[SLICE OF MIT THEME MUSIC]

ANNOUNCER: You're listening to the *Slice of MIT Podcast,* a production of the MIT Alumni Association.

JOE MCGONEGAL: This is the *MIT Alumni Books Podcast.* I'm Joe McGonegal, Director of Alumni Education. Joseph Reagle's new book *Reading the Comments, Likers, Haters, and Manipulators at the Bottom of the Web* was published this month by MIT Press. Here's an excerpt.

JOSEPH REAGLE: "People traffic in the illicit markets of comment. Some click a like in hopes of a discount. Diners loudly discuss Yelp when their server is nearby. Restaurateurs give coupons in exchange for reviews. Authors ask friends to write reviews or do something else. Sockpuppets edit Wikipedia biographies.

Pundits purchase fake followers. And sites profit by manipulating users praise and pillory. Much of this behavior is driven by the high value of comment today, an obsessive desire to rate and rank everything, the dynamic of competition, and the sense that everyone else is already doing it.

The world of online comment is quite different from that of early likers, like E.Z."-- who I speak to in the book-- "who reviewed for the love of it. At the bottom of the web we are increasingly tempted to become manipulators, and as we do so we lose something in the process."

MCGONEGAL: And Joseph Reagle, thank you for joining me.

REAGLE: Glad to be here.

MCGONEGAL: Could you tell me why you decided to write this book now?

REAGLE: So I had written a book about Wikipedia. And generally, the response was positive. But I found a couple of comments-- in fact, if you go on Amazon and you look at the review section, you find someone that left a comment there that gave it one star.

And this person is a noted Wikipedia hater. And so I found that experience odd and a little bit difficult. That was a number of years ago. And as I've continued to use the web, I see lots of things online that are odd and a little bit difficult, sometimes very difficult.

And so I describe this as a series of WTF moments. When you read something in the bottom

of the web in the comments or in review, you think what the heck is going on. I begin the book with a story of a young woman-- and many people have done this on YouTube-- who post a video asking YouTube commenters if they're ugly. And I thought, oh my goodness, what is going on here?

I characterize this book as an expedition to the bottom of the web. I'm going to read the comments so you don't have to. And it's not just because I'm a glutton for punishment or I'm in it for the LOLs because some of it can be somewhat funny. But I think there are things that perplex us about the bottom of the web. And I think there's things that we can learn about ourselves and how other people are seeking to take advantage of us.

MCGONEGAL: Obstacles in the way of getting this book done, either in the writing or the publishing?

REAGLE: This book went fairly straightforwardly. I don't have any huge complaints. I had a plethora of material. I had already published a book with MIT Press. So that was fairly smooth process. And I had a semester leave at Northeastern where I work. And I had been working on it for a couple of years, but that allowed me just to crank on it and draft a lot of material. So it went fairly straightforward.

MCGONEGAL: What about your MIT education is alive and well in this book?

REAGLE: I think my geeky sensibility. When I went to MIT back in '94 I had just graduated with a computer science degree. I was admitted in EECS at MIT. But then I got my master's in a technology policy program. I really enjoyed that. It did signal a shift away from the technical stuff. But then for the next seven years I worked at MIT.

We used to be called the Lab for Computer Science. It's now called CSAIL. But I worked there for seven years doing web policy, technical standards like XML, signature encryption, and all that sort of stuff. After seven years there I thought blogs and wikis are really neat. I'd like to do more with them. And that's when I left for NYU to do a PhD.

MCGONEGAL: I'm reading about the bottom half of the web in this book, and I'm wondering who among our alumni pool is down there in the bottom of the web. They're commenting. They're engaging. They're a very web savvy audience, I'm sure. How will MIT alumni, or how will MIT be part of the solutions to some of the problems you address in this book?

REAGLE: Well there's no easy fixes, so I'll say that. Much like my first book where I talked about Wikipedia and people thought, can we just plug a wiki into our company and have this amazing

thing happen that happened to Wikipedia-- I said there was no wiki pixie dust. And the problems that you see at the bottom of the web are manifest and varied.

So you have hate speech. You have misogyny and harassment. You have people manipulating reviews. You have people being funny. You have people being original and creative. So there's a whole range of phenomena. There's no particular single solution to-- particularly if you look at the bad things-- to all of the particular bad things.

In fact if we talk about hate speech, or misogyny, or manipulation, very often we have to dig into the details to figure out what we need to do. And much like the wiki pixie dust myth of the previous book, I think the problem here is to say there was a myth that internet is this amazing free speech arena.

It's like a lot on some city block and you can just allow people to say whatever they want and a wonderful garden will grow. The thing we've learned is, no, you'll have weeds, and rusted cars, and all other kind of nastiness probably growing there. And so if you do want to have a good space online for comments, for reviews, you need to actually do some work and make that happen. And then we can dig into the particulars.

