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WHAT THE PRIVACY DEBATE GETS WRONG

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P R O C E E D I N G S

MR. WITTES: ~~So we're going to get started.~~ Welcome to The Brookings Institution. My name is Benjamin Wittes, a senior fellow in Governance Studies here.

I don't usually start my remarks with a trigger warning, but I'm going to give you a couple of disclosures up front: ~~.~~ ~~W~~we're going to be talking about sex and various products that people purchase in connection with sex. If that bothers you, this may not be the right panel for you.

I also want to say that if we get through this event and my remarks without your laughing several times, then I have really failed at life. And if these results aren't at least a little bit funny, I need to work on this whole thing.

All right. So this is a project that I've been working on for a while, which is to try to improve the way and think through the way we keep score in the privacy conversation. And specifically, I've sort of developed a belief that we keep score very badly when we talk about privacy, and that we have this narrative that privacy values are on a quick downhill erosion as a result of technology, government, and big companies that slurp up our data, and that we, as a result, don't notice the many ways in which our privacy is improved by the very companies and entities and technologies that we most fear. And so we have this tendency to pocket the gains that we make without noticing it while worrying endlessly about the losses.

And so a couple of years ago, a colleague and I, Jodie Liu, wrote a paper that tried to outline this. Now, as my first slide in this I had a YouTube video that perfectly encapsulates the thesis of this paper. It's actually a scene from the Woody Allen movie *Bananas*, with which the paper opens, where Woody Allen is trying to buy porn. And he is, you know, very embarrassed at a newsstand by people seeing him reaching up and picking pornographic magazines, and so he's narrating out loud what he's trying to do to

cover it up, which is to bury the pornography amidst more high-minded publications. And then he takes the magazines that he's going to buy, which is a large stack of highbrow political commentary along with some porn, to the front desk or to the cashier, who can't find the price tag on the porn and shouts out across the room, "How much is a copy of *Orgasm*? This guy wants to buy it." (Laughter)

And the broad point of the paper is that this is exactly the privacy that we all have that everybody who's here who's above a certain age remembers not having. And if you're the gay kid who's looking for information about, you know, sexual orientation today, you have opportunities to do that privately that people my age absolutely did not have.

And if you are buying condoms, you have opportunities to do that without confronting a cashier who might judge you. And that these are privacy things that, actually we hypothesize, matter to an enormous number of people, though they don't matter very much to privacy advocates and to privacy scholars. And so we tend to, we argued, absorb these privacy benefits without really registering them while we focus a great deal on the fact that these transactions, that may relieve us of the Woody Allen problem, create a permanent record that might someday be delivered to law enforcement, or might be used or will be used to profile us in future purchases and future interactions with those companies, or might leak. Right?

So we focus very greatly on the privacy harms and we don't really notice the many privacy benefits that we accrue. That was the hypothesis, and we provided some limited anecdotal and news and data for it, but it's actually a very hypothesis to test.

And so what we tried to do in this paper, my co-author Emma Kohse -- who couldn't be here today for personal reasons, but I want to say she is very much the

co-author of this paper and I speak for her in this presentation as well. What we tried to do was to think about ways to actually measure this effect and to try to think about what would -- how could you take the privacy benefits of these privacy-threatening technologies and companies and create a scorecard that actually looked at not merely the ways that this could harm us, but the ways that we all benefit from it; and the ways that we use it not merely for convenience purposes, not merely because it's easier to buy *Fifty Shades of Grey* on Kindle than it is to go out to the store and buy it, but because we actually value the lack of shame that you don't have to have people see you on the subway reading *Fifty Shades of Grey*? Right.

So we used for these purposes -- and actually I want to thank Google for making a whole lot of time available to us on Google Consumer Surveys. We tried to use Google Consumer Surveys as a proxy. So Google Consumer Surveys, I'm not going to go into a long account of what it is and how it works, but it's a platform, a public opinion platform that routes information, routes questions to users on their phones and on websites that use it as a gateway for premium content of one sort or another. And it's a way of getting very quick public opinion to quite targeted samples.

And so we tried to design a set of questions that would put the sort of privacy paradox thesis that we advanced to a kind of test. Now, this is a tricky business. And the reason it's a tricky business is that Google Consumer Surveys doesn't let you ask just any question that you want. And, in fact, in particular, it doesn't let you ask really about sex or adult content or just about any of the things that we hypothesized would give rise to this effect in the original paper. And so we ended up spending a whole lot of time trying to get around the sort of halfhearted censorship and prudishness of the platform. And the result is a set of somewhat amusing euphemisms.

So we had to sort of systematically replace language in these questions

with things we could kind of get through the censors. So “vibrator” became “personal massager,” which for some reason managed to get through. “Condoms” became “birth control products.” Birth control and contraceptives sometimes get through and sometimes don’t, so you sort of run things a few times. And sometimes we could get through “contraceptive products,” sometimes we had to use “birth control products.” So, you know, we couldn’t tell if it was an automated function that was sending us these emails, but the language that you’re going to see in these questions does reflect a certain experimentation and back-and-forth that we had with the platform.

So the goal in each case was to take two questions, one of which implicated a privacy/shame value and the other of which didn’t, but which were otherwise parallel, and to try to see whether this effect that people actually preferred to deal with some remote data-collecting entity in order to buy some privacy from the people immediately around them was real or not. And we set up five pairs of questions, four of which showed I think very strong effects, one of which showed a much weaker effect. Actually, the one that I would have thought would have produced the strongest effect~~,~~ produced the weakest effect. So that, you know, gives you my~~a~~ window into my own prognostication skills here.

