

Module 4 Video Class 3: Interview with Annalee Newitz

Hi, welcome back to the video segments for our course, Journalism In A Pandemic: Covering COVID-19 Now And In The Future. We're now in module four. We're at the end of the course where we look ahead to what happens in the next couple of years, and for this segment, we're going to speak to journalist and author Annalee Newitz. Annalee, thanks for joining our course.

Yeah, thanks so much for having me.

So we have at this point more than 9,000 students, and they come from more than 160 countries. I'm not even sure what the count is today, but because they are so widely distributed, there is a possibility that not all of them may know about your work. So can you tell us a little bit about yourself and what you do?

Sure. So I am a science journalist. And in my career, which has lasted for about two decades now, I've covered technology and biotechnology as well as evolution and ancient history, and I've gotten to kind of do a lot of different poking around in different areas of science. I had a Knight Science Journalism Fellowship like you did, Maryn. I recently in the last few years started writing science fiction and thinking more about how I can write kind of at the nexus between informed speculation and hard evidence. And I continue to do straightforward journalism for places like The New York Times, New Scientist, Popular Science, lots of places with science in the title, and I also publish science fiction novels as well as science books.

So I have a foot in both worlds. And my favorite thing to do is really think about how we can have evidence-based predictions about where we're going to go next so that we can be prepared when disasters happen or when good things happen, and we want to figure out how to allocate resources for those.

So evidence-based prediction is exactly what I was hoping for, so thank you for that. The reason that I wanted to have you come and talk to this class as we close it out is precisely because your work exists at this nexus of fiction and nonfiction and looking at both past societies and imagining future societies. So I want to ask you first about one of your nonfiction books, "Scatter, Adapt and Remember," because in it you wrote this: "In its 4.5 billion year history, life on Earth has been almost erased at least half a dozen times. We know that another global disaster is eventually headed our way." Well, here we are in the midst of a global disaster. Is this what you were envisioning?

In some ways it is. I do have a section of the book about pandemics and about how to model pandemics and predict them, and in my thinking about possible disasters, pandemics were right up there at the top. Of course, I didn't know what it would feel like to live through one, and all of the different kinds of knock-on effects of being in a pandemic. But the sense I got from researching that book, which really was about mass extinction, which are these huge events where over 75% of all species on earth die out, so they're really quite intense and way beyond anything that coronavirus could ever do.

But one of the things that I learned was that it's actually quite common to have these horrific disasters that either wipe out a species or a whole bunch of species, and the kind of common thread throughout the history of life on Earth is that bouncing back from these disasters is really where things get interesting, and that life always does bounce back—so far, as far as we know. And the result is often new ecosystems, new kinds of species, new ways that species interrelate. And so, you know, humans are here and mammals are here because of all of these disasters, so disasters can be productive, which is a very odd thing to be saying right now as we're in the middle of this coronavirus pandemic.

But I think for me what's really interesting about thinking about disasters is all of the knock-on effects from these disasters. Sort of how do they play into our political lives? How do they play into, you know, what comes next for the planet and for humans?

So I'm going to ask you in a minute about what comes next, but for how things come back together, let's talk about them falling apart. So in "Scatter, Adapt and Remember," and I think also

in this new book that you have coming out, "Four Lost Cities, you talk about how societies come apart. And so having that experience and having that knowledge, are there any things that you see in the current moment with coronavirus that are particularly concerning to you?

Yeah, I mean, a lot of things. So one of the many knock-on effects of big disasters that are global is that they tend to spark other global disasters, particularly if we haven't prepared for them. And unfortunately, in the case of the coronavirus, especially in the United States, even though we knew in the scientific community that this kind of pandemic was very likely to happen sooner rather than later, we were not prepared on a political level.

Our federal governments, and state governments, and local governments had not stockpiled materials to deal with this stuff. We didn't have coordination between different scientific institutions to help combat it right away. And frankly, we don't have the international infrastructure to deal with something on this level, and that's incredibly important whenever you're dealing with something that's a global disaster, like climate change or like a pandemic. You've got to have incredibly good communication between nations and trust between the scientific communities in those nations. And, you know, we just don't have that right now, and one day I hope that we will.

