

Disinformation & evolving data

[00:00:15] **Deborah Blum** It's such a pleasure to be here and to be moderating this terrific panel. And I want to briefly introduce each of them. We have Davey Alba coming to us from the United States, Mandi Smallhorne in South Africa, Federico Kukso from Argentina and Jane Qiu from China. Our topic is this information. I want to introduce that by just pointing out that a cartoon that's been circulating here in the United States, which adds one horseman to the Four Horsemen of the apocalypse so that the cartoon is a death, war, famine, conquest and disinformation, and that should tell you how seriously we need to be taking that in the pandemic. I want to start by asking Davey Alba, who specializes in reporting on disinformation at the New York Times. Your assessment of what seems to be driving this particular wave of misinformation that we've seen exploding across the landscape and COVID-19.

[00:01:29] **Davey Alba** So thanks so much for having me. It's a pleasure to be here. I covered disinformation for the New York Times and over the past couple of years, as Deborah has mentioned, has been an explosion and misinformation about everything, but especially this pandemic. And in covering this be, one thing that I've really internalized and realized is that misinformation it very much follows the news, the news cycle, follows whatever is the hot topic of the day. And so, with COVID-19 being relevant for millions of people around the world, it's a global pandemic. This is something that misinformers have latched onto and can make a quick buck of, can make a name out of by spreading incorrect information and playing to their basis. So, this is a serious problem, and we should all be aware and sort of think about solutions.

[00:02:38] **Blum** Agreed. And I want to move now to Mandy. Mandy, there's been a new wave of disinformation following the rise of the Omicron variant, which was reported first very clearly and transparently in South Africa. Could you address what you think are some of the reasons why we're seeing this response to Omicron in this unfortunate way?

[00:03:05] **Mandi Smallhorne** I think that one of the- hi everybody. I think that one of the reasons why we've had a wave of misinformation about around Omicron is in fact the difference of the experience in South Africa. Omicron hit us at a time where we were already at a low where we had not had great vaccination figures, but through the disastrous Delta wave, apparently a lot of our people up to 70% had actually been exposed to COVID-19 so that when Omicron hit us, it didn't hit nearly as hard as it might have in other countries in the world. And so, there was this story, this narrative that arose that Omicron was mild or nothing to worry about. And unfortunately, that has spread far and wide and has contributed to poor response, I think. Even poor policy around tackling Omicron.

[00:04:10] **Blum** That's an excellent point. Federico, earlier when you and I were talking, you talked about the sort of new wave of mistrust in institutions, pharmaceutical companies, governments and Latin America. And I wonder if you could talk again since we're looking at this very sort of very recent rise in disinformation, what you think lies behind that.

[00:04:41] **Blum** And if Federico is not able to do this right at the moment, Federico? Could you address the sort of factors behind the rise of disinformation and also mistrust, because I think they're linked together, right? People responded misinformation when they already distrust the system in some way or distrust authorities, do you see that in Latin America? I am having a hard time hearing you.

[00:05:27] **Blum** Let's see if these three of various folks can adjust your microphone, and while they're doing that, Federico, I'm going to jump over to Jane. Jane, you have spent a lot of time meticulously looking at one aspect, not that you have uncovered other aspects of COVID-19, meticulously looking at some of the stories that have surrounded the lab leak theory. And in this particular case, one of the drivers of disinformation seems to be government, the American government, the Chinese government. I wonder if you could talk about that a little bit the role of government speaking of sources that we tend to lose trust in driving very alternative stories of the origins of COVID- 19.