So we’ll just tick through these and then I will invite Stewart Baker and Amie Stepanovich to give comments on, and sort of discussions of their thoughts on the paper. And then we’ll have a conversation with you guys.

So question number 1 was we decided to sort of test the *Fifty Shades of Grey* hypothesis and specifically to test it against sort of ~~a~~ comparably popular book that doesn’t raise privacy issues. And what you’ll see is that a lot more people prefer~~red~~ to read *Fifty Shades of Grey* in eBook form than in hardcopy form. Now, I think this is both because -- so this is exactly the opposite of what a privacy advocate or traditional privacy

scholar would predict, right, because when you read *Fifty Shades of Grey* on an eBook, Amazon knows what passages you like. You know, they know -- so that they can coordinate the eBook, they know which pages you've read, what was the last page you read. They have an amazing amount of information. And yet, by a pretty considerable margin, people prefer to do that than to walk into a bookstore, grab a book, and face somebody or to sit on a subway with a copy of the book. So that's point number 1, question number 1.

Set number 2, which similarly, I think, shows -- so this question, as I described before, we really started with some very specific products here and we were trying to, you know, kind of get down and dirty, if you're buying an X would you rather do it online or would you rather do it in this situation or that situation? And we eventually had to zoom out to the high altitude, general household items versus items of a sensitive personal nature.

And again, what you see is that many, many more people are interested in cost savings in the general household items than with respect to products of a personal nature. And the percentage of people that prefers to shop online with respect to the products of a personal nature is double the percentage of people with respect to general household items.

Now, again, you know, you want to buy from Amazon or from Rubber Club or from -- that's a real company, by the way -- and when you do that, you're creating a permanent record of a transaction, probably that's attached to your name, but certainly that's attached to your address. And you're doing that instead of what you would be doing if you walked in with cash and were willing to, you know, look somebody in the eye and pay with cash. And I certainly believe that a large part of that is convenience, but I think this shows that it isn't all convenience and that there's some countervailing privacy

value that actually causes people in some percentage, some of the time, to prefer the interaction with the remote entity, so that you don't have to engage the embarrassing interpersonal transaction.

So here's question number 3. This was the one specific product we were kind of able to ask about. And, you know, more people would rather buy a vibrator online than would rather buy an electric fan online. That's an interesting proposition. I mean, this is an item, I'm not going to get graphic here, but this is an item that, you know, is fundamentally you would probably want to pick up and look at before you bought. (Laughter) It's an item that you might not want your name attached to buying for a lot of people.

The personal component of the interpersonal transaction, this is the Woody Allen question, right? We, by the way --, I should have said this earlier --, we weren't able to ask the Woody Allen question because the one thing we could not find good euphemisms for was "pornography." So that's why the Woody Allen question itself is not among the data in this paper.

Finally, here's the one that I thought was going to be really overpowering. And this is a bugaboo of mine from a long time ago. I have been obsessed for a couple years now with the question of whether condom purchases would go up when CVS installs auto-checkout. And the basic theory -- I think the question is self-answering -- is, is the 16-year-old boy who's going to have sex more likely to engage in safe sex if he can use an auto-checkout machine?

Now, I think to ask that question is to answer it, but CVS mysteriously refuses to release data on this question as does Target. And in the original paper we went through all the companies that we tried to get data from on this and just strangely none of them would release it. So I thought we would create a kind of proxy question

through Google Surveys. And rather to my surprise -- and we created a sort of parallel question for young women, not that young women don't buy condoms, but we were trying to measure, you know, whether there was a difference in the way young women interact with this question than young men. And so we thought we would use one product that young men were tending to buy and might be ashamed of and one product that young women were tending to buy and might have some shame associated with.

And I was surprised, actually, that the effect in this instance was relatively weak. That is, there's no dramatic show of support for self-checkout in either of these.

You know, on the other hand, there is a weak effect, right, which is, with respect to the men, the percentage that prefers self-checkout for dental floss versus condoms is about 5 percent lower. And for women you don't see the preference for self-checkout, but what you really do see is the dislike of the human interaction. Right? And so here's the women. And what you see is, again, there's no groundswell of support for self-checkout, but, boy, there is really a drop-off in wanting to face a human. So the migration there seems to be to No Preference.

So I'm going to stop there. I just want to -- in the interest of full disclosure, there were these three questions that we asked, and we lay them out in detail in the paper, where we got real noise in response. And I want to, in the interest of full disclosure, tick through those because I don't think this is the case, but I do accept that some people could read this as these are questions that did not -- where the answers really did not support the thesis. And so just in the interest of full disclosure let's go through them.

So the original question we tried to get with condoms was: "Do you prefer to use self-checkout for condoms and contraceptive products?" And as you'll see,

in Figure 1, that originally showed no effect whatsoever. And Emma and I hypothesized and what gave rise to the question in the previous slides that the reason for that is that most of our users and respondents didn't understand that the word "contraceptive" included condoms; that when people read "contraceptive," what they were actually thinking of was birth control pills. And so what you see here is an enormous percentage of people who say they don't buy contraceptives, which, given the demographic, just seemed very improbable. So that's why we went back and recast the question.

And also, just the number of people who don't floss here, I don't buy dental floss, you know. (Laughter) And we had a similar -- I mean, both among men and women. I mean, kind of get with the program, people. (Laughter) But you also see some of the same effect with respect to feminine hygiene products; large percentage of people claiming they don't buy them, which seems, again, improbable and suggested to us that the question needed refinement.

Finally, this was just a dumb question that we didn't really think through adequately. It has the same problem of the vagueness of contraceptive questions, but, also, people don't buy light bulbs online because they break when you send them back. So it was a very bad, and sort of ill-founded, control question.

