount or personalization or weather that's based on your zip code or something like that right?

ALIA: Oh it's like when I visit a website and they say, Hey, new here? Rake 10% off your first purchase by giving us your email address.

BOB: Right, exactly. That's a, that's a privacy transaction and that's a classic one. In the old world, when you gave someone \$10 and they gave you a hamburger, it was really clear what the transaction was. I get a hamburger, you get \$10. In the privacy world, I give you an email address, you give me 10% off, what am I really giving you? Like, what is the cost to me? The privacy cost? But the point is you cannot make an intelligent transaction decision as a consumer because there is no clear label as to what the cost is for the benefit you're getting. It's not even a marketplace. You're blind. And that's really the problem. There is no way to make intelligent choices right now as a consumer.

JULES: So my mantra to the industry has been, look, you've got two paths. One is, you know, privacy and do your best to have little data and not be creepy and not be intrusive. And that's certainly part of the solution. But the other part of the solution is if you're arguing that this is for me and that you're helping me and you want to get me right and you want to customize for me, then do that.

JULES: And Hey, publisher, how about you? It's your site. These are your customers. This is your experience. Nothing pisses me off more when I go to a website and it says, Hey, here's what we do and here's what we do with your data, oh, by the way, there's some third parties here. We don't know what they do. Go see their privacy policies. What? Who? Where? Who are the- It's you. I'm dealing with you.

ALIA: I have a question. I'm wondering, you know, as you're talking, I'm listening, I'm thinking like targeting I, I'm still, I'm just not, you haven't changed my mind to think that targeting is inherently evil or anything like that. But I guess what I'm wondering is like, as a consumer, how I can sort of make targeting work for me and make it feel less like my agency is being taken away.

JULES: Yeah. Look, I think the current business models make it very hard to really, you know, make it truly for you. It is for the advertiser who's trying to get the best price to get their ad in front of the person they think is most interesting that might indeed be what you want to see. It might be what they want you to see and you have no interest whatsoever. There are tools that are imperfect but are useful. So most ads that you see have a little triangle "i" the corner. That's the industry's way of saying this ad is behaviorally targeted, it is selected based on your web browsing.

ALIA: That's what that means?

JULES: That's what that means. I know it's pretty invisible to most people, maybe people don't know that you can click on the corner of an ad as opposed to on the ad itself, that clicking on the corner is going to get you to a page that says, here's information about this ad.

JULES: You can go to the network advertising.org site and you can get yourself an opt out cookie. So you know, cookie now that you have is a unique number and that's your social

security number for the internet for lots and lots of companies. Um, so when you take an opt out cookie and you got to get one from every one of those companies So if you go to those, the Nai side or the, you click on that triangle i and you go to the central site that's provided by the digital advertising alliance. They will give you all the opt out cookies.

BOB: I saw coming across the transom while we had this discussion, you know why is the burden on me to figure this stuff out in the first place? I never asked for it. It's just been foisted on me. Our parents never had to worry about this. It's, and it's a lot of work. It's, it's, I mean, even Jules even described, okay, so you can go to this place and opt out of all these cookies and that's great except when you clear your cookies and you have to start all over again and so on and, and, and, and again, the burden is on me, not on these corporations. Why is that?

K: Yeah. When I was listening to the interview, the first thing that I thought of was, wait, why is it all, like you said, why is it all on me to opt out of all of this? It reminds me of the credit conversation we were having, in season two of breach where it's like, so it's my job to opt out or to fix all of my credit, specialty credit report data that's wrong. You know, it's so much, or it's my job to even look for the data.

JULES: There's this imperfect middle that we lost. You know, the fact that you could do things and they would be somewhat obscure even if they weren't really private. But unless you were a celebrity, who knew who was watching, well, now computers knew and were watching and any minor person, you know, had this deep profile, had this set of information that was available about them for marketing, for customizing, and that middle ground, you know, sort of vanished.

BOB: In many walks of life technology has like ruined the middle of everything. You can no longer say something casually in the coffee room. The casual chat in the coffee room might end up being tweeted and might become a huge world firestorm, right? So there's only extremely private and extremely public. There's nothing sort of in the middle.

