Center for Humane Technology | Your Undivided Attention Podcast
Episode 24: Facebook Goes '2Africa'

Julie Owono: I mean, we just learned out of nowhere that Facebook was about to launch a subsea cable.

Tristan Harris: That's Julie Owono, and she's laughing because that subsea cable, which seemed to come out of nowhere will actually be one of the longest cables in the world. At 37,000 kilometers, it will encircle nearly the entire continent of Africa. In fact, Facebook is calling the whole cable project, 2Africa, and all of this came as news to Julie, even though she's an expert on how the internet can reach and reshape nations in the Global South.

Julie Owono: It's mind-boggling to imagine that Facebook is going to launch very soon this subsea cable, which is great. I mean, I'm happy for them but what type of discussion did they have with governments? What did they trade with them?

Tristan Harris: As Executive Director of Internet Without Borders, Julie argues that expanding internet access is not as simple as running a cable into a country, it raises thorny questions around sovereignty.

Julie Owono: Most of their infrastructure is located within territorial seas. To build within the territorial sphere you need to ask the sovereign for authorization.

Tristan Harris: And once governments grant authorization, what might they ask for in return?

Julie Owono: They either ask you to have direct access to the infrastructure, that's a big question. And if they did so what guarantee do you offer that human rights in general and rights of the users will be respected?

Tristan Harris: These are not academic questions. In 2019, governments in Africa shut down access to the internet on 25 separate occasions, that's up 50% over the year before. This cable is not just a cable, it's a vital piece of infrastructure. And like the railroads and streets of the continents colonial past, it's being built by a consortium of Western commercial interests in partnership with local governments with almost no say from people on the ground.

Julie Owono: We don't know what's happening within an infrastructure consortium, we have really no idea.

Tristan Harris: We often talk in this podcast about how Facebook has become the new virtual infrastructure for running a society. We live, we communicate, we develop our identities, we see each other through these private technology platforms, but we haven't talked about how technology companies are colonizing the physical infrastructure as well. And Julie warns that if this continues, we are sleepwalking into an age of what she calls digital colonialism.

Julie Owono: It's critical now that communities have a seat at the table. I fear that if we don't seize that opportunity, internet will definitely become a tool of repression in places that desperately need freedoms and democracy.

Tristan Harris: But unlike the colonialism of the past, we can still reverse this trend by giving people like Julie a seat at the table. And she just got a very big seat at Facebook's table.

Julie Owono: As a member of the Oversight Board I saw this as an opportunity to bring the attention of the platforms on things that they pretend they don't see.

Tristan Harris: Today on the show we talked to Julie Owono, Executive Director of Internet Without Borders and newly appointed member of Facebook's Oversight Board, which has been likened to the Supreme Court for content oversight decisions at the company. This board has not actually met yet and its first meeting will in the fall of 2020.

Julie Owono: The problem is so obvious. Everybody talks about the fact that there is disinformation, there is hate speech in many places in the Global South and particularly in Africa, but there has been very little change from the part of the companies and particularly in this case Facebook. I saw this as an opportunity to call their attention to the problems.

Tristan Harris: I'm Tristan Harris.

Aza Raskin: And I'm Aza Raskin.

Tristan Harris: And this is Your Undivided Attention.

Julie Owono: I actually like to say that I am the product of the internet that I would love everybody to have access to. When I started blogging on a platform which is called Global Voices Online it was back in 2010. I was a bit frustrated that when we talked about cyber development in the Global South and particularly in Africa we focused a lot on English-speaking Africa forgetting the rest of the continent. Yes, I thought it was important for me to bring in that voice.

Julie Owono: And basically it changed my life from being a random immigrant in France, especially a black young woman. I suddenly realized I could have access to platforms that could bring my voice to people I thought I'd never reach and made sure that the issues that I think are important are visible. That's how I started working on … Internet Without Borders with this aim of how can we make sure that the next person like me also have access to that internet that helps them to change basically their reality at the individual level, but also change the world for the better.

Aza Raskin: Could you sketch just briefly how you came to be working on the problems you work on? Your background is fascinating, Cameroon, Moscow, Paris, you see the world from a very different perspective. And I think I certainly do and I think most of our listeners, so I'd just love to hear a little bit of that.