And so these are the questions that didn't work. And I put them out there just so that we can, you know, if one wants to interpret them as questions, the results of which contradict the thesis, you're free to do that. We make an argument in the paper as to why they should really be understood more as noise.

So with that, let me invite Stewart Baker and Amie Stepanovich on to the stage. While they're coming up and getting mic'ed, I will introduce them both.

Stewart Baker is one of my oldest interlocutors on the subject of privacy and policy around it in Washington. I've known Stewart since I was a cub reporter and

probably 23 years old when I was at Legal Times many years ago. And he's a former general counsel of the National Security Agency and more recently sort of policy guru at DHS. He's a lawyer at Steptoe & Johnson, where he has the distinction, as he constantly reminds us on his more excellent podcast, the Steptoe Cyber Law podcast, he constantly reminds us he has the distinction of being the person who has returned to practice law to Steptoe & Johnson the most times.

Amie is a newer of my acquaintance. She's at Access Now and she is one of the most thoughtful interlocutors in this sort of privacy space that I have. We've done a lot of panels together in the last few years and she works on surveillance issues and consumer privacy issues. And I look forward to both of their comments. Thank you.

Stewart, you want to ~~kind of start it~~get us started?

MR. BAKER: Yeah~~,~~, I have to say preliminarily, I was struck by the Rubber Club. (Laughter) Do they sell condoms or costumes? I'm asking for a friend. (Laughter)

MR. WITTES: So, actually, I refer you back to the original paper on Rubber Club. And I wish I had it. If I had it in front of me, I would read you the correspondence that we had with them. So there is this peculiar set of online retailers that are devoted exclusively to condoms, and there's a lot of them. We list them all in the paper -- or not all of them, actually, but a large number of them. A lot of them have amusing names.

And the reason seems to be that there are a lot of men and boys who are just terribly embarrassed about buying condoms. And so these companies will ship you condoms in a plain wrapper. It'll show up on your credit card as, you know, something very generic, like Acme Purchases. And they send them without -- some of them are discount sellers, but I think a lot of what drives it is privacy.

And we reached out to Rubber Club and asked them, you know, it seems inefficient, right, to have an online retailer that's devoted exclusively to condoms. And their answer was, yeah, it's about privacy and people -- and so, again, you know, the question is privacy from whom? If it's privacy from people in your household, privacy from the store clerk, they're offering that. But if it's a question of privacy from the FBI or privacy from a civil litigant or privacy from a data breach, you're quite exposing yourself. And so the question from the point of view of the thesis that we've been working with is which privacy operationally do people care about?

MR. BAKER: So I may be dating myself, but there used to be vending machines in men's rooms and you could sell a lot of things in men's rooms. You could sell combs, you could sell ChapStick, but they sold condoms. And I wonder, you might not be able to get the people who service those machines to talk to you about why they sell what they sell and where they sell the most. I'm willing to bet it's small towns rather than big cities.

MR. WITTES: Right. So I very much agree that -- so one of the areas that we flagged in this paper for future research is the question of geographic and demographic disparities. And my working hypothesis is that the bigger the city that you live in, you know, it may be the less effect that you'll see. But if you're in a small location, privacy from the people around you matters a lot.

So there's a -- again, this is research, I promise, but we ended up interacting, looking a fair bit at data released by a company called Porn Hub, which is exactly what it sounds like. And Porn Hub is one of the major pornography distribution systems online, but they have a data analytics section that actually releases data on porn consumption. And one of the really interesting pieces of data that they released is that the consumption of gay porn is substantially higher in deep South states than it is

elsewhere in the country. And I think that very much supports --

MR. BAKER: Thus explaining Apple's stance on privacy.

MR. WITTES: You're going to have to walk me through that.

MR. BAKER: Tim Cook grew up gay in Alabama.

MR. WITTES: Oh, interesting, okay. I think that very much supports your belief that the geography of these things is ultimately going to be highly significant.

MR. BAKER: So let me just quickly react to the thrust of the study. Duh, right? Of course people -- privacy is about: "Wwhat are the consequences of this information being released?" And most of the consequences that are embarrassing or shaming come from your local community, the people who are closest to you. And so, of course, you want to avoid that.

The risk of harm from the records that are kept by Amazon.com on your purchases are quite speculative and haven't actually occurred to anybody. Very few people have actually been harmed by those records and many of them have been helped. And so when you do this calculus you say: "Iit's good for my privacy. I don't see any serious harm that could come from disclosing this information to Amazon,. Aand I see a lot of harm that could come from disclosing it to my local pharmacy.,. sSo I'm going to do it this way."

The only reason it's unusual is that the privacy groups don't want to believe it because they would rather go after Amazon, because that makes a better adversary than your mom. (Laughter) And so their entire legislative campaign depends on scaring people into believing that there is something weird and serious and creepy about what Amazon is collecting on you, so that you insist on more legislationve regulating the privacy practices of Amazon.

And they need to do it quick because the more experience people have

with not being harmed by Amazon's policies, the less enthusiasm there will be for new legislation~~ve~~, the harder it will be to induce panic, a kind of moral panic about privacy of Amazon in the body politic. And the reason you're getting resistance is you become one more reason why people shouldn't panic about Amazon's privacy laws.

MR. WITTES: Okay, but let me, before we go to Amie, let me push you on that.

MR. BAKER: I was trying to set her up.~~-~~

MR. WITTES: In defense of the privacy community, it's not just the privacy activist~~s~~ groups. This thesis, and I agree with you, it's completely obvious. Right? That's the reason Woody Allen could write it in 1971 into -- because there's something embarrassing about these very local interactions. And it's a very intuitive thesis and it goes against not just the advocacy positions of a lot of organizations, ~~.~~ ~~I~~it goes against the entire privacy literature of the academy. And so my question is --

MR. BAKER: But ~~Y~~you repeat yourself.

