
As an anthropologist, I like to take the long view, look at broad-scale changes. And as you look at broad-scale changes over time, media tend to be a really important part of those changes. So if you just think about, say, the importance of something as simple as speaking and language itself, just in the organization of bands and tribes, or then later in the organization of empires, the impact of writing, or the impact of the printing press on the spread of literacy, the Reformation, the Renaissance, and so on – all of this stuff you guys have heard before are these broad-scale changes and the importance of media.

And the reason why media is important here is because media shapes what can be said, how it can be said, who can say it, who can receive those messages, ultimately shaping how all of that knowledge that is created through those communications is stored and accessed, who can access it, and goes even further than that and can even shape how people experience the world, as you guys would know better than anybody. So I'm really interested in how these media shape culture over time.

And just to get us started, I'm actually gonna take us into my fieldwork, which is actually in New Guinea. I'm gonna show you basically an unmediated world that went through some pretty dramatic changes because of a new media form. So we're gonna fly into the center of this island here, take you on a little virtual fieldwork experience.

You fly into this village. You walk for a couple days, and you end up in villages like this. And this is where I spent a lot of my time as a graduate student studying. And you'll notice, as you walk around, there's no money. Everybody grows their own foods. It's all self-subsistence. Here, you can see they're growing taro, sweet potato, bananas, and so on. They raise pigs. This is like a big feast.

They're also very opportunistic, so after a big rain, it'll wash down the spider webs from the trees, and they can harvest the spiders and the eggs and so on. They're also – sometimes they'll capture a snake, and snakes are a great deal. They're usually a two-for-one deal because snakes, right after they eat, they get really tired and they sit around digesting. You get the snake; you also cut open the snake, and you get what's inside the snake.

So the reason why I show you this and I start off with this is because that snake was found about 100 feet from where I was staying, which is this house here, when I first arrived. That's just in the first week that I was there. These are actually my legs up here. This is my sleeping bag.

This is about four, four and a half degrees from the Equator, so it's the tropics; it's pretty hot. But nonetheless, this sleeping bag was very important to me. I viewed it as, like, my little America. I used to wrap myself up in this sleeping bag to protect myself from the elements when I first arrived. I mean, I'm a small-town kid from Nebraska, so this was a really big shift for me to go out into this world.

And after we ate this snake, that very same night, I was looking around this hut and I was

seeing – there's holes everywhere. It's not exactly an airtight hut. And I'm thinking, "Gosh, a snake like that could come in here any time."

And that very night, I was wrapped up in my sleeping bag, but like I said, it's hot; it's the tropics. So the sleeping bag comes off of me in the middle of the night. I wake up, and the sleeping bag's off of me, and I feel this thing across my chest. It's like this big around, just like right there. And I managed to grab it with my left hand, and I throw it down, but as I throw it, I roll with it, so somehow I'm wrapped up in this thing. So I try to free my right arm so I can pin it down with two arms, but I can't move my right arm. And this is about the time I realize that I've actually pinned down my own right arm like this.

[Audience laughter]

And my arm had actually fallen asleep and was across me like this.

[Audience laughter]

And you come into a world like this. You don't speak the language, and so you're just sitting there – basically, all I understood from the first two months was, like, people sorta chattering. Every once in a while I'd hear my name. They called me "white man," so it was like, "Blah, blah, blah, blah, white man." And then everybody would laugh, and this went along with hand gestures.

[Audience laughter]

Now, this sounds really funny, but it was actually very devastating to me. It was very hard, and I had to basically start over. It's like – and this is what anthropologists do. We basically go into these foreign worlds, and then we have to basically be born again. We have to relearn everything. And as I was trying to relearn everything and create a new identity for this world, I started to recognize that creating an identity here is much different than it is creating an identity in the U.S., where I grew up.

And so I started studying the affects of media on shaping identity and shaping human relations and so on. And no sooner had I started studying this than a new media form came into this world, and I spent eight years studying that, and that new media form was writing.

So writing came in in the form of census books first, and it was a pretty dramatic change right from the beginning. These guys are just doing a really simple exercise. They're trying to take a census list of people's names. Turns out a lot of people here don't have names, because in this village you already know everybody that you ever see, so nobody ever needed these abstract third-person names, so they invented 'em for the census book.