MCGONEGAL: Back to the idea of MIT and you mentioned CSAIL. Will artificial intelligence get us out of this mess?

REAGLE: I don't know. In the book I do reference some really neat things that I've seen out there. So for instance, some people have looked for comments from time travelers from the future on the bottom of the web. The defense agencies have put out calls for proposals for software that can detect irony. [CHUCKLES] And they're using comments as their data sources for training these algorithms.

And particularly, this was the Secret Service. Because lots of people say Obama should die or something like that. And they want more nuanced algorithms that can allow them to detect serious threats from just people mouthing off. So there is some really neat stuff going on.

Also with respect to detecting manipulated reviews, again computer science people have been doing really interesting work in terms of studying the patterns of when fake reviews are more likely to be posted. Scientists have looked at positive reviews, when are they most likely to follow on anything, like on Amazon. And they're most likely to follow when someone posts a negative review.

And so you can see that to discern the fact that people are basically trying to get the best reviews that they can they've also used machine learning techniques to train algorithms on what a fake review tends to look like. So there is some really neat stuff happening. But it really won't solve the larger social problems. It'll help us a little bit, but it really is a social problem, not a technical problem.

MCGONEGAL: We also have so many connections here between the Media Lab and the Electronic Frontier Foundation-- you mentioned them a few times in the book-- and Science Technology Society Program. We have a new cyber security policy initiative and so forth. What hope do you have for us from any of those efforts?

REAGLE: I don't spend a lot of time on policy. I used to do policy. That's the program I was in here at MIT. But I think there are two spaces where improving our understanding of what's happening online is important and does intersect with policy. The first is with respect to hate speech online.

California has now passed the law with respect to revenge porn-type sites. I think we're coming to an understanding that saying awful, horrible, hateful things online or even harassing people online is problematic. And we shouldn't just, as the saying goes, ignore the trolls.

I can talk about the history of trolls and the culture of trolling. But when people dox you-- that is document your private information and say why don't you visit this person, or send them something in the mail they would appreciate, hint, hint-- I think we have to take those things seriously.

Conversely, I think there's been a couple of cases where someone said something clearly stupid online that no one would interpret it as a real threat, but instead, law enforcement officers reacted too strongly to it. So we need to be a little more savvy on the policy and the nuance. And then the other thing is called Section 230 of the Communication Decency Act.

And this relates to reviews, also relates to revenge porn. But back in the '90s one of the things I was concerned with and worked on was how can we preserve the internet from being trampled upon by governments. One of the things that we've sort of worked out was this idea that if you have a user generated site, like Wikipedia or like Yelp, you shouldn't be responsible, necessarily, for anything that someone posts there.

And we were victorious. Generally, sites can say we're a forum. We're not responsible for everything that people post on our site. But my thinking on this has changed over time. So if you have a site where people come and post harassing speech, or revenge porn, or libel, or defamation, what sort of actions are available?

But there's a line. Because what happens when you have sites that actually purposely solicit harmful, deceitful material? Should they still be covered by the immunity given by Section 230? Similarly, Yelp has actually been called extortionist because they say, we just solicit user reviews. And for any particular merchant, which reviews show on your page is controlled and manipulated by Yelp.

But there's no accountability with respect to what they choose to show on your page. So there's been cases documented of Yelp employees calling merchants saying, would you like to advertise with Yelp. You'll get a good review on the top of your page. You'll get your advertisement on a competitor page. The merchant says, no, thank you.

And then that employee of Yelp writes a bad review of that merchant. And it's prominent on the page. And Yelp is actually won in the courts so far because the courts have said it's user generated content. Yelp is not responsible for it. But again, I think if you're going so far as to solicit particular types of content or manipulate user generated content I do think you have a bit more accountability than the law currently recognizes.

MCGONEGAL: I'm trying to think of the example you give-- is mean people, mean--

REAGLE: Mean kids.

MCGONEGAL: Mean kids.

REAGLE: Yeah, that's a little bit different. That was a case where you had a couple of sort of online satirists who liked to say mean, nasty things about people. And they fixated on a particular woman, Kathy Sierra. And she ended up getting harassed horribly once what I call troll-plex started spinning.

MCGONEGAL: And it's not always on that site where everything happens, where you can sue that site and say, hey, you're violating the law.

REAGLE: Right, but it was definitely a tricky gray zone kind of area. Because the people who ran the site could say, well we never posted harassing things. We just called her a dipshit. But it was part

of this larger conversation. And this meme of attacking Sierra kind of came out of this particular site.