MR. WITTES: No, my question is why is it not part -- why is the highly local not more part of the privacy conversation more broadly than it is?

MR. BAKER: Don't you think it's because the academic community mostly resonates to, and would like to help, the privacy campaigners? That's the agenda that they see as important.

MR. WITTES: Amie is shaking her head. (Laughter) All right.

MR. BAKER: All right. Amie.

MS. STEPANOVICH: So my name is Amie Stepanovich and I'm a privacy activist. Wrong meeting. (Laughter)

Thank you very much, Ben. Thanks for the introduction, it was very kind, and for having me here. I apologize to you all in advance. I am allergic to something in

the air, so if I have to take a second and sneeze, I am very sorry.

I think there's actually a lot interesting here, and I've read through it now a few times just to get my head around what you're presenting. And I love the attempt to add empirical data to the privacy conversation. There is a growing movement, I think, toward that and I really appreciate it and I like looking at numbers. I'm probably one of the only -- I'm definitely the only lawyer who went to my school who really loves numbers, so I really appreciate that addition. And how much time in the paper you spent on your methodology. And I think we could have a totally side conversation just about methodology and different questions that it raised for me and different ways to test these different questions.

Because, for example, I read almost exclusively right before bed and so I'm a devout paper book reader, but I have moved to eBooks more because I am falling asleep and so I don't want all the lights on, which you need to read paper books. Now that I've watched you present and I was like "Wwhere are people reading *Fifty Shades of Grey* versus where they're reading *The Hunger Games*?" And that might have -- like just the location where they read might have an influence on what type of device they're reading on. And so there's a lot there that I think -- and I encourage people to kind of poke at because I think making and continually improving -- which I imagine there will be a Privacy Paradox III in the works at some point.

MR. WITTES: I hope so. Sorry, go ahead.

MS. STEPANOVICH: No, and then to move in, I think the one place where I hugely disagree is the idea that privacy is a zero-sum game. You don't lower the negatives about Internet interactions. You don't make those somehow less by increasing the positives of those same interactions. They can both exist simultaneously. And so highlighting the negatives actually becomes really important because privacy is already a

huge uphill battle. I made a list: public safety, child pornography, innovation, research, and some actually might blame privacy for 9-11. Nobody that I know.

MR. WITTES: Stewart, for example. (Laughter)

MR. BAKER: I would.

MS. STEPANOVICH: But the national security state is also there rallying against privacy interests. So there's a huge uphill battle, which means there becomes a very big impetus for trying to say: "Hhere are the negatives that exist in this space."

I don't know if I've ever written a paper or any activist or advocate that I know on privacy that hasn't started with "Hhere are all of the benefits of technology," like "Wwe think it's great." I'm a huge nerd. I'm a huge nerd, and I think that technology is wonderful, but I think it comes with real threats. And so recognizing these, I think, are good, but you also have to take a step back and make sure that you're recognizing the depth of the threat.

And one of the things that I think the paper would benefit from is an addition of context and a definition of "privacy," what definition of "privacy" you're using here. Context is because people perceive privacy in context. And so you actually in your first paper use the example of the door and the telephone, which I thought was very instructive because I could have people listening in on my telephone conversation. Everybody as a child picked up a telephone conversation, right, that somebody else was on. It was like, "Ooh, if I'm really quiet, I can hear this."

The person talking might not want you to hear that, ., —I imagine they don't. Iif you they were having an in-real-life conversation, not on the phone, they would move away from you. So the context becomes important because online you don't see the people watching you.

If you're walking around CVS and you have 50,000 advertisers walking

behind you, watching every single thing you pick up physically, you would feel very different than if you were just walking around by yourself. But that's exactly what's happening online. And so how people perceive privacy, I think, becomes very important.

And you make a very good argument for the fact that people feel like there are privacy benefits when they purchase online, that's psychological. I feel like I have more privacy. But I don't think that actually means that they have more privacy.

And so I have some other notes, but I'll leave with that. But on top of that, where I think there are the most benefits of this paper is actually there was recently a report published by the National Institute for Standards and Technologies, NIST, on government privacy engineering. So they're trying to make privacy into an engineering field. And to do that you have to be able to calculate the cost of privacy.

What happens if a problematic data action is the term they use instead of a privacy threat, but what happens when that occurs? And I think actually the long-term results of some of this data is we can measure some of these negative repercussions. You know, you're measuring the positives, but that's going to contribute to measuring the negatives. And it's going to be able to feed into a more systematic approach where we're focusing on privacy harms to the user and not to the company, which is what we use now.

MR. WITTES: So you make two points that I think are completely fascinating and one of which I want to clarify my own view on, and the other of which I just want to amplify a little because I think it's actually one of the critical questions.

So the first point on which I should clarify, I don't actually believe that there is a unified privacy number that we all have. We have X amount of privacy, right, and that that number is either going up or going down, and that we should, therefore, subtract the harm number from the benefit number, and it either ends up positive or

negative with respect to X. I think I agree completely with your formulation that it is possible for privacy to be on the march in some respects and in grave retreat in other respects, and that there are both benefits and negatives associated with giving your data -- privacy benefits and negatives associated with giving your data to large, remote entities.

And the limited point that I'm -- and I even believe that it is a very good idea for privacy advocates to focus on the negatives of dealing with those companies by way of convincing those companies to adopt policies and federal government, for that matter, to adopt policies that encourage more privacy protective behaviors on the part of those companies.