The census had other impacts as well. So villages that once looked like this, which were sort of organized based on relationships to one another, were oftentimes burned and

recreated on sort of a grid-like pattern which could be drawn up on paper. And they'd actually flatten out the sides of mountains and create these new villages that are actually numbered to match the census book. So this is, in a way, almost being rewritten by the book.

Even the disputes had changed. So this is a dispute early on, when I first arrived. And you can see everybody comes out into a clearing. Everybody talks about what's going on. And when writing came in, that also came in with law books. And now these disputes were moved into the courthouse, where people were held up to the letter of the law, and ultimately, if they're found guilty, they are given a sentence. And sentence by sentence, this culture was essentially being rewritten.

So the point of this is to say that media are not just tools. The media are not just a means of communication. The media mediate relationships, so when media change, relationships change.

And you guys have heard a lot of this stuff before. Lee Rainie has this great, quick summary of this, of all the effects of new media. Here's a quick rundown: role of experts is challenged by newly empowered voices; new institutions emerge to deal with changes; struggle to revive social and legal norms; concepts of identity and community multiply and transform; new forms of language arise. We've seen all of this in the last couple of decades. But of course, Lee Rainie was actually talking about Elizabeth Eisenstein's work on the printing press.

So this stuff has been around for a while. So media change, relationships change. Look at television, and look at how television reshaped the family. And we actually had to reorganize our living rooms, and let's face it, this isn't just a living room for a lot of people; this is a dining room. And everything is now shifted to face the television set.

And on these television sets, as Neil Postman pointed out in 1985, the conversations of our culture start to happen on television. And the conversations are controlled by the few and designed for the masses. The conversations are always entertaining. That's how you keep the masses involved, even the serious ones. So you look at our political debates and how they devolved from very long, reasoned arguments down to 30-second soundbites at best.

The conversations are punctuated by 30-second commercials, and these conversations create our culture, which Neil Postman summarized as one of irrelevance, incoherence, and impotence. And what he meant by "impotence" was he asks you to imagine, say, in 1985 you're sitting there watching a really important news program. And he asks you this series of questions: What steps do you plan to take to reduce the conflict in the Middle East, or the rates of inflation, crime, or unemployment? What do you plan to do about NATO, OPEC, the CIA, etc.? And he goes on; he says, "I shall take the liberty of answering for you: you plan to do nothing." And that's essentially what you could do when you're sitting there watching television. So he goes on to say, "The public has adjusted to incoherence and been amused into indifference."

And so now, this is my job. I face large classrooms like this, and I see this indifference on the first day of class every year, and you can sorta see this disengagement. Now, a lot of people say this is a generational thing, but it's clearly not. I mean, this is the same group here.

[Audience laughter]

I don't know if you see the difference, but...

[Audience laughter]

But, you know, these guys are awash in a new media environment. There's this great quote about this: "In the midst of a fabulous array of historically unprecedented and utterly mind-boggling stimuli, whatever." This is from Thomas de Zengotita.

And my class was really inspired by this. We started studying the word "whatever," and we did this little brief history of "whatever." You can do this by doing a Google search, and you frame it by year, and you can see how the word "whatever" changes over time.

And we found that, prior to the 1960s, there were roughly five to seven definitions of the word "whatever." And they were pretty tame. They were things like "Whatever, that's what I meant." So somebody says something to you – or you say something to somebody; they tell it back to you in basically just some slightly different words, and you say, "Whatever, that's what I meant." That's one of the very common ways to say it.

By the late '60s, it took on this new sort of cultural heft to it, and you could say "whatever" as a way of saying, like, "I'm not part of the system." It was like, *[Imitates stereotypical hippie voice]* "Yeah, whatever, man," you know, like that –

[Audience laughter]

And that's what you get in the late '60s. In fact, in 1973 veterans started receiving a little pamphlet from the State Department explaining what this new word "whatever" meant, so these people who had been off at war could understand what was going on.