And one of the things that I learned in "Scatter" and then also the book "Four Lost Cities," which is coming out and is really focused on how human civilizations undergo massive transformations and disasters, is that you really have to watch out for those additional problems.

So right now we're coping with the coronavirus, we're working on it. But as that's happening, we're seeing our economy collapse. We're seeing our political institutions become more unstable. We're seeing environmental problems exacerbated as regulations over environmental waste. We're seeing more problems around climate change because environmental regulations are being relaxed during these difficult times. And that place where multiple disasters pile up on each other—political disaster on top of natural disaster, which then spawns another natural disaster—that's when things get really pear shaped.

I was just listening to the California Report, which is a public radio program here in California, dealing with the fact that now we're facing famine. We're facing starvation in California, even though we have plenty of food, but lots of people are now undernourished and malnourished and aren't able to eat. And so, again, there's another example of a knock-on effect, where what we're suffering from is a pandemic, but what we wind up with is a pandemic with famine, political instability, economic instability. And if you get enough of that, you start to look at really dramatic changes happening in your society. Like something like a collapse or a revolution. Something that could be really much more profound than a disease.

So out of that menu of things going wrong that you just rolled out. Thanks, I really asked for it.

I have more if you need them.

I do want to hear more because what I'm curious to know is, you know, out of this list you just unveiled of things that are going wrong, do you have any sense of which of those are the gnarliest? What will be the hardest to manage in the next couple of years?

That's a really good question, and partly the answer is that we can't know for sure. Because we don't know how difficult it's going to be to come up with a vaccine for the COVID-19 coronavirus...Even if we come up with a vaccine within that 18-month window, which is purely guesswork. Right? It could be 10 years. You know, we just don't know. Even once we have that, we don't know how it will be distributed.

And I think that question of how it will be distributed, that's really where we need to be poking if we want to think about really how unstable things could get. Because there's the scientific solution to this problem, and then there's the political solution and the economic solution. And I think that the scientific solution is a lot more straightforward than the economic and political solution. So the answer to what is gnarly here—the gnarly part is our governments and seeing how our governments respond to this very simple task, which is help your people to stay alive using science.

And that's a very simple thing to do, but once it gets involved with political infighting, glad-handing, and oligarchies, and people bribing each other, and all of the things that we know happen in every nation, that's where it's going to get tough. And once things get tangled up in those political issues, I think that's when you start to see these knock-on effects like famines and increasing problems around toxins in the environment. That's because governments focus all their energies on how they're going to give their brother the contract to manufacture these vaccines, right, and so then they're not focusing on how do we safely manage our agricultural output. And so, yeah, unfortunately, I think that there is no scientific cure for political instability, and I wish there were. I think there are some people who believe there is. But, unfortunately, it's a social cure, and those are the hardest to do. That's the hardest therapy is social therapy.

So let's talk about something hopeful.

OK. I'm ready.

So skittering over to the other side of the equation. One of the things that I love about your books is that though you write about things that are quite dire, you write about the end of civilizations and about the death of the dinosaurs, the death of the universe, you managed to find very hopeful moments within it. And that's even more true, I think, in your fiction.

So I am wondering out of that trust in human creativity and community that you express in your work, do you see any reason to be hopeful right now? Anything that you see in this huge menu of bad stuff that you've just rolled out that actually does make you feel like things might be OK?

Yes, absolutely. I think there's always hope. I think that the moment that we stop trying to fix everything out of hope, that that's really the darkest place. So even when you're in incredibly difficult circumstances, always continuing to do the work, whether that's the work in the lab, whether that's work going out into the street and protesting a government that's unfairly allocating food or medicine or political power, there's always hope in that.

And for me, I think the smallest unit of hope, like if we could measure it the way we sort of measure like the smallest unit of like an atomic structure, the smallest unit of hope for me is friendship and trust between people. And once you kind of have that, once you have communities coming together to, like I said, work in a lab to figure out a vaccine or a therapy, or you have political adversaries becoming allies, or you have a political group becoming allies with a spiritual group. Anytime that happens when people are able to work together, you have the beginnings of something better. And it's, of course, not always. There are always exceptions, and there are always groups of people who get together and do bad things. And I don't want to downplay that. But in general, when you're tackling a problem like this, which has many sides to it, political sides and scientific sides, the more that you can have people coordinating, the better.