Julie Owono: Sure. I'm leading an organization. The aim is to defend freedom of expression online among other human rights. We have been focusing a lot on the issues of internet shut down, so when governments decide to shut down access either to the whole internet or to social media websites such as Facebook, Twitter, but also messaging apps such as WhatsApp. And what we saw was that initially when this trend began most governments, usually repressive ones would say, "We need to shut down because..." For very dubious reasons to be very honest.

Julie Owono: But many of these governments understood that they could weaponize the problems that the platforms have created and particularly problems around hate speech and disinformation to further justify that they need to sensor. So basically saying since Facebook, Twitter, and all these others platforms are not doing anything to deal with these problems in our country or in our region, Africa in particular because that's a region we work a lot on. "Since this platforms are not doing anything about that, well, we have no other choice than to censor and suppress access to Facebook, Twitter, and others." Yes, we've been working a lot on internet shut downs and tying it increasingly to the problems that the platforms have created.

Tristan Harris: Oftentimes with our work here at the Center for Human Technology we seem to be tackling two competing dystopias. There's the Big Brother 1984, shut-it-all down censorship dystopia, where we shut down things, we shut down what you can say and you can't say. Then there's this other dystopia, what we call the Aldous Huxley problem of Brave New World, where we give people so much information, so much triviality, so much noise that they don't know what's true and everyone gets caught in a loop of amusing themselves to death. And there's these sort of two ends of the spectrum.

Tristan Harris: And what I find interesting is in the government shutdown scenario. It mixes the purpose of the shutdown, which is, "Hey, there's so much noise no one knows what's true. I got an idea, let's shut it down," to shut down the Huxley dystopia, but it's actually enabling the Orwellian dystopia because it's exactly during those shutdowns that extreme actions are taken by the government or people don't know what's going on in terms of human rights abuses, things like that. I would just love to maybe get a little bit deeper into that.

Julie Owono: Yeah, the issue of having access to too much information is really an interesting entry point. The first thing is a lot of repressive governments have been completely disrupted by just what happened with the internet, they were not prepared. Increasingly governments are using some of the problems created through an unfettered access to information and the lack of regulation and moderation we've just discussed to justify that, "Yes, we need to go back to a time when we had only one information because that's more security, that's more stability, that's no violence, that's..." and it increasingly speaks to people, honestly.

Julie Owono: I got involved in doing the research that I'm doing currently on the link between increased hate speech on social media platforms and weaponization by governments who further shut down the internet. I got interested into that because my work became very difficult, honestly, advocating against internet shut downs. But I remember in places I would go and say, "Hey, it's not good to shut down the internet." And people would tell me, "Yeah, but we don't want hate speech so we'd rather have that instead of having hate speech," which I totally understand it's a point that should be heard too. And that's how I started working on hate speech and how to help that from E or see better hates in places they don't know. It's really dangerous and we need to continue to work against that.

Aza Raskin: One of the core principles for designing technology that is humane, at least ones that we talk about is those that are closest to pain should be closest to the power. And with Silicon Valley's obsession with scaling, blitz-scaling, it is never been easier for the person with the most power to be the furthest from the pain. That is we're designing our

systems to be maximally inhumane because we're designing systems that people need that are unsafe, that they're then forced to use. I was surprised to learn this Facebook and Google are building physical infrastructure to bring the 1.3 billion people in Africa that aren't online, online. What is their responsibility as they do this? Because they can't argue that they're not on the ground to bring the infrastructure, they are on the ground. So what have you seen and what's the responsibility?

Julie Owono: That's the awesome question. They're totally... I mean, what I like to say is it's not possible that you want the profit but you don't want the political responsibility that comes with that, that's impossible. If tomorrow other people or other groups get killed in one of these countries, just like what we saw in Myanmar two years ago, people are going to come at you on Facebook whether you like it or not and you're going to be held—I mean, people will ask for account. But even if you don't want to be politically responsible you will have to because these governments, they don't want you to contribute to the beginning of a genocide, nobody wants that so they're going to shut you down definitely. That's the risk and that's what they're already doing.

Julie Owono: And while they are doing this, we also should be aware of that in front of that there are other companies from either Chinese, Russian, mostly Chinese companies to be honest, that come in there, that propose alternatives that are also interesting to these users. The risk of course is how to make sure that Facebook and also Google don't interpret this responsibility as, "We have to side with the oppressor because we have to make sure that our infrastructure are protected." That's precisely where it's important to work with organizations there, not only digital rights organization because they're not plenty but traditional or human rights organization, consumer organizations and many other women's organizations that have been around for 50, 60 years and that know the country. So work with them and make them aware of what's happening.