MS. STEPANOVICH: Great, we can stop there. (Laughter)

MR. WITTES: My point is an intellectual point, which is that if you're asking the question, "Aat the end of the day what is the privacy impact of our interactions with these companies?", Tthe answer has to be it's much complicated than the list of negatives associated with dealing with those companies. So that's the first point.

The second point on which I just want to amplify what Amie says, that I think this is actually really key, is where she says that the question -- that she agrees that people may do business with these companies and feel like they have more privacy as a result. The key question is whether objectively they do. And so there's an impolite way to respond to that question, which is to say that what Amie's really saying is it doesn't matter -- your perception of your privacy doesn't matter. What actually matters is her perspective of your privacy.

But I'm actually not going to go there having just teased that and sort of gone there. I'm not going to go there because I actually think the important point is that this is exactly right and it flags the relevant question, which is whose perception of the

reality of privacy is the one for which we should have solicitude as a society? Is it some set of objective criteria defined by the community of people who professionally and intellectually care about privacy, or is it privacy as a lived experience of the aggregation of hundreds of millions of people?

Now, I think the right answer to that question is both, but I think in our conversation we underestimate the value of the lived experience side of that question. And I guess to the extent that we have a difference on this point, the difference is that I'm much more solicitous of the person who says: "I feel uncomfortable with reading *Fifty Shades of Grey* on the subway," that that strikes me as a legitimate human experience that for that person is a real privacy value. For the gay kid, that's an easier point to understand when you're talking about the gay kid or the religious dissenting person in a small community, right, who's looking for information.

By the way, there's some interesting data that people are more likely to check out LGBT-oriented books from libraries if there's auto-checkout than if there's not. So, you know, you can make the point in a trivial, frivolous way about *Fifty Shades of Grey*, but that experience of caring about who around you knows what you're up to gets very acute very quickly if you move it into areas that objectively matter more.

But I would defend, even at the frivolous level, the 14-year-old kid who doesn't want to look somebody in the eye to get a condom and say "I'm having sex tonight, here's 10 bucks." Right? That's a hard interaction for a lot of people. And I actually believe that it's a value to take that difficulty, that emotional difficulty of that transaction, pretty seriously.

MR. BAKER: So I do think experience is critical ~~is~~ here rather than asking people for their express preferences. People will always express a preference for more privacy, because why not? If it costs nothing, they want more.

And we know that after expressing those preferences, they give away their data for a couple of airline miles.

MR. WITTES: Airline miles are important. (Laughter)

MR. BAKER: Yes, they are. And privacy, at the end of the day, is not fixed. It is a negotiation between individuals and reality over what practical expectations they can have about what's private and what's not. And some things we lose as technology changes and some bits of privacy we gain as the technology moves forward.

I'm struck by the emergence of a norm, a privacy norm, that says you don't really just call people out of the blue. You need to let them know you're going to call. You need to have their permission to call. That was never the norm in the 20th century. Everybody rushed to answer the phone no matter who it was. Now we figure it's a scam or somebody selling us something and we don't answer, we let it go to voicemail. The idea that we can be free from that sort of intrusion into our lives, it's different from data privacy, but it's a very real element of privacy that we've gained from this.

And what I think is going on here is people need to be able to see new technologies and see what the bad privacy consequences are, if any, before they can actually make a determination about how they feel about the privacy. My bet is the most important privacy aspect of Amazon's policies is that they require a subpoena. So they're not going to hand this data out to anybody. Unless you're in litigation, your data is going to stay with them.

And you're never going to see those people who are behind you, the little ghosts watching you shop. And if you never see them, you kind of -- and there's no consequence for you, you don't really care. And so to consider that a privacy violation strikes me as inconsistent with our lived experience.

MS. STEPANOVICH: I love that remark because it's so reminiscent of the national security viewpoint. (Laughter)

MR. BAKER: That's right.

MS. STEPANOVICH: If we collect all of your data, we're not actually violating your privacy if we don't tell you the program exists.

MR. BAKER: Or Gmail, they read our -- or they run our stuff through and they serve us ads based on the contents of our most intimate mails and we just don't worry about it.

MS. STEPANOVICH: I don't know if we don't worry about it, but I think -- I mean, getting back to this question of the gay teenager in the deep South, where I am from and I'm fairly familiar with., Access Now, we're an international organization, and one of the reasons I'm actually willing to not necessarily argue with this paper maybe as much as some of my colleagues would -- I don't know if that's true -- is because we deal with like gay individuals in areas where it is a crime, possibly a death sentence crime, to be gay; where women buying condoms might actually lead to stoning because they're not supposed to engage in that activity; where the privacy that you recognize given by the Internet -actually could be a matter of life or death. But that is also why we advocate so heavily in favor of privacy on the Internet, because the moment that data is breached or released under a subpoena or compromised in any way, those actions, those consequences, not only can manifest, but they can manifest in a way that's even more hugely -- has a much bigger impact than on any individual level because you see across the board.

And in the U.S., we saw this with Ashley Madison. And we saw this with the breach that if they had your credit card number, are you cheating on your spouse? And that was a very real consequence.

MR. WITTES: So this, I think, I want to open it up to questions, but I think this also gets to a key point that I've never actually written up, but I think is one of the important consequences of this research, which is that it's possible that the aggregate effects on people's privacy is that you have much more of it until the moment that you don't, at which point you have much less of it. And that, you know, you get all these privacy benefits from the ability to do Google searches in your bedroom, the ability to do transactions with Amazon that you don't have to look somebody in the face. All these things really benefit your privacy, until the moment you're the subject of an investigation, or the moment you know somebody who's the subject of an investigation, or the moment you get -- there's a data breach, right, at which point it's the tsunami going over the small island.