I also think that just to focus in on the coronavirus for a second and not kind of this bigger issue of like how the climate is screwed and like politics are messed up. One of the things that we see historically among humans is that whenever there is a massive disaster that's a pandemic, it usually leads to progressive social change, particularly social change for workers. Because one of the things that's happened, you know, starting even 1,000 years ago or more, is that when a pandemic sweeps through a community, it really reminds people forcefully who the important workers are in that community.

And it's always the people who are making food, who are growing food, people who are helping to care for the sick, people who are in positions of educating the public. And those people in everyday life, we often forget how important they are just to survival and just to making us have lives that are worth living. And I think we're seeing that happen, at least here in the United States. Suddenly people are having to acknowledge, oh, you know, the people who pick my food are actually way more important than the guy who programmed Zoom. You know? Or they're way more important than the person who's like signing papers over at this federal building. And not to say that those people aren't, you know, wonderful people, but if you're talking about the survival of your species, those are the people who are important.

And so, for example, after the first wave of bubonic plague in England, the 14th-century plague, there was a wave of worker reforms. And for the first time in very many years in British history, peasants were given better rights, workers' wages went up, and here in the United States, we're seeing the beginnings of something like that. We're seeing workers going on strike for the first time in sectors where they hadn't been organized before. So this goes back to what I was saying about social connections between people like workers are getting together and organizing and they're saying, "What's good for us?" Like, how can we get something out of this that protects us? Not because we don't want to do the work, but because we do want to do this work. And we want better protection. We want PPE. We want, you know, sick days, and we want health care. Things that, you know, are just humane.

And so, again, we've seen this again and again throughout history that as societies reorganize themselves in the wake of these kinds of natural and economic disasters, often that is an opportunity for groups who have been marginalized to come forward and say, "No, we are important," and actually be listened to. So that makes me very hopeful. The other thing that makes me very hopeful coming out of the coronavirus is that a number of folks working on topics around climate change already said this, which is that now we have a metaphor that people can understand viscerally that has to do with how you prevent a long-term problem, like climate change or a pandemic, how you prevent it from getting worse.

And the whole idea of flattening the curve of just not doing certain things in order to make the world better for all of us. Now we can start talking about how that's relevant to the climate because the exact same rules apply. Like we're doing little things every day, personally. We're doing things at the level of our local and federal governments to combat this disease in the same way that we need to do with climate change, and in the same way we need to do with carbon emissions, and with toxic dumping, and with agricultural runoff, and the use of antibiotics in food.

And so these are all complex global problems, and I think now that people are ready to start thinking that way. It's a very hard thing to do to wrap your brain around like, "OK, what I'm doing now affects everybody around the world and potentially everybody for 10 or 20 years in the future." That's hard. But I think now we're starting to understand. We're seeing how little things that we do in our everyday life can actually be part of a big global effort, so that gives me hope as well.

I think that when we come out of this period of quarantine and pandemic, we're gonna have new groups of people who are at the table. New groups of workers, new groups of people who are struggling for climate justice, finally actually getting to have their ideas put into policies. So that's the hopeful outcome.

Thank you for that. Thank you for being hopeful. So let's put those two together. Sort of all the negative stuff plus the reasons to potentially be hopeful. What in your best guess or in your authorial imagination, what do the next couple of years look like to you? What does a year or two years, five years, what do you imagine might happen?

Yeah, I mean, there are a lot of interesting ways to take that question. So I've partly already been talking about it a little bit. I think there's going to be more labor organizing. I think there's going to be more awareness of poverty and the terrible gini coefficients in various places. And at the same time, I think that like to sidestep the sort of big stuff, I think we're going to see a lot of changes in how people are interacting online.