Julie Owono: It's mind boggling to imagine that Facebook is going to launch very soon this subsea cable and most of their infrastructure is located within territorial seas. To build within the territorial sphere you need to ask the sovereign for authorization. What did you ask when asking that authorization? They either ask you to have direct access to the infrastructure, that's a big question. And if they did so what guarantee do you offer that human rights in general and rights of the users will be respected? To ensure that this guarantee out there we have to make sure that communities have a seat at the table.

Aza Raskin: What does this seat at the table look like? Because I'm thinking about the civil rights audit that just happened for Facebook. They had a seat at the table and Facebook just shrugged. In your best possible world what does that actually look like to have a seat at the table to have that informing product?

Julie Owono: Yes. Let's start with the issue of infrastructure. Having a seat at the table when we talk about infrastructure is making sure that the consortium which will manage basically access to the infrastructure for service providers in each country, how to make sure that this consortium has a seat for civil society organizations or a piece of human rights organization and are more transparent because they're not, we don't know what's happening within an infrastructure consortium, we have really no idea.

Julie Owono: I did a research about why internet was so expensive, really expensive 10 to seven years ago in Western and Central Africa, when in France for instance, it became way cheaper.

I mean, it was nothing to have access to internet. And what we found out was that there are consortia that manage access to the infrastructure but for service providers, so usually telcos. And on these consortia you would usually have the companies, organizations that put in the money for the cable, for the infrastructure, you would have have government representatives and you would have some other private sector representatives.

Julie Owono: And there was no report on what they were doing, really no information. That explained why when you went from Senegal to Gambia, the difference in the cost of access could be multiplied by 10, 20 for no reason when they had access to the same, exactly the same infrastructure. We think it's the same thing with all these new infrastructures that are being built, how to make sure that beyond the cost because the cost is not the problem anymore but other issues, how to make sure that if a government wants to shut down internet there are certain procedures before that becomes even possible. But to do that you need transparency, which we don't have, so a seat definitely within this consortia, that would be the ideal scenario.

Julie Owono: When it comes to having direct access to product in an ideal world, to have this connection between product teams and companies and grassroots organization, well, again the issue of transparency. We have been working with companies on this problem of hate speech. When I say working with it's trying to alert them, we never know whatever happens to our reports, I have no idea. We just know we report it, that's great. On the other hand we don't really know whether or not what we're doing is efficient.

Julie Owono: We think it is because we do see some differences but we certainly don't have the same means of a measurement that companies would have. They would know better whether or not there has been an increase or decrease in hateful discourses on platforms. And for now they're not willing to give up on these issues of data where honestly privacy is not an argument, I'm sorry. Especially when we talk about potentially genocides, I'm not even exaggerating, I'm scared even to use that word but that's true.

Tristan Harris: We're running in general this grand psychological experiment on what happens when you plug 3 billion people into an automated attention information-sorting system that just says what gets the most clicks and no one's ever run that experiment before. And it's an unsafe experiment, especially when I think you enter into countries where not only are you designing for the assumptions for what it looks like to go to work and speak with people in San Francisco, California, or the Silicon Valley. But in Africa, I know there's something like 1500 to 2000 different African languages, and you only have a capacity as a company to do let's say content moderation in a handful of languages. I think Facebook only has something like 20 major languages or something like that, that they do fact-checking for.

Tristan Harris: And so if I'm Russia or if I'm Cambridge Analytica and I want to go into your country, and I can just say, "Well, let me go into a country where I know Facebook doesn't have the fact checkers in those languages. Now I can sow misinformation in exactly the known blind spots where I know the companies don't have the resources to do the safety checks. I'm just curious how you think about this because I know in your work you've talked about digital colonialism and I'm just curious how you think about those things.

Julie Owono: Yes. You mentioned the case of the Russia. Increasingly Russia is using the African continent as a proxy to target voters in the United States. And they're doing that by exploiting resentment with regards to history and particularly the history of colonialism and imperialism especially in Africa. And in that history, Russia at the time sided with some of the independence fighters against former colonial powers. The Russians have really understood that this resentment happens to mirror the resentment felt here in the U.S. or in Europe against racism, institutional racism. That's why it's important to have a very accurate knowledge of these dynamics.