And so you -- think of it as a lot more privacy and then it drops off a cliff all of a sudden is one possible metaphor for it. And Amie's example of the person who -- you know, the woman in a country buying condoms who can get stoned for it, has a lot more privacy, until Amazon is subject to that subpoena. Right? And so, gives with one hand, takes away with the other.

So let's open it up for questions. We've got a whole bunch. How are we doing on time? We have 10 minutes, so I'm going to do two questions at a time. Here, let's do the first two here and the second two after them there, and we'll take -- the first two. It can go in order.

MR. ROSE: Herb Rose. I've got a few quick questions. One, how many people actually -- and I think this was alluded to, maybe several of these -- how many people actually read the privacy disclosures at websites when they first go to use those websites or simply click the appropriate box and move on?

Another question is that have people become less self-conscious in

recent times, i.e., less concerned with their privacy, since television sitcoms have started to address a lot of these issues and, therefore, brought it out into the public and exposed it?

MR. WITTES: Just pass the mic straight back to the woman in back of you.

SPEAKER: Yes, good morning. Thank you very much. There's always the trade-offs and your paper seems to focus on the commercial Internet as opposed to national security or license plate tracking. So my question relates to the ability of choice and control.

So if you could add a question that said if you bought your *Fifty Shades of Grey* or condoms online, would you be willing to pay $1 more so that Amazon will not track anything with this purchase, would you be willing to pay $1 more? Because the control part of it is the control.

I can't control cookies, so I'm stuck with it all. But if I could pay $10 and nothing I searched would be re-presented to me because I searched a book, I'd pay it. So could your questions in your survey follow up with a: "W~~w~~ould you be willing to pay something for this not to happen?"

MR. WITTES: So let me quickly deal with your questions to the extent that I can. You are talking to three of the only people in the world who read Terms of Service before they click through things. (Laughter) And I think --

MR. BAKER: Two.

MR. WITTES: Two. You don't?

MS. STEPANOVICH: I think there are a couple other people in the audience that probably do.

MR. WITTES: Yeah, there are a few. I didn't say the three only, I said

three of the only, but Stewart now has removed himself from that. (Laughter)

No, this is one of the great legal myths of all-time and the idea that click-through agreements -- I once joked that the NSA could solve all its problems by having a click-through agreement on your tax return. And, you know, just consent to whatever programs they want to do.

MR. BAKER: At least with a $2 discount. (Laughter)

MR. WITTES: And, you know, I think whatever the right answer to these trade-off questions is, I mean, I think click-through agreements are a goofy façade, is my opinion.

Look, your question raises one of the most interesting, and I have never thought of that particular question and I want to thank you, because I would love to figure out a way to get that option in as a way of sa~~v~~ing are there people who, A, are benefiting by the ability to read in this more private fashion, and yet are also worried about the backend effects? And I think that would be a great way to do it. The only problem I have with that question as you formulate it is that may be too long for Google Surveys. We'd have to figure out a way to crunch it down into many fewer words.

SPEAKER: Would you be willing to pay --

MR. WITTES: Yeah. No, absolutely. No, no, I hear you. It's a great question and it gets to something very deep, which is the relationship between the back-end privacy questions and the front-end privacy benefits.

MS. STEPANOVICH: And just to real~~ly~~ quick~~ly~~ add is I think that if Ben's right here, one of the things that he has shown is that privacy is not dead, which is something that we've been -- like the core concept that people do not care about privacy, if your paper is right, is totally wrong.

MR. WITTES: Right, completely wrong.

MS. STEPANOVICH: And I think that that's the direction that we should take this.

MR. WITTES: That's a really, really important point.

The gentleman right here and there was somebody else. Oh, and two, three rows in back of him there's somebody else.

SPEAKER: Good morning. Thank you very much for all of you being here and speaking.

I was struck by the fact that Google controls what words you can and cannot ask. The fact that you couldn't use "condom" or "vibrator" to me seems uniquely American. (Laughter) Or at least in my experience. There were two things that that triggered for me: ~~.~~

One is among developed countries, the U.S. is uniquely religious, and so ~~there's~~ these notions of shame and small-town gossip and things are incredibly corrosive. And secondly, that there's this libertarian strain that we do trust our companies and Google wants to be a repository of our trust so that we will give it more of our search engines.

I was wondering if the three of you have personal knowledge or academic exposure to the international comparisons of privacy norms and how the U.S. relates. Thank you so much.

MR. WITTES: Okay. So while Anna's bringing the microphone back, let me just say a quick word in defense of Google's censorship of Google Surveys. There is no more inconvenient set of policies for me than this one, but I totally understand where they're coming from. These are questions that literally pop up on people's websites, on people's phones, and some of the people in question are underage, and a certain amount of decorum and taste. I mean, I would be pretty irritated at Google if a seven-year-old

child of mine suddenly have a "Have you ever bought a vibrator?" question, you know, pop up on her web page.

And so I actually don't think that Google's policies here are unreasonable. As much as I've sort of made fun of them in the paper, I don't actually think they're unreasonable at all. They're just, from a research point of view, very inconvenient. They're literally routing these questions to hundreds of thousands and millions of phones and computers, and I think there is a certain, you know, keep it on consumer behavior, on politics, on other things, and keep it away from sex, is not the worst instinct in the world.

MR. BAKER: Blaming it~~n~~ on U.S. religious views I think betrays a lack of familiarity with the views of most of mankind.

MR. WITTES: But on your comparative question I would defer to both of my panel colleagues, both of whom have spent more time on the international dimensions of privacy than I have.