K: Or people create their own imperfect middles with making finstas which are Instagram accounts that you, I guess you only allow a couple people to follow and you post really personal information on, which I don't agree with, but it's an interesting like consumer-generated version of this middle, like trying to find this middle of wanting to have your stuff out there to people you care about?

ALIA: So while Jules helped us understand the world of ad tech, I still wanted to find an answer to our non ad related questions. Is there an answer to my Netflix problem? What about the echo chamber?

JULES: Yeah, well you should be aware that frankly the ads you see when you surf the General Web for movies are selected differently for different audiences. And you know, you can see both good and bad about that.

JULES: Um, so this micro, you know, targeting, um, which in the past might've been, hey, we'll have a different ad in a different newspaper versus a magazine. Uh, which online you may not even be aware is being selected for people differently. I don't know what Netflix is or isn't doing. But customizing content and customizing ads, that's a very narrow line there. I mean, imagine product placement being different for different audiences. I mean, anything that can be customized is increasingly being customized. And you know, people may or may not be aware that their search results are customized for them, right? You search for apple and I search for apple and a farmer searches for apple and you know, different people, someone's going to get the computer, someone's going to get, you know, something about the fruit. The card catalog in the library, you know, is being adapted and again there's, there's good and bad to that. On one hand, Hey, I'm going to get the results I'm looking for. On the other hand, the fact that we're all seeing a different view of reality, different content. So, you know, scholars have really debated, is this personalization kind of breaking up the public sphere? You know, we all open up the same New York Times, Wall Street Journal, LA Times, and we're reading the front cover and some editor has said like, this is what matters. When we consume the same articles because our friends shared it or some algorithm said, this is what you're interested in, are we being divided up into different little niche, you know, audiences? Are we losing that public kind of communal feeling of what's important and what's news? Again, it's good and bad. Um, the good is that niche candidates can survive in the election, right? Bernie Sanders can have a small but yet devoted following and he'll stay in until the end of the election against, you know, Hillary Clinton because his followers are, aew supporting him. In the old days, you know, you'd be forced out by kind of the collective consensus. So it's kind of great for democracy, I guess that every particular audience, you know, can find its audience or reach its audience. Netflix can make money showing a movie that is only interesting to kind of a small segment of the public, but it can find them. And as long as it has a lot of those long tails, it can, you know, have a viable business model and all of us who want to watch, watch those niche things, you know, can find an audience. But the downside is that the collective feeling of we're all reading the same kind of main newspaper or the, we're watching some sense of the news, right? If Walter Cronkite said, hey, what this president is doing, you know, is outrageous. Well then we all said it was outrageous, but now we can go find our niche audience and become, you know, radicalized or hear an echo chamber. So it is a tough challenge

ALIA: I mean, Bob, you know this, cause you, you have lived longer than Kelly and I have, what was it like before there was targeting and there were so many, like you could find a community that believes what you believe about in virtually anything. Like what was it like before that? Before, when there was a collective general understanding of things.

BOB: So, again, it's uh, it's a plus and a minus, right? It was easier. Everyone points to Walter Cronkite and the Vietnam War and when you lost Cronkite you lost the nation. And I can talk about media directly just because of my experience, but it was easier to establish a collected set of facts in the world. And there's a positive to that, but I hope alarm bells are going off on everyone's heads who's hearing me say this right now. Because obviously group delusion was even easier back then. You know, as long as you controlled Walter Cronkite, you could control

the planet. And so it's a double edged sword to have all of these other media outlets in some ways. Lots of alternative news is thriving right now, and we hear stories we never would have heard before, which is great. That's a huge improvement. But the other side of that coin is it's really, really easy to end up in your own echo chamber.

ALIA: Okay. Let's return to our question one final time. So where have we landed Bob? Targeting good, evil and scary. A little bit of column a, a little bit of column B.

BOB: I don't like the word targeting. Doesn't targeting feel like you're at target practice?