By the 1990s, this word "whatever" was still going forward, but there was also this new word that was emerging. It was the indifferent "meh." And we started looking for the first instances of this. We found one in – here's a *Simpsons* episode from 1992.

[Video plays]

Bart Simpson: We're the MTV generation.

Lisa Simpson: We feel neither highs nor lows.

Homer Simpson: Really? What's it like?

Lisa Simpson: Eh.

[Video ends]

And you see, it was kinda like a "eh," right? It wasn't quite a "meh." But then on Melrose Place bulletin boards and stuff like that, people started writing "meh," M-E-H, and *The Simpsons* picked up on that. And here's in a later episode.

[Video plays]

Homer Simpson: How would you...like to go...to Blockoland!

Lisa and Bart: Meh.

Homer Simpson: But the TV gave me the impression that –

Bart Simpson: We said "meh."

Lisa Simpson: M-E-H. Meh.

[Video ends]

[Audience laughter]

All right, so there you go. And of course, okay, so they mentioned the MTV generation. If we were having this conference 15 or 20 years ago and we wanted to talk about today's youth, we'd have to say this. And I actually found a PowerPoint online that was from this era, and it had this following slide: The MTV generation have short attention spans, materialistic; they're narcissistic; they're not easily impressed. And they're not easily impressed because they're bombarded with this amazing media, and it's therefore hard to impress them.

In 1992, the rock anthem of the year was Nirvana, and then you see the word "whatever" there: "I find it hard/It's hard to find/Oh, well, whatever/Never mind."

And this is a disempowering environment, so this is part of the issue here. It's a one-way conversation. You have to be on TV to have a voice. You have to be on TV to be significant. And so when reality TV started hitting, also in 1992, on MTV, there started to be this new shift, and basically, people were willing to do just about anything to get on TV. We still see it today in shows like *Fear Factor* and *American Idol*. But on *American Idol*, there's something else going on, and there's been a lot of people trying to figure out what it is.

But what's interesting about *American Idol* is that there's this other piece happening, and that is that people not only really want to be the next *American Idol*; there's also a lot of people who really think they should be. And when you watch them, you're like, "No, you're not."

[Audience laughter]

And so there's something else going on. So people have attributed this to the self-esteem movement, maybe the sort of self-help generation of parents from the '70s now raising the children of today. There's been a lot of talk about why this is, but what we do know is that kids are growing in sorta self-importance – some people call it narcissism. The positive way to look at it is, though, that they're happier and have more self-esteem. Not necessarily happier; we'll get back to that, actually.

But there is a new word version of "whatever" that we started to notice in the mid-'90s as well, and this new version looks something like this. It says, like, "Whatever, I'll do what I want." It's the Valley Girl. You guys remember the mid-'90s, when the Valley Girl version of this came out. It's like, *[Imitates Valley Girl voice]* "Yeah, whatever." And it's got this sort of tinge of like –

[Audience laughter]

There's a little bit more self-importance there, like "I don't care what you have to say," that kinda thing.

Here's another clip that tries to capture this, from *South Park*.

[Video plays]

Announcer: And now back to more kids who are out of control, on the *Maury Povich* show.

Talk show host: Our next mother is Liane Cartman. Her son claims to be the most out-of-control kid in the world and says there's nothing his stupid mom can do about it. Well, let's bring him out. Here's Eric Cartman.

[Booing by talk show audience]

Eric Cartman: Whatever! Whatever! I'll do what I want!

[Video ends]

[Audience laughter]

All right. So Jean Twenge has actually written about that. She gathered statistics from the 1950s to the present, found all sorts of interesting shifts, and summarizes there in the title *Why Today's Young Americans Are More Confident, Assertive, Entitled, and More Miserable Than Ever Before*. And the reason why they're miserable is because they basically have this built-up idea that they're really important, they're gonna do great things, like *American Idol*, and then when they don't, they're kinda shocked.

And there's actually a whole slew of books. You go to the self-help section, you'll find a slew of books on the quarter-life crisis. And this is the crisis you hit when you're 25 and you realize you're not as awesome as you thought you were.

[Audience laughter]

And, you know, we go on watching and loving this stuff.