MS. STEPANOVICH: I mean, the first many months at my job, I will not tell you -- we have an office in Brussels, we have 12 offices -- how many times somebody looked at me and said, "Amie, you don't understand that privacy is a fundamental right in Europe." And I had to explain several times, "Y~~y~~es, I do understand this and I think it's really great," but I do think this notion of international concepts of privacy is very significantly different.

I a~~A~~lso ~~--~~, your question and the question up front on this being -- I have this in my notes, but, you know, Ben, you called these privacy benefits. I actually bottled them frequently as psychological benefits as opposed to privacy benefits. And this idea of shame and "Y~~y~~ou should be embarrassed by this," I think, eventually, is a societal issue that, you know, women shouldn't feel shame when buying feminine products or

condoms and neither should men, or any of these other things. But it's been around for a really long time.

You know, reading books, embarrassing books a long time ago, they used to have fake dust jackets you could put on them. The eReader is just the newest iteration of this.

MR. BAKER: Yeah, I'm willing to bet that in Ann Arbor, Michigan, or Silicon Valley, you want to make sure you're only reading Breitbart on an electronic reader. (Laughter) Yeah, but the notion of what's shameful varies, but the notion of shame is everywhere.

MR. WITTES: The gentleman there.

SPEAKER: Yes, actually to pick up on that point that you were making about this being a measurement, the study being something of a measurement of shame rather than a measurement of privacy, I think that that dovetails nicely with the idea that you were mentioning a little bit earlier about the sort of tail risk associated with an online purchase whereas if -- I mean, in Woody Allen's case, of course, he lost, but if he had gotten through the transaction and gotten the pornography and nobody had shamed him publicly, at that moment he would have won. He's not going to be shamed again, at least until he has to go and dispose of the pornography.

But there's a short timeframe with respect to an in-person purchase, with respect to the likelihood of your privacy being punctured in some way, whereas there is this long tail that you don't know what the risks are. All you know is that the risk exists out there. And I wonder if you might be able to -- what you might find with your results if you could take the same question and ask it before and then after some significant data breach. If you would find that there was a consistent willingness, or if you found the willingness went down, the willingness to use the online world to purchase your

potentially shameful products.

MR. WITTES: So it's a completely fascinating questions and, of course, the ideal way to do that would be to anticipate which companies are going to be subject to data breaches and ask about the specific company before and after. You know, obviously, that's kind of tough to do.

I will say that I believe, I'm not sure about this, but I believe that Ashley Madison suffered a great deal less in enrollment than one might expect. And I've heard this atmospherically, I haven't actually seen data on it.

So, look, I'm -- but I think the answer to your question is yes, you are exactly right, the fundamental issue here is the short-term immediate, but in many cases very profound, benefit of engaging -- I would describe it as privacy, but if you want to talk about it as shame, that's fine -- in a privacy-maximized transaction or interaction versus the possibility of a long tail privacy impact. And my only broad thesis here is that consumers are making different judgments in this than privacy advocates and scholars are. Who is right is a different question.

And I think the mother of all questions here, which is the one that Amie teased, with which I really agree, is the question of whether there are ways to get those upfront benefits while minimizing those long-run costs. And I think if there's a single policy message from this paper it's, you know, think about the upfront question with a long tail rather than simply thinking about the long tail.

I think we have time for one more question or let's get both of them. There's a woman in the back and a gentleman in the far back left.

SPEAKER: Hi. Thank you for my question and this really good discussion.

I'm curious about the question about control, kind of taking a different

angle than my fellow audience member up there, of do you users when they go to a large company, like an Amazon or a Google -- in full disclosure I work for Google -- do they also think about this question of~~about~~ control and transparency? So a lot of these large companies, even some data brokers, have account dashboards where you can see all the information that a company might have about you and have varying levels of control across the company about deleting data, whether that be your search, your purchase history, your viewing history, and things like that.

So getting back to your example of the small town example of a local pharmacy where you may not know over time what that company might have about you and the ability to exercise control over that data versus a company and a large entity where you could kind of see that in a more aggregated manner and really have more information to make a decision. So you don't have to be just confronted with the consequences to think about what your privacy preferences are, but you can look at it in terms of the data that you are giving and the ads that are based on that and whether or not you want to opt out of tracking ads or not.

MR. WITTES: Okay, let's get the last question and then we just going to -- when it's done let's just start on the left and work our way down with final remarks and wrap-up thoughts.

SPEAKER: And then you're speaking politically, start on the left and then move over to the right. Exactly. (Laughter)

MR. WITTES: No, Stewart's way to my right.

SPEAKER: Stew is in the center. I think you need to switch seats.

My question really it seems that the study really is balancing embarrassment because, remember, Woody Allen had total anonymity there or mostly anonymity there. And so even if he had the guarantee of anonymity, so there would be

no privacy issue, he still had embarrassment. And I think that was what was driving the concern against the illusion of privacy, which is what you get when you buy online. Because what happens when you buy online, I think, is that you're told there's a privacy policy, but you know fundamentally that people can get access to the data, particularly with subpoena and the like, but you don't see it. You don't see the impact of people looking at your data, filtering, sending you ads, not sending you ads, and all that stuff as a result of the personal information that you're collecting.

The embarrassment seems up front and visible. The privacy violation or the privacy impact is not seen by you. And so those are the two you're balancing.

And the only other thing is how do you know that eBook readers don't prefer to read *Fifty Shades of Grey* as opposed to people who read *Fifty Shades of Grey* prefer to read them on eBooks?

MR. WITTES: Okay.

