

Festival of Ideas

Cathy O'Neil in conversation with Andrew Kelly

Andrew Kelly: Hello, and welcome to Bristol Ideas. I'm Andrew Kelly and I'm with Cathy O'Neil. Cathy O'Neil is the author of the best-selling *Weapons of Math Destruction*. She received a PhD in mathematics from Harvard and has worked in finance, tech and academia. She launched the Lede Program for data journalism at Columbia University and recently founded ORCAA, an algorithmic auditing company. Cathy O'Neil is a regular contributor to Bloomberg View.

We're talking today about her new book, *The Shame Machine*. Cathy, thank you very much for joining us.

Cathy O'Neil: Thanks for having me, Andrew.

Andrew: Cathy, shame for you is personal and philosophical, isn't it?

Cathy: Yes, exactly. Shame, of course, for everyone is personal. Shame starts out as a personal thing. My work as a mathematician, data scientist and journalist came up against shame quite dramatically when I was researching my book *Weapons of Math Destruction*, because, well, in a word I realised that shame was the underlying power that some of these algorithms had, and that fascinated me. Especially because as a mathematician, that particular brand of shame wasn't something that would be effective on me.

So let me explain. These teachers were being fired based on an algorithm that no one could explain to them. And when I interviewed them, I would ask them, 'So did you ask them to explain it to you?' And they'd say, 'Yes, they told me it was math, and I wouldn't understand it.' And I was like, and then what happened? I expected them to say, 'And then I, you know, cussed them out and insisted that it was my right to know as a public servant exactly how I was being evaluated.' But no, they didn't say that. The next line was always,

'Yeah, well, I accepted that, I was silenced.' So that was just fascinating to me. Because as I said, as a mathematician, if someone tried to math shame me, it simply wouldn't work. So it was a strange kind of power to have over somebody.

Andrew: In the book, you situate the issue of shame within the way you've personally been shamed, in terms of weight and in terms of diabetes. Tell us about that experience.

Cathy: It's sort of a follow up to my observation of what happened to teachers in the face of math shaming. I put that in my pocket and a couple years later I was researching bariatric surgery, because I was at risk of getting diabetes. I was turning 40, my father had gotten diabetes at 40, my brother two years older than me had gotten diagnosed the year before. And I had all the risk factors, you know, obesity and I was having more and more trouble exercising. So I was doing my research because I knew that bariatric surgery was a very good treatment for diabetes, and it actually prevented it. And I should add, by the way, that I had been very fat shamed as a child, I'd spent much of my teenage-hood and young adulthood dieting unsuccessfully.

At some point, I thought I was over it. I thought I transcended that entire source of shame. Bariatric surgery is a weight loss surgery, primarily, even though it also should be a diabetes cure, in my opinion. Anyway, that's a little context, but I decided the summer my book came out to research bariatric surgery. And I was just inundated with fat shaming messages on ad tech, in the ad ecosystem that I had worked on. I knew exactly what was happening. That was the irony of it – I knew why these ads were being served to me because I've served ads to people based on their profiles, based on their search words. So I could even sort of explain it to someone. And yet the effect it had on me was dramatic. It confused me, it baffled me, it made me feel like crawling into a ball. It made me want to pay for a quick fix. It really made me just wonder, how can I make this go away? It made me, in a word, cede my rights. And that was the connection to the teachers that I'd seen

before. It was like, oh, I get it now. Shame does that. It makes us fall apart. Our sense of identity, our sense of self-worth falls apart so dramatically that in that moment of cognitive dissonance, where we're like, 'Wait, am I a good person? Am I worthy, or maybe I'm not worthy.' At that moment, you are just willing to grab at straws to try to reestablish yourself.

Andrew: When I was reading the book, I was thinking back to my school days, when I went through various periods of being shamed. I can recall many times having to stand in the corner because I'd misbehaved. I can remember dropping down classes at school, which my parents were not happy with and made me feel quite ashamed. And growing up relatively poor and living in what we call council housing, and you call public housing, you felt ashamed in a way, in comparison to some of your colleagues. But one of the most cruel things I remember at school – which I didn't suffer from (as lunch was always at home) – was free school meals. The kids at school who had the free school meals had to stand in a separate queue, so everyone knew who they were. And they suffered for that. There's no question about that. And I do think some of the things that I felt humiliated by, that I'm ashamed of, did stay with me for a long time – and I didn't have the worst of it, and certainly didn't feel ashamed during a period, for example, when social media existed.