Now, there's another way to look at this, of course. This is a key moment developmentally in people's lives, when they are searching for identity and recognition in a culture in which identity and recognition are not givens. And this is kind of an interesting thing about today's society is that identity and recognition are not given; you have to find them and you have to earn them and you have to create them.

And so that's what's going on in these situations, and at that critical moment, they're bombarded with new media, and this makes it especially challenging, as seen in this Dove commercial. Here's a young woman being shaped by the onslaught of media. Some of you may have seen this commercial before.

[Video plays]

Female Voice: You'll look younger, smaller, lighter, fuller, tighter, thinner, softer.

[Video ends]

This is pretty powerful stuff, and I think it again exemplifies this core idea that I'm trying to get across. From Marshall McLuhan here: "We shape our tools and thereafter our tools shape us."

So now the question is, what happens in this new media environment? Is there something here that we can create a better world with? Are we stuck with the same old story? What happens now?

So the first thing to note, though, is that as new media came about – basically this new media environment was quite possible ten years before it actually arrived. And Marshall McLuhan notes here, "We look at the present through a rearview mirror; we march backwards into the future."

So you look at, like, what happened when we sort of launched ourselves into this digital environment. We immediately started grasping at old models for ways to organize this new media environment. So here you see, looking in the rearview mirror, we started organizing our desktops with folders and documents and so on. All of these are metaphors, really. As you guys know, you can organize digital information in all kinds of interesting ways. The early days of the Web were all about Web pages – again, borrowing a metaphor.

Then we moved on in our metaphors. We moved past text, and if you guys remember, like, the DHTML age, the late – sorta '97, '98. And you could get all sorts of interesting little scripts to make your Web site really dance. And you can see here one line: "With the advent of DHTML, Web pages are one step closer to its cousin TV in terms of special effects." And this really bothered Tim Berners-Lee, who was the father of the Web. This is a quote from '97. He says, "It's not supposed to be a glorified television channel." So we're really stuck in this rearview mirror model of what's going on. We're trying to make this new media form an old media form, essentially.

And one of the problems with that, of course, was just the complexity of the code that was emerging. And one of the problems with that was that form and content were suddenly becoming inseparable. This was before the standardization that led to CSS and so on. And so, few users have had the skills to upload content during this time.

And so I made a video about this change. This is the Web 2.0 video that Peter mentioned earlier. You can see here, it's just like this really quick history of text and how it changed as we went digital. So here's text on paper, and then you see all this erased, and then we'll look at what text looks like digitally. And I'm just gonna speed this up, 'cause this is kind of a – I mean, it's kind of a geeky video, you know? You can geek out on it, if you want, later.

[Audience laughter]

But it's basically about the shift from HTML to XML and the possibilities that that opened up, the separation of form and content and the possibilities that opened up. So it's about wikis, blogs, tagging, all those types of things. And ultimately, it's suggesting here that the Web is not about linking information; it's about linking people, people sharing, trading, collaborating, and so on. And that means we're gonna have to rethink a number of things. So the video ends with the suggestion that the changes we're seeing right now are much bigger than just in media, 'cause these are actually mediating our relationships.

So the real story of this video, though, and the way to really capture how this new media environment is different and what we can do within this new media environment is to look at how this video was made. The video was actually made in the basement of this little house in Kansas. It was made in collaboration with a guy in the Ivory Coast who I'd never met before, 'cause he had released his music with a Creative Commons license, which allowed us to basically collaborate across time and space.

I launched it on a Wednesday, and by Friday it had 253 views. This screenshot exists because I was really, really excited about this. As an anthropologist, if more than 200 people read your work, this is a really big deal.

[Audience laughter]

So I took the screenshot, and I sent it to my department head, and she was so excited too. I mean, it was a big day at Kansas State.

[Audience laughter]

So here you can see it went up to, like, over 1,000 views the next day. It's part of this big, massive user-generated content. And what I wanna present to you is the idea here, though, that it's not just about user-generated content; that it's actually – this new media environment brings us together to create an entirely alternative media environment, which you'll see here.

So what happened is it goes up to over 1,000 the next day, and as I'm hitting refresh – I'm getting quite obsessed with it, right? Hitting refresh, refresh, refresh. And it's, like, doubling every time I refresh it. Some – okay, what's going on here?