ALIA: Yes. Yeah it feels like I am the target.

BOB: Yes. Who wants to be a target of anything?

ALIA: Nobody.

BOB: Yeah. Now personalization is great. Personalization can be great. And I know this is probably frustrating for a lot of listeners. I would say that this technology that allows us to do this is more good than bad, but only slightly so and, and there will be a day when you're glad that again, I'm sure you're glad that your phone knows where you are when you look for directions somewhere and you're glad that it can tell you whether it's raining right where you are or will be raining tomorrow. And those are all good things. But the problem is we just haven't put any guardrails around it. And boy, I loved what Jules said about the fact that so many companies invent things and all they can see is this naive version of how cool it is. And they never think about how bad actors will misuse it. And that's the real problem here.

ALIA: Yeah, I agree. I want some more guardrails. Like I just want to feel safer and I want to feel less creeped on, you know, I want to feel less like I'm being stalked by these big companies for my data. And then, sure some of it's, some of the outcome is really useful, but a lot of it is just creepy and frankly puts me in a box that I feel pretty uncomfortable in. And so yeah, I guess I just want to like shout out to the people who are creating their, their rogue Facebook and Twitter and Instagram accounts. Are we calling them finstas?

K: Sure. Yeah.

BOB: Will you join in our crusade?

ALIA: Yeah.

K: Oh my God.

BOB: We're building the barricade. We are building the barricade. I love it.

ALIA: Yeah. Like I think we should probably do more of that. Like there are really practical ways for us to take back some of our agency, even if it's like just a little trickle of it. And if one of those ways is creating, you know, private Twitters and private Instas and multiple accounts like to do the things you want to do and to make the Internet and your tech work for you, then great.

K: Yeah. It's like a lot of people make finstas to shield themselves or not let other human beings in the world see what they're up to. But maybe you should think about the Finsta also as a way to not let advertisers and targeters to see what you're into, you know?

ALIA: Yeah.

K: Make it that kind of barricade.

ALIA: And in the meantime, like I think just being aware of it is pretty huge.

K: Yeah.

ALIA: Like I think it's not, it's not common knowledge and you have to take the time to become aware of, of what's happening to you and your digital life every day and hopefully by listening to us, you're starting to do that, you know, right alongside us.

KELLY: Wait, so before we end this episode, what about the ads in our podcast?

ALIA: Yeah, Kelly, that's a really good point. I mean, I know that they're targeted, right? But I don't really know how or why. So I feel like we should talk to somebody. I feel like we should talk to the head of the company. Let's talk to Keith.

BOB: We want to be as transparent with our listeners as possible, so let's talk to the head of the company about exactly how the ads in So Bob are really engineered and placed in our podcast.

KELLY: Yeah I think that's the best idea.

ALIA: Let's do it.

KEITH: Hey guys.

ALIA: Hey Keith. Hey, Keith, could you just for everybody who doesn't know, could you explain who you are?

KEITH: Yes. I'm Keith Reynolds, and I am the founder and president of Spoke Media.

ALIA: If you've been listening to So, Bob for a while now, you've probably heard me reference Keith, not by name because I try to be nice, but Keith is somebody I spend a lot of time with and

so he's been referenced many a time as somebody who wears earbuds around the office and I don't notice because he's so tall. And then I'm having a conversation and I don't realize he has his earbuds in.

BOB: Keith's name, of course, is on every podcast as executive producer.

ALIA: Yeah, you've heard his name. You've heard it many many times. Keith, why do you know anything about ads?

KEITH: Because we are a small company and they're virtually entirely my responsibility right now.

ALIA: So maybe you can help us answer our question then. Bob and Kelly and I are wondering how do ads on this show, on So Bob, work? Like I know they're targeted, but I don't really know how or why. So can you give us some more context?