Cathy: Yeah, well, there's a lot there. But I just want to jump on that notion that your school had a separate line. One of the things I kept coming to, just sticking with the teachers I talked about earlier, for example, for a moment, is that the power of that unfair scoring system. By the way, mathematically speaking, that was almost a random number generator, I later found out, it was very meaningless. So one of the reasons they were hesitant to explain it to the teachers is because it was random. It was just a tool of power over the teachers. And it was inherently shaming. Inherently shaming. Because it was just a number that was supposed to evaluate your teaching. And then on top of it, if they asked questions, they got directly shamed. It was a great

example, I think, of how shame is used by people in power to maintain the status quo, and to blame the victims of a shaming system.

I think that school lunch example that you're describing is another example of that. I actually have a section of my book devoted to school lunches and to school lunch and shame. It's just dramatically terrible. It's the best sort of example in fact, I think, of what I call punching down shame, if I may – shaming somebody based on something they cannot choose to conform to, or shaming somebody who has no right to defend themselves or no chance to be redeemed. I call those choice and voice. And both of those, of course, are completely obvious when you're talking about children. And moreover, it's an institutional design of a school room, a school lunchroom, that does this. It's embedded in the actual design of the institution to shame children for being poor. And what it does successfully, besides shaming those children, is it sort of sets up a lifetime of saying you're poor, it's your fault, you should be ashamed, rather than the alternative, which I think is kind of the reason that we do it this way, which is this is a society's problem, we need to help folks, we need to decrease inequality, we need to remove dignity violations, and we need to recognise people's humanity.

That's just too much work for us as a society. We don't want to do it. We don't want to do that work. We don't want to acknowledge it as a universal problem. So we just blame the victims and it's just institutionally embedded. And it's a great example.

Andrew: Let's stay with punching down at the moment and then come on to the to the other area. You talk in the book about various examples of this: addiction, obesity we've talked about, poverty we've talked about, but also about ageing and about dementia. Tell us a little bit about that.

Cathy: I was lucky enough to give a TED talk about my first book, *Weapons of Math Destruction*, on the themes of that book. And I met an anti-ageing activist, an ageism activist, Ashton Applewhite, who really explained to me

just how unbelievably ageist we are without even really acknowledging it. It's not the same thing as fat shame, where you're actually just allowed to say, 'Oh, you're fat. You must be lazy,' you know, just blame people for being fat. That's just like an actually acceptable form of taunting, at least in the United States. When it comes to ageism, it's just a little bit more subtle than that, but in some sense more prevalent. Because we talk about ourselves that way. We say, 'Oh, I feel old,' you know? Once you start sensitising yourself to the extent of ageism happening around you, it's baffling. So it totally makes sense.

In fact, I think, probably the most traditional profiteering industry that bases itself on shame is the cosmetics industry. Probably the first industry that sort of really, truly profited directly by saying you should be ashamed of yourself for the natural ageing process happening to your body and in order to, like make that 'go away', quote-unquote, because you're not actually going to make that go away, you should buy this product from us and we will make you feel like you're doing something about it. And by the way, not coincidentally, will also make you feel like there's a choice in the matter when in fact there is no choice. So that's sort of classic punching down shame, that you're acting as if there is a choice, and you should make the right choice, and you should buy our product in order to do that.

You talked about dementia. As a rule, I enjoy debunking pseudoscience. So I grabbed the opportunity in this example, which was the product called PrevaGen, which is highly, highly advertised in the US. Maybe also in the UK, I'm not sure. But it's this... it's really terrible statistics. One of the things that's different, instead of just shaming women, it actually shames men just as much, so that's an innovation, I guess, which is to say it sort of makes people feel like oh, if you're older, you must be losing it, you must be going senile, you're not as quick as you once were, you have to keep up. And a lot of the ad is in the theme of you have to keep up with your younger colleagues. And the idea is you take this extract of jellyfish, and then you're smarter and you have better memory. There's no evidence to that. The so-called study that

they designed failed to come up with anything so they just did a bunch of cherry-picking of data until they could claim that they had a result, which was absolutely not science.

But I guess the larger point is... well, there are two points. One is that it turns out it's very profitable – because this is a company that's making a huge amount of profit – very profitable to shame people based on the natural ageing process. And number two, it helps to have pseudoscience backing it. So there's like that kind of authoritative, you know, you're not as scientist yourself, so you can't ask questions and you should just trust us – that aspect, which I'm always attuned to, because as a mathematician, and as a scientist, it is an abuse of authority and trust.