[00:06:24] **Jane Qiu** I've been covering the origins of COVID-19 since the pandemic and more intensely in the in the past year. So, it really is a battle of the narratives between two fiercely competing theories. On one hand, you have the natural origins theory, on the other you have the lab leak theory. And now, I truly appreciate why people say that a lie can travel halfway around the world before the truth can get his boots off. As you mentioned, an important driver of this misinformation in this debate about the Chinese and U.S governments. They were engaging in this disinformation campaigns. It's like watching two kids in a shouting match, trying to outcompete the other to come up with the most outlandish claim. So, China's Foreign Ministry, for instance, insinuated that the virus was leaked from a military lab near Maryland. Tom Cotton, a U.S. senator, said that the virus was engineered by the Wuhan lab and then leaked. There are also more insidious forms of such campaigns. Some U.S. officials, for instance, they would talk to political reporters anonymously about their speculation of lack of not being. And then the claims would be splashed across the media, you know, often presented as evidence for that. So that's a major issue is that people tend to confuse between speculation with evidence. So, it's a big problem.

[00:08:22] **Blum** That's an excellent point Qiu and returning to you, Federico, do you think issues- the kind of scenario that Jane is raising really speaks to the problem of all of us starting to lose faith in an honest sharing of information from our governments? And do you see that in Latin America? Do you see a rise in mistrust in institutions? Do you have a quick idea of what might drive that in your part of the world?

[00:08:56] **Federico Kukso** Yeah. I mean, Latin America is, you know, the northern homogeneous continent. I mean, there you got Brazil, Argentina and Chile. But one thing that you can understand the pandemic or the science journalists is noticing how the history of science in the region. Science hasn't been the central part of the agendas of the government. You don't see many science journalists in the newspaper because they are not like journalists, mostly because newspapers, usually they don't hire science journals. And science is not a big part of the agenda of the newspaper. So, I think you have to understand that and the mistrust with government related to other issues like ecological, religious, political or economic issues. So, I think that that's a part of the problem. But also, I think there are many problems. For example, one of the problems I see in the coverage of the pandemic many people usually don't talk about is the hype. How did some information had been exaggerated, related to some drugs, treatments or even vaccines? Right. So, I think that's a problem in the media landscape, mostly because you get you saw this in Latin America and regarding convalescent plasma, you saw these with hydroxychloroquine or ivermectin or even vaccines. Last month when they started to be a lot of breakthrough infection here in Latin America, many people started saying that the vaccines are not working, mostly because the news media usually tend to describe vaccines are this shield that covers you from the virus. So, I think it's important for -my recommendation for journalists is try to be more moderate regarding the information you

give, try to -especially taking into account that behind press releases are big companies and you have to take that into account. Try not to exaggerate. We all want to listen or to read some news that says that some drug or some treatment will end this pandemic forever. But I think at the end we end up eroding the confidence of the people in the science. So, I think as a journalist, we must be a little more grounded to earth, try to be more moderate and not exaggerate things.

[00:11:46] **Blum** Yes, I 100% agree with you about overselling research results and overstating vaccines, and in fact, we've seen that in this country as well, where people talk about breakthrough infections as if they were a failure of the vaccine, clearly showing that they really don't understand that vaccines are to lower your chances of getting the virus, but also reduce your chances of serious illness. And Davey, I wonder as you look at what I think of as fertile audiences for disinformation, there are so many things that I see, you know, being generated out of the anti-vaccine machinery that I think how could anyone believe that? Now do we have an understanding of who falls for a specific- can we characterize who actually is most vulnerable to these tactics?

[00:12:39] **Alba** Yeah, absolutely. So what? I'm a technology reporter and I covered disinformation, especially online disinformation. And what we've seen in the past couple of years, for as long as this pandemic has been going on, is the internet is really an accelerant of these falsehoods that are spread and latch on to social media algorithms that prioritize the pieces of content that grab our attention the most and keep us entertained. And following the thread, following the rabbit hole all the way down to its end of conspiracy theories that don't actually have a basis in fact. So, it's actually really troubling to me as a reporter looking at disinformation every single day that the way this spills over into the public is really through the mainstream platforms. Some theories might start on more fringe platforms like Telegram and Parler and all these other alternative platforms like Rumble Video Platform. And then you see some people sort of raising these questions of, well, what if this is a legitimate theory and people pick it up on Twitter and Facebook and then it ends up in your mom's feed or an uncle's feed and people just sort of parrot and repeat what they see. So, I think that that's a real problem here, and I'm not sure that there is actually really any one sort of archetype of someone who is particularly vulnerable to misinformation. I think that it's sort of incumbent on all of us to think of it as a project, a community project to raise all of our literacy levels and to make sure that everyone that we are in contact with knows how to sort of suss out good sources for themselves and just to be aware of what's floating around there, which is partly my job to be able to sort of respond to it when it comes up in conversation.