Julie Owono: It's important to know what groups are being politically weaponized against each other because that's what's going to be used later on not only against the populations in that particular country, in that particular continent, but it plays out between nations that are increasingly antagonized on the one hand Western nations, and on the other hand Eastern ones who want to play a role on what's happening on the African continent and on the destiny of the continent. But we have worked to do, and particularly I've work to do a lot, is explaining the intersections of all of the problems and saying, "Maybe have a look at what's happening," I don't know in Southeast Asia right now and probably you'll have an idea of what may happen a few years to come in Europe as well.

Julie Owono: I have a very great in the sense that it's very illustrative example of what happened in Libya. In 2011 when there was a Libyan revolution, a French company worked with the Gaddafi regime at the time. They sold deep packet inspection technology, I mean which allowed the regime to basically map and arrest all the opponents. And that same company was asked by the French government to create a huge database of all information about French people. Before you had different databases for different services but after the terror attacks in France in 2015, the government decided that they need to, well, centralize everything and they said it would be easier to access information, all information about individuals.

Julie Owono: And the company that was consulted to do that was precisely that company that helped Gaddafi arrest protestors in Libya a few years back. Yeah, for us it's important to think about all this, well, there is an expression now, the rest of the world, how the rest of the world is definitely a testing ground of what is going to come obviously in a few years here in the U.S. or in Europe or in more developed places. We think it's important to pay attention and yeah, be ready.

Tristan Harris: Do you have any examples for listeners of those nuances of hate speech that might be different across the thousands of languages and in the African continent?

Julie Owono: Sure. My team and I, and me here, we have been tracking and mapping what hate speech looks like in five different countries in Western and Central Africa. And what we have seen is that the dynamics are almost more or less the same, so big political event or fracture. Event could be a very disputed election or a political party that has partisans from one region of the country versus another one that has more partisans from another part of the country, and that party is usually the one that is ruling and ruling with a heavy fist. That's one of the dynamics that we've identified which is common.

Julie Owono: Also the issue of gender, we barely mention that but the first way to identify ethnic hate speech I would say is to look through text hate speech, phrases such as, "Oh, women from this group are prostitutes so you should never marry them." Or, "Women from

that other group they like to steal your money." I'm just giving random examples. The names will change, the country will change, but at least the similarities guide you basically on what type of speech and information you might look for.

Julie Owono: We're currently working on this project of building a public database of what hate speech looks like in some of the countries that we work on. We think it should be public because it will inform not only the main platforms but also others because we don't talk about TikTok but TikTok is highly problematic, especially in these countries. I was chatting with a friend who is based in Abidjan, Cote d'Ivoire, and she was asking me, "How many of the videos that I come across on my TikTok are related to people getting lynched or very violent videos?" We think that public databases will force platforms to make their current hate speech detection better.

Julie Owono: What we also are trying to push is this idea that tech companies need to rely and they need to accept that they need to rely on expertise outside of the company. And that knows way much more than any expert out there, the Silicon Valley will know. This really struck me when I was recently in Palo Alto to meet people from the product team of a big company. They do have some internal people who are more or less aware on working on elections in Africa, so they're more or less aware of the conflict. I shouldn't say more or less, they have PhD, so they are very aware of that. But having a PhD is not like being a journalist in... I don't know, Kigali or Bujumbura or wherever. You have a different perspective that's certainly valuable out there.

Julie Owono: And when you actually work with local experts as we call them for now, but you also empower them and make them agent of change. If they understand that what they're doing is important to make sure that the platform remains healthy, well, they will inform others of what's happening. They have newspapers, they have organizations. It's important basically to step out and go and work, not speak to them because all these companies they like to talk stakeholder engagement, we know that. But in addition to speaking with them, work with them and trust their expertise, that's what we're telling them.

Tristan Harris: One of the issues here is that when you go into a country that might have hundreds of languages or something like that, there aren't hundreds of newspapers necessarily, or hundreds of institutions that represent all of those different constituencies, tribes, representatives, histories, et cetera. But then you have this issue of Facebook's Free Basics where they're actually building the infrastructure. So there's actually no way for organic local language competitors to compete with that infrastructure that Facebook's provided because they've got asymmetric resources, asymmetric power, asymmetric capacity to lobby the government, boom, they're planting all the infrastructure.