KEITH: Yeah, so, every podcast needs a hosting platform. And a hosting platform is the behind-the-scenes website where the podcast lives and it distributes it to your different podcast players like Apple and Castbox and Stitcher and all those. At Spoke Media, we use Megaphone as our hosting platform. And one of the reasons we use Megaphone is because they have a partnership with Nielsen, the audience research people, and that partnership allows Megaphone to target ads. And so when we started out, because we're small and we weren't sure we were going to be able to sell the host-read ads that you normally hear in podcasts, where the host comes on and is endorsing the product, With Megaphone they'll supplement the unused ad space, when we don't sell host read ads, with prerecorded ads. And those prerecorded ads are targeted in a way that host read ads are not. We, uh, get a giant spreadsheet from Megaphone, and it has a list of different brand categories. So industry, or healthcare or home security or different kinds of broad categories. And we go through that and we say yes to certain things, we say no to certain things. For So Bob for example we say no to a lot of different tech categories.

ALIA: Oh yeah, I remember that. Like we, I remember Bob and I kind of looking through that with you and being like, oh yeah this, this feels fine

BOB: This feels to close to something we might be talking about so we should've have an ad for that.

ALIA: Yeah. Everything from reptiles to tech to you know, like, celebrity gossip.

KEITH: And so we, we fill that spreadsheet out, we send it over to Megaphone, and then Megaphone automates an ad service based on our preference and serves prerecorded programmatic ads in the ad slots on our shows.

ALIA: Wait, what does programmatic mean?



KEITH: Essentially it means a computer takes care of it. The ads that you see on TV are largely programmatic. The ads that you hear on the radio. And it's kind of a newish thing for podcasts.

ALIA: So it's sort of like when I watch Hulu, like I get served ads when I watch Hulu, right. On most of my Hulu shows.

BOB: Or when you visit a website.

KEITH: Yeah.

BOB: So how do we tell listeners that this is an ad, versus this is our podcast?

KEITH: Well this is one of the things that I think is both a business thing and a fun creative thing that you know, Alia and I have talked about for a long time and we're excited to put into shows like So Bob. We do these bumpers, so you'll hear those little sound effects, and the little whispered Spoke Media, which is the one and only Alia Tavakolian, before and after the different ads.

ALIA: Spoke media.

KELLY: Perfect.

ALIA: It's just like that.

BOB: That was great.

ALIA: I just whisper you into the ad you guys, just listen for my whisper in and out of the ad.

KEITH: And that's to really try to provide a clear delineation between this is Spoke Media talking to you and this is an ad that you're being served. Listeners can actually learn more about all of this by clicking on "learn more about your ad choices" at the bottom of the episode description of every episode of So Bob, and of many of your other favorite podcasts.

ALIA: Yeah you've probably seen that and like just scrolled past it like I have for most of my podcast listening life, and this is your opportunity to go click on that thing and figure out what all of these targeted ads mean.

BOB: And hopefully listening to this podcast has empowered you to do this kind of thing. So I really do hope you go read it and figure out how, what you think about it. And let us know!

ALIA: And now that we've told you all about targeted ads, why don't we all listen to one, together. But separately, because we're all getting different ones.

[AD BREAK]

## CREDITS

ALIA: Next week, on our final episode of season 1 of So, Bob, we tackle a question I've been wondering about for a long time: Do we have control over our private photos and videos? And if we don't, who does? Be sure to subscribe now so you don't miss a thing. If you like what you're hearing, head to Apple Podcasts and drop us some stars, and write us a review if you're really feeling it. This helps other people in the world with burning tech questions find the show. If you have a nagging tech question about your digital life, write to us at [sobob@spokemedia.io](mailto:sobob@spokemedia.io) or tag us on Twitter or Instagram @SoBobPod. No question is too big or too small. So send them our way. So Bob is a Spoke Media production. It's hosted by me, Alia Tavakolian and Bob Sullivan. We're produced by Kelly Kolff with help from Reyes Mendoza. This episode was mixed by Alexander Mark. Our head of post production is Will Short. Special thanks in this episode to Tory Onno. The songs you hear come from FirstCom. Our executive producer is Keith Reynolds. Thanks to this week's guest, Jules Polonetsky. You can find more of his work on Twitter @JulesPolonetsky. That's P. O. L. O. N. E. T. S. K. Y. Thanks for listening