So like I said, I have a background as a tech journalist, and I've been thinking a lot about how we're using technology right now and how that's going to affect politics and education. The fact that we're sitting here having this MOOC. You know, MOOCs have been around for a while, and they've been really helpful. I think now they're going to become much more the norm. And one of the things that's great about the MOOC, and this one, in particular, is that it's very international. It's bringing together bodies of students that are normally not interacting with each other. And of course, it's hard to interact with 6,000 other people in a MOOC. But the fact is that this is a small moment of community that we're creating right now.

This is a group of people from all over the world speaking many different languages who are listening to the same ideas and who are going to come away from this class thinking differently about how to do reporting, and how to do writing, and how to interact with their communities. And I can't understate how radical and transformative that is. I think that's something that could carry over into how we do our politics. I think obviously there's going to be a lot more emphasis now on political engagement online. We're already, in the United States, we can now listen to the Supreme Court deliberating over the phone, which is something that people just didn't have access to before.

At one point in my career, I was very interested in a Supreme Court case that had to do with file sharing, and I slept outside the Supreme Court all night waiting in line to get in to hear the arguments, which was pretty exciting. I wouldn't want to do it now. It's like a lot easier to do that when you're in your 20s. But that just means that, you know, people who don't have the ability to go sleep outside the Supreme Court can now listen to how they're arguing over very important issues.

So on the flip side, I think that we're going to see a change in how people interact in the real world, too. I think it's very obvious that it's going to change social norms around how people sit together, how they use transit in countries like the United States, where we're just terrible at wearing masks. Like there's just no culture of mask-wearing here the way there is in Japan, and China, and a lot of other countries where it's just normal. Like people wear masks all the time. You know, it's going to really change how people look at each other.

And one of the things... Here is...an interesting knock-on effect. So in the United States and in a lot of European countries, there are laws against people covering their faces in public, and nominally those laws are supposed to discourage crime. But I think as many groups have pointed out, they are basically laws that are intended to criminalize being Muslim, and for women who want to wear a hijab or want to cover their faces.

And once we have normalized the idea in the United States that people need to be wearing masks, I don't think those laws are going to be able to work anymore. And so I think weirdly, it could give us some political freedoms that we didn't have before. Freedom of expression. Freedom to wear what you want to wear and to not be criminalized for it, and that makes me really happy. I just feel like that's a great outcome is that, you know, well, too bad your racist laws will no longer be able to work if you want people to live.

So those are the kinds of things that I like to think about, like the weird little byways, the weird effects of how public health will spill over into these other parts of our lives and potentially make them better. There are obviously many ways that things will be worse.

I think the other thing that we're going to see going forward is an even greater emphasis on how we're going to allocate health care spending. And this is especially important in countries like the United States, where...we have a very thin amount of....We have a...How should I put this? We don't really have a national health care system.

We do not.

I mean we have a thing that could be a national health care system. So I think we are going to see a lot more public interest in how we're going to make health care more widely available. I think that it just makes it so viscerally obvious that people will die.

And then finally, like again, these are all little things. I think we're going to see, you know, a lot more interest in automation in terms of how to get into a place without touching the door, or how to flush a toilet without touching the toilet, and things like that. And all this sounds really great. You know, the idea that, you know, we'd have more technology helping us have classes and technology helping us get through life without having to touch surfaces that might be contaminated.

But where I would end this speculation is by saying that all of these things are going to once more call attention to the incredible division between the haves and have nots because there are going

to be the people who can afford to have a computer that allows them to take a MOOC, that can afford to work in a building or live in a building that has automation, that can even have jobs. And there's going to be the vast majority of people who don't have health care, who are working in dangerous jobs and aren't being compensated for it.

So I think, again, all of this stuff comes back to this question of how are we going to deal with our essential workers who have been mistreated and marginalized. So, yeah, I think the next three to five years are going to be full of issues around worker rights, health care, and a lot of online classes.

Including this one.

Yeah.

Which all of us, I think I speak for all of us, when I say thank you for calling this MOOC radical and transformative.

I mean, just calling it like I see it.

Well, thanks so much. These were really fantastic thoughts. Thanks for joining our class.

Yeah, thanks for having me. Good luck.