[00:15:04] **Blum** No, that makes a lot of sense. And I want to bounce back to you, Mandi, in this way, when I was listening to David, I was thinking about I have a fairly distant relative who buys into all the anti-vax stuff. But she also brings to it an attitude, which is she doesn't like smart people, that's what she calls them smart people, people who are over-educated and make her feel stupid, so she doesn't want to listen to them. She preferentially will choose these other sorts of aspects of information. And I'm wondering if you see in South Africa, but just asking you to open that up to maybe even elsewhere in Africa, an attitude of mistrust in science, based on both, let's say, past colonial behavior, but also say the actions of some of the big pharma companies or other governments that tends to bolster the response to misinformation. And if you think there's anything journalists can do about that?

[00:16:15] **Smallhorne** Yes, I do think that there's a connection there. I noticed that we were getting disinformation, feeding through to us, bleeding through to us from the U.S,

which to me was the epicenter of disinformation. And it was colliding with existing problems in Africa, which I find very justifiable, actually. African populations have been used for drug trials over the years, often without necessary safeguards such as proper informed consent. And that has led to a whole lot of stories down the years from polio vaccines to HIV that circulate in our communities and inform people that Western science isn't necessarily to be trusted. And then along comes all this stuff coming in from America and I think that the lesson that I certainly have learned as a journalist in this period and then I think that we should all learn is not to look at people and go, oh, you are a bunch of idiots because you believe this stuff, but to look at them and say, what makes you believe this? What is this feeling? Why don't you like smart people? What is in your history and your background that makes smart people so rebarbative? What is in a Kenyan's background that makes him feel less trusting of medical science? Are you afraid of having power taken away from you? Do you have really- I mean, I have some very seriously justified problems with Big Pharma. And I have to wear that off every time I report because there's bad and there's good and you need as a journalist to be able to tease that out. I think that it's really important for us. I started to learn it with climate change and with all the disinformation around climate change and following those narratives and now with COVID-19, it's become very clear to me that we have got to start thinking about different ways of communication. We have to start storytelling, not just the facts, but also the feelings, the reasons for people's fears. Why are people so afraid the government might have played a part in creating this, whether it's the U.S or Chinese government doesn't matter. What is it about that narrative that feeds something inside that? Why are people so willing to believe ridiculous nonsense about the vaccines, for instance? I mean, I've just dealt with an adverse reaction story that was being touted by somebody who is a very educated person. You know, it's not about facts so much as what's in that person's mind, what's in their heart that is that this is info is feeding and deal with that as well as the facts.

[00:19:24] **Blum** Yeah. Yes. You know, I love this panel. I wish we could do it. I know you guys don't have time for the entire day because it raises so many interesting questions. Jane, when we're looking at sort of the biases of- and I'm throwing biases or attitudes or perspectives or beliefs of our readers. Do we also need to consider the same with- and I'm thinking about the way journalists respond to information that may or may not be trustworthy-the biases or background of our sources and even our own? Could you talk about that a little bit?