Andrew: It's incredibly valuable work you've been doing there. You talked about the shame industrial complex. Could you explain that for us?

Cathy: Yes, so I wanted to sort of capture this notion... Shame, of course, can happen between two people and I talk about that as well. But I wanted to capture this larger notion that I was becoming aware of in my observations of shame, where institutions and corporations were either profiting directly by shaming people or they were institutionally propagating themselves, keeping the status quo fixed by shaming people. This social mechanism of shame was being used to profit the institution. One example would be the Catholic Church. Instead of acknowledging the abuse by priests, they shamed the victims for decades, just to avoid accountability, right? So there's a huge amount of power shame, shaming by power to hold power to maintain power. And then there's profiteering shame, which is shaming by companies to make money.

Now, I will add, by the way, that there's a new form of that second type, that profiteering type, where instead of in the traditional model – the cosmetics industry, the weight loss industry, I would even say the rehab industry, and for that matter, pharmaceutical companies like Sacklers which were

profiteering off addiction, that model is to make people feel ashamed to make them buy your product – there's a new model, and that is social media, which is not directly shaming people to make them buy your product, but rather setting up an environment where people are become addicted and conditioned to shame each other. And while they're doing so, profiting off them. In other words, Facebook and Instagram, TikTok, all of them, they basically build their algorithms to serve you the content and put you in an environment, a designed environment, where you and your friends will be served the most outrageous content from the other nearby but different norm group.

So you'll be outraged and you'll lob a shame grenade over the corner of your circle to the next circle over. They will then become outraged that you tried to shame them and they'll fire back and you get in these endless cycles. Why does this work? Because it optimises profit for the social media engines. And so it is not surprising when you think about it. That what keeps us on Facebook – which is what they optimise to do – is getting into these shaming spirals.

There are two reasons for that. First of all, shaming feels terrible. It feels terrible to be ashamed, so you really want to punch back as soon as it happens. And number two, which is probably even more important, it feels good to shame other people, it actually feels good. There is a pleasure centre stimulation when we shame other people. And that's OK historically, right? We evolved not just to survive in a community, but to police that community to some extent, in order to keep the community cohesive. So there are impulses to shame other people when they break the rules that that can be healthy. But in the age of social media, those sorts of healthy impulses have been hijacked to become toxic. And that's actually what we get retweeted for and liked and reposted for. So we get conditioned to perform more and more toxic behaviour in the context of shaming and in the context of profiting the social media platforms.

Andrew: So you've got punching down, but you also talk about punching up, and perhaps a better use of shaming techniques. Tell us about that.

Cathy: I've only talked really about un-useful versions of shame until this moment, but I don't want to make the claim that we should stop shaming. Shame is really important. As I pointed out, there are healthy uses of shame. Shame is essentially the way we convinced people that there's something that they want and then there's something that the community that they live in wants or needs, and they have to balance those two issues. They can't just do what they want, they have to sometimes do what the community needs them to do. An example would be shaming someone for hoarding food in a famine. You have to share your food in times of scarcity. And that's appropriate. It's appropriate because it saves lives. And the flip side of that is being ashamed, being shamed, feels so bad, in large part because in the context of famine and hoarding food, if you were doing something that was shameful, the threat of being expelled from the community and dying of exposure was real. So it made sense for it to be an existential threat to your existence.

So punching up shame, which is basically the opposite of punching down shame, means that you are shaming somebody who has a choice and who has a voice. And again, what that means is they could conform to the norm, they have the choice to, unlike somebody who's poor who can't just be like, 'Oh, I've decided to be rich.' They have a voice which means they can defend themselves if they've been misinterpreted. It means they can be redeemed, which means that they're going to be seen by the community long enough to be seen to be improving their behaviour. So it's not like a sort of drive-by shaming event where you just shame someone, you never see them again, you lose touch with them, which so often happens on social media. Punching up means, 'I'm watching, and you have a choice and you're making the wrong choice, and we need you to do better.'

Andrew: I think when it comes to holding the powerful to account, for example, we've got a very interesting case in the UK at the moment where our two senior politicians, the Prime Minister and the Chancellor of the Exchequer, having claimed not to have attended parties under lockdown, abiding by the rules that everyone else was expected to abide by, have recently been fined for attending parties during lockdown and have refused to resign. It's a problem compounded by them effectively misleading Parliament, which should be a resigning matter. But it is difficult to see, particularly at the moment where the argument is, well, they've apologised, it was a mistake, they've paid their fine, but there are bigger issues to deal with – the cost-of-living crisis through to Ukraine – how shamed they can be, and what action can be taken against them.