And I ended up finding it over at Digg, and you guys know how Digg works. You submit a site; you Digg. It basically can get dugg right up to the front page. So now thousands of people are seeing it through a system which you might call user-generated filtering. It comes right to the top. Other people are bookmarking it on Delicious, essentially organizing the Web, so here's user-generated organization. And then as people are organizing it, as people are filtering it, it's becoming part of RSS feeds and being sorta shipped out all over the Web to the people who might be interested in seeing it. And this you might call user-generated distribution.

And so here you have this big alternative to the old media environment, and people even contribute accidentally. So even as people are blogging about it, Google and Technorati and places like that are counting the number of links that are being made to the video, and creating these top-20 lists and so on.

And so here you can see, by Sunday morning, somebody e-mailed me and said, "Hey, did you see you're in the top five videos?" And this is just counting the number of new links to the videos. And I was super-excited now, and so my wife and I were both now in that basement in Kansas, and we're just hitting refresh, refresh, refresh.

[Audience laughter]

And it's Super Bowl Sunday, so we're thinking, "Okay, we have to get to No. 1 before the Super Bowl, 'cause once the Super Bowl hits, all of the viral videos from the Super Bowl commercials are gonna hit and wash out the top 20." So we just keep hitting refresh, refresh, refresh, and fortunately, at 12:08 p.m. –

[Audience laughter]

– got to No. 1. So I took the screenshot and sent it off to my department head, with some note about tenure. No. *[Laughter]*

[Audience laughter]

But it was interesting. So here we are, worried about the Super Bowl. Well, those Super Bowl commercials that are about to hit the Web are – they cost a million dollars to produce that 30-second commercial.

So Doritos had this great idea. They thought, "Okay, in this user-generated environment, we'll just have our users create – our customers create the video for us." And you can see here, they actually had an editor select the top five before people could vote on 'em. And the reason they did that is because there's been other movements like this, like – I don't know if you ever saw the Chevy one. They allowed you to make your own commercial about the Tahoe, and you could, like, put it together however you wanted, choose the soundtrack, and then write whatever you want on top of it. And some of the submissions were not quite what they wanted.

[Video plays, with music]

[Audience laughter]

[Video ends]

So trying to avoid this, Doritos just had the top five, and you could vote on the top five. And then this is the video – that's just a screenshot from the one that won. And they asked these two guys – I think they were 21 years old, roughly 21. They asked them, "How much did that cost you to make?" And they said, "It's \$12.79." That was the cost of, like, three bags of Doritos they had to break during the filming. And it did quite well. It was the fourth-rated commercial, based on *USA Today's* Ad Meter; sort of in psychological effectiveness, it ranked fourth, so it did really well. But it cost \$2.6 million just to get it on the air. And if you're doing the math, that's a total of roughly two point six – *[Laughter]*

[Audience laughter]

And they asked the ad executives, "Why would you do this? Why would you pay this kinda money to get 30 seconds of people's attention?" And they said, "Well, it's about water-cooler talk. Monday morning, we want everybody talking about our product." And these days it's all about blogs and so on. We want people all over the Web talking about our work. Now, it turns out the No. 1 video on the Web the next day was actually zero dollars, and I know that 'cause that was my video. It was still No. 1.

So that's how a video, through this new media environment, made in a basement in Kansas can actually get out to millions of people. And that's why I think we need to rethink copyright, rethink authorship.

But it goes beyond that, because this is about how we connect as a society, and that's why we're also seeing all sorts of other shifts. Rethinking commerce – it goes far beyond eBay. These days it's not just about selling your stuff online; you can swap your stuff. You know, just one for one, you can swap it on Swap.com. You can rent your stuff out. You can even rent your house. You can rent your car. And you can even loan money to people. And so basically, we're seeing the long, slow death of the middleman in basically every domain, and it's even hitting banks.

So we can also rethink governance, and I'm not just talking about, like, politics, like YouTube politics, that kinda thing. I mean the actual process of governance. If we were to recreate government today, not based in paper but based in digital forms, we might do something really different. The New York Law School was actually experimenting with some of this stuff at the Do Tank, where they imagined different forms of, like, wiki-like government.