[00:20:06] **Qiu** I think I think especially when covering intensely political and intensely geopolitical stories, it's really important to vet potential bias. So, you know, as you mentioned, I think we all have our own bias as well, we are all humans, we all have opinions. So, the first thing is really to acknowledge and to be honest about our own potential bias. It's the first step to keep it in check. I'm going to have a major story out on COVID-19 origins and so I was really worried, about my own racial bias because the story has an angle of geopolitics, of the China-U.S. attention. So, I just kept asking myself, am I might be objective, am I letting, my own opinion, my own sentiment affecting the balance of the article and also worried- actually I sent an early draft to a top U.S. journalist, a dear friend of mine, I actually consider her as my mentor. So, I sent her an early copy for her to check whether the article is biased. So of course, the sources also have potential bias. We need to ask, does this person has an ax to grind? Does this person have an agenda to push? A top U.S. journalist told me about his experience interviewing a strong proponent of lab leak theory, and he told me that the source is really, really angry with China. And he said, I quote, "his anger towards China, blinds him to the facts," end of quote. So, when we come across sources like when we are aware that he's potentially very biased, we need to be really careful how to treat the material we got from him, how do you treat the

assertions. We have found them. So, I think a golden rule is really in journalism is that the fact somebody says something to us does not necessarily mean that we should use it in our story with our critical assessments. We are not brainless. We are not doing this transcription apps. There's always a judgment call in everything we put into our story and critical assessment of the assertions to assess the evidence behind the assertions is incredibly important, especially covering stories with a with geopolitical political angles.

[00:22:58] **Blum** Yes. Absolutely, right. Davey, I want to come back to you for a minute in the sense. We've had a lot of discussion about the rise of disinformation and some of the factors that sort of amplify it. And I cited the cartoon that's been circulating in my science journalism circles of disinformation being the fifth horsemen of the apocalypse, which the idea behind that is disinformation is doing actual harm, costing lives. But do we know that that's true? Do we have any way to assess whether were all of these different forces that push people to a misunderstanding of what the pandemic is? It is actually causing harm is actually causing low? So, could you explore that a little bit?

[00:23:52] **Alba** Yeah, of course. So, since I'm on a panel of science journalists, I want to be careful about attributing a causal connection to these things. It is really hard to say one thing causes another without a controlled study and lots of years of research. But what we do know and what we do have data on is just how far these lies spread, and there are different ways to track that data. I use various platforms like CrowdTangle, in touch with research companies all the time, to just give us a sense of the size of the lie and how far it's spread and who it is sort of the purveyors of these lies and you start to see repeat offenders and patterns and things like that. So, one thing that we can say with a lot of certainty is that these are the lies spread so far, the most viral Facebook falsehoods regularly get tens of thousands of shares and millions of views. YouTube videos are in the tens of millions of views when it comes to really viral stuff. For instance, Plandemic, if you guys remember that from 2020. And so, we know that these things go viral. We know that they find an audience. We know that they reach enormous amounts of people. And we also know on sort of the more anecdotal track that when you see people coming into hospitals with COVID-19 and refusing to get vaccines, that the things that they'll talk about are the lies that they see online. And so, when you put those two side by side, there's really powerful anecdotal evidence that people are starting to believe in it some of these things that they hear online and that is a factor in vaccine hesitancy, and that is something that every misinformation expert I've spoken to says.

[00:25:56] **Blum** And Federico, is there a responsibility of journalists to counter misinformation? Is that part of our job or is our job to advocate for truth as it were? Or is our job just to tell the story and hope for the best?

[00:26:14] **Kukso** Well, I think one of the things, at least in Latin America, I think in other parts of the world, if you see that, try to find the responsibility behind the misinformation is not only on Facebook, it's not only on WhatsApp. It's also the misinformation also can from the big media. For example, here in Argentina there had been a big campaign against confinements at the beginning of the pandemic, mostly led by the big newspapers, mostly because their agenda collides with the agenda of the government. So, when for me, it's important that the news organization hire specialized journalists and have an experience dealing with a pandemic or I mean, the words are important. The words we use are important. So, I think that's important for me and also try to be more critical regarding signs. I mean, one of the things that I've seen in Latin America when a political journalist or a sports journalist interviews a scientist, it's what is called epistemic trespassing. I bet you already heard this expression is when a journalist interviews a scientist that has an