MS. STEPANOVICH: So I'm going to answer the control question and kind of address this part at the end because I think -- I started talking about the definition you're using of privacy, because there's a definition of privacy that is the right to be left alone, and there is the definition of privacy that is the right to control your data. And I think Ben has actually really focused on the right to be left alone, the right to not have somebody else interfere with your interactions. Whereas, I think, the right to control your data in person, undeniably you have more control over your data. You can walk away from circumstances. I can choose which CVS I go to, if I go to the one in my small town or the one 50 miles away. I can choose if I go to this register or that register, et cetera; which phone I use.

But online that control is much limited. And even in companies that say, here, look at all of the data we have about you, your name, your location, A, you can't

control what they collect. So there's a big problem of once they have it, what does that mean? Is it going into these aggregate databases? Are they doing anything else with it?

And B, you also can't control the information -- the inferences that they're making based on the information they have. So Facebook knows a whole lot more about me than the information in my profile; information about who I have dated and who I'm about to date. Facebook supposedly knows more information about me than I know about myself because they can make these inferences. And I can't control or have them delete that information, and I think that is very significant because there's all of these data points that we don't even know exist and we can't get rid of.

On the other point, at the end you talk about eReaders and *Fifty Shades of Grey*. I think that's interesting and I think actually gets back to the methodology that I brought up. And I think having that methodology conversation is fascinating because you can start seeing ties between certain data points and other data points that I think might start arising from that conversation and I think that's where this should go next.

MR. BAKER: So I'm deeply skeptical about the idea that there's some aspect of privacy that's detached from bad consequences of the information being known by people, even in the Woody Allen example. Yes, he's anonymous, but if you think that's enough, you haven't been a teenaged boy recently. (Laughter) It's profoundly embarrassing to have that discussion, so I remember. (Laughter)

And so if there are no consequences to the information being known, then no one feels particularly strongly about the privacy of that data over the long haul. That's my sense.

I thought of one other, I'll just close with this, one other area in which electronic media, where lots of data is being collected, nonetheless enables us to engage in behavior that gives us more privacy. Here's my suggestion. Go to Google Auto

Complete, do searches for things like “are Jews” or “is Hillary Clinton” or what have you.

MR. WITTES: We did this exact experiment in the first paper.

MR. BAKER: And then tweetak those questions and see how many of them produce answers that are useful versus abuse.

MR. WITTES: Oh, that’s a really good idea. That’s a really, really good idea.

MR. BAKER: You’ll have to open an anonymous Twitter account. All right.

MR. WITTES: So we actually in the original paper did a lot of experimentation with Google Auto Complete and it shows exactly what you would expect it would show, which is that the first thing people do whenever they have a sensitive issue going on in their lives is they Tweet about -- sorry, no. (Laughter)

MR. BAKER: Wrong administration.

MR. WITTES: That was a really bizarre Freudian slip, sorry. (Laughter) The first thing they do is they type it into Google. And that’s everything from clinical symptoms to relationship issues to “I’m afraid that.” I mean, whatever is going on in people’s lives, that’s the first thing they’re doing with it. And, you know, I would argue that that’s a privacy benefit., Tthe ability to have those conversations with the Internet in an anonymous fashion and gathering information is something that my children have had and have enormously valued that I did not have as a teenager. And, you know, I think that’s highly significant.

I want to briefly address the two questions. Yes, I believe that control of data and the way the companies are using it is critical. And I think one of the ways you ameliorate the backend concerns about Facebook is by Facebook giving you maximal control over what they do and they don’t. And to the extent that they do that, that is some

degree of amelioration and some degree of -- there's value in that. Tto the extent that companies do not do that stuff, you heighten, gravely heighten, the risk of tail consequences. And, you know, to go back to the you get the privacy benefit up front and then you have a long tail of possible consequences, how quickly that tail goes down, how far, is largely or partly a function of the degree of user control that you're given.

On the gentleman's question, two things:. So, number one, the answer to your methodological question about how we know what's the dependent and independent variable with respect to *Fifty Shades of Grey*, we don't. It's a hypothesis that it would look that way, it looks that way. If you want to interpret it as evidence that *Fifty Shades of Grey* -- that eBook readers are more likely to be interested in salacious BDSM fiction than hardcover book readers, I suppose that's a valid interpretation of it. It's not the way I read it. And I think the only way one would resolve that dispute is to do lots of such questions over time and see if there's a consistent pattern that sort of defies a stereotype of any one group of people.

MR. BAKER: Or date a lot of eBook readers. (Laughter)

MR. WITTES: Right, right. And then finally, look, in response to both your question and Amie's response to it, I do think that we are kidding ourselves if we try to detach shame and embarrassment from privacy. Amie criticized me for not having a definition of privacy in the papers. Let me give you one now: It's the ability to control who knows what about you.

And if the thing that's salient to you in controlling who knows what about you is the person immediately in front of you when you're buying a condom or when you're buying *Fifty Shades of Grey*, that's privacy to you. And yes, I can sit here and say "Bbut there are privacy consequences of doing it in the way that relieves you of that consequence that you're most concerned about," but I can't tell you that you're wrong to

have the emotional reaction that you have to the circumstance in question, though I do very much agree with Amie that it's a societal problem that people have that much shame about the purchase of these products.

I don't have shame about sitting in front of a large group of people talking about them and, you know, I wish every 14-year-old boy, and girl for that matter, shameless condom purchases. I really do. That's not the world that we live in, and the world that we live in is one in which there's a lot of shame attached to the purchase of certain products. And privacy for a large number of people as a result is the ability to control who knows what and who knows at the moment that they're doing it, and they're willing to do certain things that may have long-term tail privacy consequences to relieve them of that immediate consequence. And I'm not willing to sit here and say that's not real privacy.

So with that, if either of you has any additional thoughts, I thank you all for coming. And I hope you enjoy the paper. (Applause)

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