And so there's a lot of possibilities here. And so the "why this matters" piece is pretty simple. This is not controlled by the few. It's not one-way. It's created by, for, and around networks, not masses. It can transform individual pursuits into collective action. But I wanna talk about, just for the next 10 or 15 minutes, why this might deeply matter. And this is where it gets, I think, especially interesting is how this might actually shape ourselves in some really profound way.

So here's a few sort of principles I'm gonna build on. One is, we know ourselves through our relationships with others. Secondly, new media create new waves of relating to others, and therefore, new media will create new ways of knowing ourselves. That's the main point I'm going to try to get across. And we're gonna explore this through the idea that we might actually have to rethink ourselves.

So what we did – I just grabbed some of my students. This is in a small class. I also grabbed students in a big class. And we just scour the Web for all kinds of insights, and we especially were interested in studying YouTube. So we just kinda dive right into YouTube, and I'll give you a quick little overview of what we found there.

This is your quick little view of what's on YouTube. We've been studying YouTube now for over three years, almost since the beginning. So we have all these statistics about what's on YouTube. Here's a quick overview of some of the things you'll see there. First off, these are the most commonly uploaded videos. They're just family videos.

[Various video remixes of the "Charlie Bit My Finger" video are played]

[Audience laughter]

Now, some of these remixes get actually really sophisticated because video editing is like drag-and-drop editing now, so here's the "Charlie Bit My Finger" hip-hop version.

[Musical remix of "Charlie Bit My Finger" video is played]

Here's what we got interested in while we were studying this, is that we found that over 20,000 videos every day are addressed to the YouTube community. And people talk about YouTube as a community.

[Brief clips of various YouTube videos are played]

So this is what we wanted to explore. And now just to provide a little context here, if we're talking about community online, we might wanna look at community and what's happened offline.

We're basically in a six-decade-long decline in community in the U.S. It's been documented by Robert Putnam in books like *Bowling Alone*. He basically suggests that we used to bowl in leagues; now we bowl alone. And we're doing everything, more and more, alone these days. He talks about how there's this shift from the corner grocery store to these big supermarkets; from small village life and downtowns to suburbia.

And we end up in these suburbs where we're only connected by televisions, and then, of course, we get bigger and bigger suburbs, bigger and bigger stores, and more and more television. And so we just keep on going and going, until we end up in this situation, where there's almost this cultural inversion going on where we express – quite radically so, we express this individualism in our society.

And yet we value community. So even as we express more and more individualism, there's this other side of us that sort of longs for community. We express independence but value relationships. We express commercialization and we find ourselves valuing authenticity. And I think the only way to understand the emergence of any community online is to put it within these boundaries, to understand where American values are today and what's going on in those domains.

So Robert Putnam goes on to point out that – he says, "My hunch is that meeting in an electronic form is not the equivalent of meeting in a bowling alley." And so we decided to explore exactly – not just – it's not enough to say YouTube is a community. It's more like, what kinda community is it? What's going on in that environment?

So we just got involved. Here's an early video.

[Video plays]

Female Voice: – camera, and had a mirror around here to show you guys, but – oh, here it is. This is what I'm talking to. Not you. This. Well, you, but this. I'm talking to you, but for the time being, I don't know who you are.

[Video ends]

So if you think about this, I mean, this is what mediates the YouTube community. This is how you connect to the YouTube community. And it's kind of a different situation than normal life. In normal life, in face-to-face conversations, you present yourself knowing what the context is in which you're presenting yourself. When you face a webcam, you don't know what context you're entering into. You don't know who's gonna watch you, when, and where, and so on.

And so there's this plethora of possible contexts that come into play. And this actually leads to an almost accidental self-analysis among people when we did interviews with them. We found that they were forced to be very reflective about who they are and how they wanted to present themselves, just trying to figure out – because they didn't know who was gonna be on the other end.

And Marshall McLuhan actually started writing about this a long time ago, talking about re-cognition, like recognition of the self. And this is what he had to say about it.