expertise in one field, but he usually gives opinion regarding an area that's outside that expertise. So, for me, it's important to interview the correct people, mostly because they sometimes use the authority as scientists to promote like this- I mean, I don't know if you remember there were many Italian scientists, I remember April of 2020 that they said that the pandemic will end in two months. I mean, for me, it's a really funny experiment to go to the website of these newspapers and you see all these fringe ideas at the beginning of the pandemic. Of course, we all know that science is a process, but I actually try to be more skeptic regarding scientists who wants to be in the media and have like these big, big declarations like even if they are Nobel laureates, we don't have to rely on that and we have to rely on the evidence, not in the voice of the scientist. We as a journalist rely- where did they publish? Was it Reviewed? I don't care if you are a big scientist and you say that the virus is, I don't know, doesn't exist. Like what happened with the HIV pandemic right? So, for me, that that's a thing that we have to be more critical even regarding our own news organizations.

[00:29:00] **Blum** Yes, I think that's an excellent point. And I have a bunch more questions, actually. Well, we are getting a whole lot of questions from webinar participants, and so I'm going to shift over to those questions and asking and ask you some of those. And I want to start with this one. This would bob back to you, Davey. Do you think that Facebook, although any of you can answer this, do you think Facebook, Google and the other internet giant should play a bigger role in stopping misinformation? One of the big problems now is that journalists are also relying on these platforms to deliver the news. So, there's some sort of ethical tension there, and I'm curious as to what Davey and any of you think about that.

[00:29:55] **Alba** Yeah, I can give it a shot to begin with. I think that's a really astute observation, obviously, these platforms are now sort of distribution platforms as well for journalism. I think you always have to go back to the source of who is saying what and kind of analyze things that way, if it's a Facebook account of a reputable news outlet that obviously carries different way than the personal account of a scientist who has a track record of spreading misinformation. And so, we always have to take those things into consideration. The thing that I'll say about the platforms is that they do sort of know that this problem exists and they are aware of the stakes here. It's difficult because they always talk about having to balance free speech and making sure that everyone who wants to say something has the air time and all of this. At the same time, I do think that they have shown themselves to be quite late and sort of, but not aggressive enough in a lot of cases. And often the yardstick they'll use is if there is imminent harm. If there's imminent harm, then we may consider taking something off of our platforms. But sometimes that harm comes to pass. And we of course, its always hindsight is 2020, but maybe there was something that we could have done to dampen these movements on January 6th, I think last year was the really big evidence of that speech can cause, you know, sort of real-world violence. It can spill over into the real world. And we really have to be careful about making sure that these movements, these huge movements that gain momentum online don't snowball into these things that cause real world harm.

[00:32:06] **Smallhorne** I just would like to add, if I may, Deborah.

[00:32:09] **Blum** Sure.

[00:32:10] **Smallhorne** That it worries me how much of the delivery of news is affected by profit motives. You can see that with the platforms, you can see it with the media houses

as well. And I don't know how to do it, but I think that we have to have some mechanism that counters that because clickbait is driving everything at the moment.

[00:32:35] **Blum** Yeah that's a problem.

[00:32:38] **Kukso** To add to this is at least in Latin America, there's a conflict of interest regarding Facebook, mostly because Facebook is funding many news organizations. So, I don't see us, as you said, a cause and effect. And you have to take into account that Facebook and Google are you are being neutral organization and supporting them to survive. Another thing I don't know if you know this or what's the situation in China or in South Africa? At Twitter, for example, in Spanish, Twitter doesn't fight back the hate speech as they do in English. So, in English, you can see, like Trump and other political personalities that have been banned from this platform. And that's not the case with some political or like Bolsonaro or other big people and politicians that are against vaccines. So, you have to take into account the language and the cultural diversities regarding these platforms.

[00:33:41] **Smallhorne** That's true for Zulu and Africans as well, I can tell you. They're English, they're not looking at the other languages enough.

[00:33:52] **Alba** I think that's a good.

[00:33:55] **Blum** Oh, go ahead, sorry.