So I actually don't know if we needed to constitutionally or governmentally intervene with that site. I think that problem was more of a problem of culture, that we as a community of people online find this sort of activity acceptable. And in fact, Kathy Sierra who was being harassed in these horrible ways was forced to genuflect before the free speech purists and say, I'm not advocating the government intervene.

No one advocated the government intervene. No one was saying Congress come in here and fix this particular problem. I think that was some sort of overreaction. That problem, I think, with the Kathy Sierra was a case of us as a community and a culture saying bad things can happen when you create a space where you're encouraging people to be nasty. So don't be surprised when it gets really nasty.

MCGONEGAL: Of course you address Twitter quite a bit in here and the *New York Times* feature a month ago. Was it Ron Johnson's piece on Justine Sacco waking up in Africa after tweeting something about not having AIDS, being a white person, et cetera, losing her job and waking up within a trollscape?

REAGLE: So I just started tweeting. I'm not a big Twitter user, myself. But I just started tweeting a little tagline, which is, "if you want to be misunderstood, tweet it." And so I every week I see a couple of news stories of people saying, I should have not used Twitter to take on this complex issue because it's much more nuanced.

There was a case over at BU of a professor tweeting things. And she ended up apologizing saying this wasn't the right nuanced medium for her tweets. And so every time I see an instance of that, I tweet-- it'd be nice if I could come up with a hashtag. Because again, other people are using hashtags. And they're going to be misunderstood.

In fact, there's this practice called tag crashing, or hash crashing, or hash bashing where people take over the hashtag that you think means one thing. Or take, for instance, you might tweet something ironically, but people don't understand that it's ironic. So people use the hashtag IRT, ironic tweet. But IRT also means other things. And so, again, if you're looking for nuance, if you're looking to be not misunderstood, use something other than Twitter.

MCGONEGAL: There are light moments in the book. But it's nauseating at times what you've uncovered, and

yet necessary medicine it seems for anybody who fancies themself to know the internet and be a good web surfer. I also think of parents. You talked about 4chan and the last year they've had in all of these massive doxing of Snapchat photos. Scary times to be a parent.

REAGLE: Yeah, I imagine so. And in online culture when you read something horrible or you see something horrible online, they call it a unicorn chaser. Have you ever heard of that? Yeah, so you go look at some happy kittens or something like that to change your mind. So actually, I include some comics from some of my favorite comics in the book.

xkcd and Geek and Poke who provide their comics under a Creative Commons license. So I try to provide some unicorn chasers in the book. And there is a lot of funny stuff in there too. But it is a concern. I don't specifically focus on children and teen use. My colleague at Northeastern, Brooke Foucault Welles, studies young people's use.

danah boyd just had a book come out recently called *It's Complicated.* And I really like that book. It's kind of like what your younger aunt would be able to talk to you sensibly about when you were a teenager in terms of what's happening. We shouldn't panic but we should be aware of what's out there.

MCGONEGAL: What else are you reading right now?

REAGLE: Oh, I was just reading a really interesting essay before I ran over here about-- they call it erotic or sexual capital. And it's fairly geeky. But I'm working on a paper about the fake geek girl controversy and how in their fandom, and comics, and geek communities there's been this issue of women participating and them being policed by [INAUDIBLE] and say they're fake geek girls.

And so I'm interested in this question of in geek spaces who deserves to get attention? And is the incursion of mainstream interest or even women and other people who are not traditional geeks-- why are they being policed?

MCGONEGAL: What else needs to be written on this subject? And will it be written by you? Or what else are people doing in this space of studying comments that's yet to come?

REAGLE: Yeah, Whitney Phillips has a nice book that I'm reading now also from MIT Press entitled *This is Why We Can't Have Nice Things* really focusing specifically on trolls. Danielle Citron Keats has a really good book about hate crime on speech. So she really digs into more of the policy issues and the laws that need to be changed to tamp down on some of that sort of material.

For myself, I'm moving on from comment, though I'm still touching on it because I'm studying geek feminism and issues like that. My next book is going to be about life hacking. I don't have the title. But that's people who take that sort of geeky ethos of what can I tweak, what can I optimize, what can I improve, and applying it to everything in their life.

I was just looking at a video yesterday about how to tie your shoes. And there's this optimum-- I think it's a Swedish technique for tying your shoes. And I fold my shirts using the Japanese technique. And so I'm just fascinated. And like a lot of things I study, like Wikipedia, like comments, and now like life hacking, I am both sympathetic but also a little bit skeptical of how far people go.

MCGONEGAL: Joseph Reagle's new book *Reading the Comments, Likers, Haters, and Manipulators at the Bottom of the Web* is now available online or at your favorite local bookstore. Joseph Reagle, thanks for joining me.

REAGLE: OK, thanks Joe.

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