[Video plays]

Marshall McLuhan: We live in the world of the instant replay. Around the planet, all the events are not only being recorded, but replayed. And the amazing thing about the replay is that it offers the means of re-cog, recognition. The first time it's cognition; the second time is recognition. And the recognition is even deeper, so replay offers a deeper level of awareness than the first play. But we had been getting into some very large matters about the effects of this new environment, this new electric environment, on man and his awareness of himself.

Female Voice: I guess that's what makes me so uncomfortable about talking on camera. It's just like, I'm looking at my face. I'm like, "Good god." 'Cause when I think of myself, I guess I don't really think of myself the way I appear to other people. I'm just – yeah, young, naïve. "Oh, she's so cute. Cute little girl." I'm not cute. *[Laughter]*

[Video ends]

Okay, so these are all students of mine sort of experimenting with this form.

So then there's this other side. We're looking into the camera to present ourselves, but then we also consume other people's messages through a screen. And there's a certain anonymity in that. There's this anonymity of watching. And Lev Grossman has written about this. He says, "Some of the comments on YouTube make you weep for the future of humanity just for the spelling alone, never mind the obscenity and the naked hatred."

I mean, this is part of the anonymity here. If you look at some of the comments – this is from one of the "Charlie Bit My Finger" remixes, and you can see the type of

conversation that's happening here. And this is very common on YouTube. This is one of my favorite ones. qwertyu121: "What the fuck are you talking about?" Franklingirl14: "YouTube comments make me angry, grr." "Then don't comment on YouTube, you shit-stain."

[Audience laughter]

I mean, this is pretty common stuff. And the basic model here is anonymity, plus physical distance, plus you have this rare and ephemeral dialogue. Creates this space for hatred as public performance. And you guys have probably tried to avoid, you know, creating user experiences like this.

But there's also this other aspect of this, that the same three characteristics can also lead to this freedom to experience humanity without fear or anxiety, to be able to sit there and just watch people through the screen.

[Video plays]

Female Voice: It's slightly voyeuristic, you know? And it allows you to watch other people without staring at them or making them uncomfortable, because they don't see you watching them. You can just watch their videos. And it's really interesting. It's like this sociological experiment where you can just, like, see their being. You can see their person.

[Video ends]

So we found something really surprising when we looked into this: that this cultural inversion also can be read as a cultural tension. And the way to see it as a cultural tension is to recognize that, while we all crave connection on the one hand, as individuals and who very much value independence, we see any connection as a constraint. And what we're really looking for then, or what we might seek, is a connection without constraint. And YouTube and mediated environments actually provide a possibility for this, for better or for worse, because there's actually some negative sides to this. But you'll see some positive sides to this as well.

One of the things you see on YouTube is people confessing things and sharing things that they don't even share with their families. And here's some examples.

[Video plays]

Male Voice: It's just amazing to me how powerful this medium is. I mean, I'm just sitting in my living room, and I'm talking to a camera. My god, the interaction, it's unbelievable.

Male Voice: _____ we were like, "Oh, this is how it's been on." It's casual. We just talk to the camera.

Male Voice: Just put there, see if that helps. I gotta figure this thing out, eventually. Just came by to say – came by? What do I mean come by? I didn't come by. I'm sitting right here.

[Video ends]

[Audience laughter]

So here, you'll see some of these confessions get really powerful.

[Video plays]

Female Voice: January was hard enough for me. Right now, I should be preparing for my, for the birth of my son _____ but I'm not _____.

Male Voice: Hi, Mel. I've watched your video, and sorry I'm running behind on my schedule here.

Female Voice: I was listening to it, and I felt my tears coming.

Male Voice: It's a big fucking experiment in putting myself out. We're all learning from each other and about ourselves. And that's what I think fuckin' YouTube should be about.

Female Voice: Thank you, guys.

[Video ends]

So there's another way to tell this story too, and this is through sort of a hero that emerged on YouTube. If you asked people on YouTube, like the core YouTubers, who are their heroes, they often mention this guy. His name's Juan Mann. He comes home to Sydney, flies in to Sydney. There's nobody to hug at the airport, so he goes down – and he's kinda this quintessential lonely individual of our times – goes down to the mall in Sydney and holds up this "free hugs" sign, and finally somebody takes him up on it and hugs him here.