[00:33:57] **Alba** Oh, I just wanted to make the point that I think that's a huge problem with these platforms of scale where if we know that Facebook has all sorts of subsidies in developing countries so that they can sort of offer free Facebook, but only within Facebook, not if you look up something on your cell phone, not on Facebook. It's outside of that gated wall and you have to pay a data fee for that sort of thing. And that's the danger of these social media companies trying to get as many users as possible, pushing into places that they don't understand the context of and don't have the resources, enough resources, especially local resources, to moderate content and understand deeply the consequences of letting something grow. Some movement, some believe grow on that part of the world and how it can affect communities.

[00:35:04] **Qiu** So in China, of course, the situation is quite different, you know, so we don't have Twitter, we don't have Facebook, but we have our own social media platforms, you know, like WeChat, like Weibo which is a microblog. And so, there are also a lot of misinformation and sometimes can go viral. But as you all know, China has very strong machine to censor and also, they don't like anything go viral. So once they see some kind of virality, that they would stamp out. Sometimes political, sometimes it's not. They just don't want this kind of fame and kind of mass of information going on in in the internet, they just find it inherently threatening, so they just want to stamp out. Sometimes there's no obvious reason, just people are showing something quite benign and then that can-I think that say something about maybe the kind of problem the software that they use to do the censorship. Sometimes it's not really, it doesn't really work specifically for full screen or for the ends of politics. Sometimes it's just random things get censored.

[00:36:35] **Blum** Yeah, and I'm against censorship, but we've had an ongoing debate in the U.S as to whether we should do more to regulate the big social media companies. And so far, it's been all talk and no action, which probably is also a money issue. Right? I'm going to pivot a little here and our last few minutes. We have an ongoing discussion in

science journalism about the problem of false balance. And so, I should say that previous question. Very good question was from [00:37:08] **Barney's Bhalla on** [0.9s] and this one is from Nancy Brenner. How can journalists counter balance anti-vax medical professionals, including doctors and nurses, in getting the story out correctly? Is there a false balance when we tip too much one way or the other? Does anyone here want to address the problem?

[00:37:34] **Qiu** Maybe I can start, Deborah.

[00:37:36] **Blum** Sure. Go ahead.

[00:37:37] **Qiu** So for the on the topic of COVID-19 origin, there's a quite a serious problem of false balance. we have two opposing theories, we have the natural origin theories, we have the lab leak theories. So, in many articles, they are presented as if they were equally valid. Even scientifically they are not and of course, both theories are possible. Nobody has said that lab leak is not possible, but they are not equally likely. And at least at this moment, I researched about it intensely, my judgment is that the majority, the consensus lies to the natural origins, but I think the important thing about false balance, or to avoid false balance, is that we have to convey very clearly with the scientific consensus lies and where the weight of different lines of evidence lies. And this has to be presented in a way that it's an ongoing process, it's not fixed conclusions because consensus can be wrong. Things may change with new evidence, and the weighting of different lines of evidence can also change with new evidence. So, it's an ongoing process and people can change their mind and then the science changes.

[00:39:13] **Smallhorne** And I think that this is one of the things that that is an important difference between a science journalist and a general journalist, a journalist who's trained out of the humanities, usually, and they are right, fully trained to go and seek the other side. But when I do training on science journalism, that's one thing that I make very, very clear is that in science, you have a consensus. In the settled science, you very often have a very clear consensus, in science like the COVID-19 science, you can see the consensus developing and you need to be sensitive to that. As a reporter, dealing with these issues. John Oliver did such a good job of this with climate change when he had three people in the studio dissenting from climate change, and then he had 97 people coming in to say, this is the other point of view. This is the people who understand the consensus of science around climate change. We need to get that across somehow if they are dissenting views, but they are small in comparison to the major view. And we need to understand that while you need to sometimes reflect that is another view, you don't need to give it the same weight as the consensus view. And I think that that's a really important thing that journalists need to understand, and that has been difficult for people put into a position in this pandemic of reporting on within this area of science. When they come out of an area where they've been taught completely differently in ethical terms with journalism, you've got to give the other side. I think that it's really important that we get that across that in science, there is very often a consensus or a consensus is developing and we need to be able to tell people that we also need to convey that with an understanding of the uncertainties of science. That's one of the things that I've seen as problematic during this period is that we kept on having reporting that say this is what's happening, this is what's happening instead of conveying carefully that science is an evolving process, especially in something like a pandemic.