Tristan Harris: Second point is on how much content is available in all those languages. Now let's imagine Facebook goes in and they're allowing these 200 to speak, right? Well, now the 80 to 90% of that language's speech is now best represented by Facebook because where else are people publishing this stuff? There aren't again those 200 newspapers for all those 200 languages. Now Facebook is actually the primary place where all that language is getting voice, getting amplification. There's no one who can counter-speak, who can say that was a rumor, that was a conspiracy theory, that lynching thing that didn't really happen, that video you saw that was the deep fake.

Tristan Harris: And so one thing I find interesting is like almost going back to the kind of Colin Powell Pottery Barn rule, when he said to George W. Bush, "If you break it, you buy it." And he was saying this with regard to going into Iraq. If you go into Iraq and you go in because you want to bring liberty and freedom to the country but you broke everything, then guess what? It's your responsibility.

Tristan Harris: But more so what's so interesting to me is, and I'm sorry to pick on Zuckerberg here, but he says, "Look, I shouldn't be the one responsible. Don't ask me to set a policy for all these people because you think I know what that local tribes language or culture is or whatever?" But he's created the situation where 80 to 90% of that language's representation is actually happening on his platform. He's displaced the competitors who can counter-speech against anything that he's saying, so now it is his responsibility. I see this almost like Iraq times a thousand, because you're going into the hundreds of countries and into all these different tribes and civic conflicts except you have no capacity now, but you can't say that it's not your responsibility.

Tristan Harris: And we're in this predicament where this is just the reality that we now live in, but what are we going to do about it? Because we all don't want this to happen, it seems like we have these two routes. We either shut it down completely which is the direction increasingly you're saying, even citizens are saying we should go because they can't deal with the amount of stuff that's on there that's false that's just creating conflict. But then that just like you're saying, it favors the oppressors. How do we get out of this, Julie? And especially now speaking to obviously Facebook starting up this content Oversight Board, the Supreme Court for content and trying to deal with these issues. Do you want to speak about how both with your role there and more broadly speaking, how do you see us finding a way out of some of these problems?

Julie Owono: Speaking as an activist who has been working on these issues and these places particularly in Africa for 10 years, I should say that the only way for that is having more groups who demand accountability from Facebook. We have seen that it works. It probably takes a bit of time, but it works. I remember in India, you are mentioning Free Basics. Free Basics is not in India despite the fact that there are still millions, hundreds of millions of people that need to get online and that are poor. There was an outcry and Facebook went out, but they went out and just came to Africa where they are now I think in more than 30 countries out of 54 and nobody asked them for anything. No question.

Julie Owono: There is really, and I insist again on that, the need to... I don't want to use build capacities because that's vocabulary from the development sector and I have a lot of criticism with the development sector. It's important to have groups that will be able to see critically things, not only see the good, because it's of course if Facebook tells you they want to help connect people, connectivity is great. We're using it now so it's great. But what comes with that? That's what people should be educated to question always.

Julie Owono: And we should have more groups doing that everywhere in the world and particularly in Africa and the Global South in general, to hold the company accountable, to ring the alarm when they don't deliver on democratic principles and freedom principles and, yeah, hold them accountable for the responsibility whether they like it or not. I mean, now as a member of the Oversight Board, that's precisely why I chose to join. I saw this

as an opportunity to bring the attention of the platforms on things that they pretend they don't see.

Julie Owono: I say pretend because the problem is so obvious. Everybody talks about the fact that there is disinformation, there is hate speech in many places in the Global South and in particularly in Africa, but there has been very little change from the part of the companies in particularly in this case Facebook. I saw this as an opportunity to call their attention to the problems telling them that, "Yes, there are lots of issues with Russian interference in the U.S. elections, which I think are one of the main reasons why the Oversight Board exists even, that's great. But look, there are also lots of problems in X, Y, Z place and here's why we think your community standards are wrong. They don't encompass the complexity of the issue that you're trying to deal with as they are written now. And on top of that they're not compliant with international human rights law that protects the freedom of expression which you say you want to protect. So, yeah, here's probably a better way to do this."