[Video plays, with music]

And then it starts to spread. You'll see other people start taking up the sign.

[Video continues to play]

[Audience laughter]

And here you see, it goes on YouTube, gets over 45 million views, and then this goes global. And thousands of these events start happening all over the world. This has been going on now for almost four years, these events all over the world. They're still going on. And I think this demonstrates a number of things I talked about earlier. One, that this is like now a global conversation, that it shows how people can organize around the world as well through these new media. But you also have to recognize there's always gonna be the spoofster.

[Video continues playing, ends]

[Audience laughter]

And this is actually a really important part of the new media environment, right, is this commentary, this constant sort of joking back and so on. But sometimes this gets really serious, and I'll show you a really serious one here. You remember that Dove commercial I showed earlier, which is very powerful, very interesting, right? Well, here's a remix of that.

[Video remix plays, with music]

So about two weeks and about a million views later, the Greenpeace activists who made this video were at the table with Unilever, and Unilever signed a moratorium to end the deforestation that was used for the palm oil. So that was quite a powerful thing. They actually went on to say that was the most powerful thing they'd ever done as an organization.

So this is obviously – this world is actually – this media environment is enabling new voices. It's no longer a one-way conversation. But all of that requires – I mean, all of that is basically built on design and built on a lot of the things that you guys do. And so I wanna encourage you guys to start thinking beyond user experience design and start instead thinking about designing the possibilities for human connection. And when you start thinking about that, start recognizing that this world we're creating, it's like we each add our own little piece, but then other people add their pieces on top of that, and it just builds on itself and builds on itself and so on.

And the best way I know how to present this is through the metaphor of music, 'cause music allows you to imagine these different layers sort of appearing on top of one another. So here's one final video to show you guys.

This is Eric Whitacre. He's a composer, and a while ago he saw on YouTube this young woman singing one of his songs back to him, and he was inspired by this, and he thought, "Well, maybe I could just have people all over YouTube try out for my choir, and we can do this virtual choir around the world." So he ended up getting 185 people all over the world, from 12 different countries, and here they are singing one of his songs, which he has conducted virtually through this film here.

[Video begins playing, with music]

And it shows, like, how this collaboration, the collaboration of layers upon layers that we see throughout the Web – on Wikipedia, everywhere – can be so powerful and amazing.

But this gets really serious as well. Think about 2007, the aftermath of the Kenyan elections, and there's a lot of violence going on. Four Kenyans get together, and they release a new platform called Ushahidi, which means "witness" in Swahili. It allowed people to take their cell phones and send reports out about what was happening on the ground. People could get reports based on where they were from these other reports going on. That platform basically created an army of 45,000 citizen journalists who were able to document what was happening at these critical moments.

That same platform then was used three years later in Haiti, so here you have this devastation. A group of college students at Tufts University implement the same platform because the Kenyans had given it away. And here you can see they answer over 170,000 tweets. The tweets are things like this: "We are looking for Geby Joseph, who got buried under Royal University."

And people on the ground are getting the updates based on where they're at. They're not using Google Maps; they're using OpenStreetMaps, which is based – created by volunteers all over the world. Those are the maps that are actually on the ground, 'cause those were the best maps available.

So Clark Craig of the U.S. Marine Corps had this to say about it. He says, "It is saving lives every day. I wish I had time to document every example, but there are too many. I say with confidence that there are hundreds of these kinds of success stories. The Marine Corps is using a project every second of the day to get aid and assistance to the people that need it most."

[Video ends]

So in many ways – I mean, I had talked to Peter about this when he invited me to come – I've always viewed people like you as very important people, 'cause you create the media through which we connect, and hopefully create ways that we can connect in ever better ways.

And I hope that you'll consider designing for a new future of "whatever." I talked earlier about how, in the '60s, it was "I don't care, whatever," like sort of "Whatever you think." In the '90s, it became "Whatever, I don't care what you think." And hopefully we can build a future which is "I care; let's do whatever it takes, by whatever means necessary." Thanks.

[End of Audio]