[00:41:41] **Blum** Yes, and I think that that should be a major goal for all of us who cover sciences too. It's tricky because the news media is event driven and science is a process.

And so, we have that kind of culture class, but as we could do so much better if we can make people understand the sort of evolving nature of knowledge in this and many other cases. Again, pivoting, I have two questions one from Priyanka Runway. and from Lisa Palmer on a similar subject. How do you engage with when you get trolled? Social media trolling, outlandish opinions to your posts when you're reporting on topics that are super-hot, like the origin of COVID-19? And are you seeing a rise in digital attacks on your work in new ways? Given the high profile that science reporting has had during the pandemic. Anyone want to start there with responding to trolling and attacks on honest reporting of science?

[00:42:46] **Kukso** I don't know if I have an answer. I think my opinion changed during the years I've been in social media, but I think one thing is important and we have to talk about these is mental health, mental health of journalists. I get really mad when I'm attacked and I end up blocking. I know this is not the best thing, but I think mental health is important. Not only the medical staff, the scientists or even all the population of the world is really burnout with the pandemic, but also the the journalists, right? Every time we are briefing this information every way, ever moment of the day and even that we try to do our best and then we end up being attacked. So, I don't know if this is an answer by actually tried to unblock to see who is attacking me, to see if I can have a conversation, something that is really hard on social networks if I know this person. But I try to block them, mostly for my mental health as I said before.

[00:43:57] **Blum** It's a good idea and excellent idea. And the point about journalists' mental health is also natural. David, do you think this is you? This is obviously not unique to science journals, but do you have any thoughts?

[00:44:11] **Alba** Yeah, I do and I want to tie in a little bit of the last question, maybe into my answer. I think the way people have to think about balance, we also have to think about that very carefully when we decide to write about something as a misinformation reporter because you don't want to give oxygen to falsehoods and allow them to spread further. So, I think framing of story is and how you present this information is very important. So, one thing that will do is make sure that this lie has already gotten traction on its own. It's already everywhere. And so, our journalism isn't spreading it further. It's providing the actual facts to talk about, hey, you may have seen this going around, now let's talk about sort of what's actually the truth in this statement or piece of content video post, whatever. And so, we want to make sure that something is already viral before we cover it instead of adding to its momentum. And then secondly, and to do that, obviously you have to have the actual debunking up high, you can't just sort of let this person go on about their views before you start to pick it apart. And on the flip side of that, with harassment, it's often people who have an enormous platform already who have millions of followers that I end up covering people who have a legitimate audience who believe their lies. I cover a lot of big influencers in the anti-vax movement, much of right-wing media. And once you publish a story that says, hey, this is these are lies, you do get a barrage of harassment coming your way and it does get extremely loud, I've gone through harassment campaigns where on every single platform like Twitter and Facebook and email and website and LinkedIn are getting inundated with messages, people find my Instagram account even and find a way to DM me there and sometimes it can get pretty personal and hit close to home once they start to actually get into the project and dig into personal details of my life and people close to me. I think what Federico was saying about mental health is really, really important. And I have certain strategies to deal with that sort of thing at this point. Locking accounts down temporarily, sort of deciding when and when to not engage. And I think the

good thing is that these people tend to move on to the next lie and the next target. And so, if you sort of keep your head down for a little bit, they will move on.

[00:47:31] **Blum** That's a great point and also a great way to end this panel. And unfortunately, we are out of time and I just hate letting you guys go. There are so many other good questions that people have asked, ranging from the role of Bolsonaro in Brazil to looking at the world. What are journalists supposed to be educators? Are they supposed to be advocates, sparked a great conversation among the attendees that I want to say thank you to all of you? Thank you. Really excellent conversation. Thank you. Come back soon.