Aza Raskin: The cynic in me when I saw the Oversight Board being announced, I was like, "Oh, this is another impact-washing move. Because one of the themes, I think of this conversation has been one size does not fit all. If you're going to be around the world you really have to have solutions that are bespoke to the people and the context and the history and the language that you're going into. And then the Oversight Board just structurally is a small thing far removed from all of those many places. And what I think I'm hearing you say is, "Yes, that's true." And the reason why you're taking the position is to raise visibility about the specific problems that you care about rather than thinking of the Oversight Board as the solution, in my understanding, right?

Julie Owono: Exactly. I really don't think honestly, humanely, it's impossible to... We're 20 at the moment and we'll be 40 when things are completely ready. It's impossible, 40 people cant... And first of all we're not Facebook moderators, we're not here to do moderation in bulk, that's not interesting for us. But rather what's interesting is out of one case, so starting from one particular case, trying to identify the issues that are at play with regards to freedom of expression and safety and many other important values and rights. And the interpretation we can give to that, that will help and guide further policy updates by the company and will change the way the company see the specific issue that we dealt with in this case.

Julie Owono: It's a compliment to many other things. I mean, it's complimentary, but what I did like also about this particular initiative is that it did bring in the idea that platforms are not arbitrary powers that they need to be held accountable. For now the law in the U.S., the law won't do that for various reasons related to some legal immunities, and also other places in the world won't do that. And honestly, I don't even know whether or not it should be good that governments hold companies accountable because that can also be very wrong at least in the way they understand it for now.

Julie Owono: It's a way to bring in a bit of checks and balances to that whole arbitrary, discretionary we decide what free expression is thing. I really hope it's not going to be... And I really hope we're also going to be checked and balanced. We need to make sure that there's always someone who can call you out when you going in the wrong direction. I think that's important to avoid arbitrary and discretionary decisions that are not grounded in reality and interests for human rights.

Tristan Harris: I wish people understood more of the examples of just how bad some of the situations are because it's like when you double-click on these things and you just get a sense of how... We have 20 people on the Facebook Oversight Board, we've got 3 billion Facebook users and 100 billion posts moving through the system every single day, more than a hundred billion according to Nick Clegg. We've got what AI that are going to perfectly detect in 2000 languages, the AI has never been trained on the right way to sort handle that speech when we know that the default bias, if you zoom your eyes out and blur your eyes is bullies win, hate speech wins.

Tristan Harris: I think it's interesting to think about TikTok here too, because the fact that you can just see video after video of lynching of that other minority group that you hate, it's like having automated machines run the information ecology that 3 billion people depend on to make decisions and understand whether they should feel at peace or angry about constantly. We're left with words like content moderation and algorithms which don't speak to, this is how people wake up and then feel either at peace or angry today.

Tristan Harris: We're so far into this that I don't know what to do now but I know that I'm grateful that you came on through the podcast and that we could talk about it for a little while. And I just hope that this gets people more interested and hopefully more understanding of the hundreds and hundreds of countries in which this is happening and we don't know what the results are going to be until the consequences unfold, because so many of the dominos have been set in motion.

Aza Raskin: At the Oversight Board, content moderation, these are all frames that are retroactive, that are defensive, that are waiting for something bad to happen and then trying to block it. And it ignores that the structure of Facebook, the structure of TikTok, the structure of Twitter is to reward us when we say things that are hateful that get lots of reactions. And so it's like we're getting injected with the bad behavior.

Tristan Harris: It's the hate virus.

Aza Raskin: Yeah, yeah, exactly. And I'm curious where you see hope, or if you see hope for that kind of structural change.

Julie Owono: I do see a lot of hope. First of all, it's not because I'm on the podcast but I really love what you guys do. Honestly, I really like that more and more people who used to work in those companies are speaking out against what they've seen. And I'm also very hopeful that, I mean, what still gives me hope is again this possibility that exists out there and that we haven't harnessed yet as much as we should of working more together with people in different groups. And that works as well for companies, there will be continued dialogue and collaborations, cross-border collaboration, transnational collaboration between groups in the U.S., in Europe and also in Africa and other places in the Global South that really do need it, critically needs it. There is a lot of room for that, so yeah.

Aza Raskin: Awesome. It was really, it's been such a pleasure having you on Your Undivided Attention and a privilege to get to meet you.

Julie Owono: Thank you, I'm a great fan and you guys give us hope, thanks for that.

Tristan Harris: It is mutual, great to meet you.