Cathy: I completely agree with you that this is a perfect setup for punching up shame in the following senses. They have broken norms that they expected other people to agree to, evidently. And so there is a sort of shared norm by which people – and by the way, I should say that punching up, even though it means it's appropriate shame doesn't mean it's going to work. So punching up shame doesn't always work. It requires that the people you're targeting actually share the norm. And it requires that there's a certain amount of pressure for them to conform beyond just their felt shame. So is the norm truly universal? That's an important question. And I think that probably the most disappointing thing for the average citizen is that maybe Boris Johnson didn't actually believe in these things, believe in these rules. And that's the hypocrisy that is so obnoxious. Maybe he doesn't mind misleading parliament and that's also something that's shocking, because that's a norm that is expected to be universal. And then the question is, is there enough pressure to actually force him to do more than just apologise? And, of course, I did in the book talk about the fact that there's a difference between a fake apology and a real apology.

I have this notion in my book, which is the phases of shame. The first phase of shame is when you just feel ashamed. There's the possibility that Boris

Johnson just never felt ashamed of his actions, so that would really mean that he doesn't share the norm in the first place. So let's put that aside as a possibility, in which case it's just not going to really work unless somebody else makes him resign somehow, with some kind of threats. But let's put that aside and assume that he did actually feel ashamed of this.

The second stage of shame would be a cognitive dissonance, where you're just like, 'Am I a bad person for this? I don't want to think of myself as a bad person. I will stop thinking about this.' So it's kind of a denial phase. Most people have private issues that they feel ashamed of, and they have private interactions with themselves over it. They can sit in denial for years, possibly forever. They could get triggered to feel shamed about something again, and then go back into denial. That's typically how people end their lives. They don't really go to the third stage. Which Boris Johnson was probably forced to, because it's not something that can be left alone, right?

The third stage would be reckoning. That's a personal reckoning. That's when you say, 'Oh, I really did something wrong. I really did something wrong.' By the way, you can also go through reckoning and the stages of shame if it's punching down shame, where you recognise, 'Hey, this doesn't work for me.' I feel like I went through stage three at the age of 25 when I said diets just don't work for me. And even if you go through stage three, you can still be triggered back to stage one, as I was researching bariatric surgery. I felt fat shamed again. So then the question is, did Boris Johnson ever actually reckon with his shame? That's a big question.

And then the fourth stage if one gets there, which is not always true of course, is when you don't just reckon with it as an individual, but as a society, that's when you say, 'Oh, wow, like people like me are really screwing it up for the rest of the people because we set bad examples and blah, blah, blah.' It's thinking about it as you are not just one person, but as a member of society. It's a social justice issue. Sometimes, if you're thinking fat shaming, you're like, wow, like, the diet industry really makes money off of products

that don't work, and they charge us money, and they make us feel bad for the product failing. That would be stage four of fat shaming. So going back to the apology, and I'm sorry this is such a long-winded answer, but you can really tell when somebody apologises whether they've gone through the reckoning.

You can tell when a when somebody's gone through the reckoning phase, the first or the second reckoning, as a personal matter or as a social justice matter. If they haven't... let's start there. If they haven't gone through that reckoning, they will say, I'm sorry it made you feel bad, what happened. Because they haven't acknowledged, they haven't reckoned, they haven't acknowledged that what they did was shameful. And they can't say it out loud.

It's actually kind of amazing when you're observing this...I mean, I'm not saying it's a perfect model for how people go through shame, but it's a pretty good model. You'll see that when people really have reckoned, they'll say it. They're like, 'Oh, yeah, I did it wrong. I was wrong. And I hurt people. And I'm sorry.' And that just makes such a difference, because it's a real apology. I haven't studied Boris Johnson's apology. But certainly paying a fine doesn't require reckoning. Giving a true apology does.

I have an example in my book of George Wallace, who was a segregationist, a virulent segregationist. He blocked Black children from going into a school at a certain point. And then he was shot. He was running for president against Shirley Chisholm, a Black woman, who visited him in the hospital after being shot, and he was so touched by her humanity that he really went through the reckoning, not just for himself, but as a social justice issue. He apologised full-throatedly to the Black community and was beloved by them after that. It just goes to show you that you can actually do something much worse, much worse than having a party when it's against the rules. If you really truly apologise, people will forgive you. The best possible thing that we can say about humans is that we actually do forgive each other. But it does take that

reckoning to have happened and a real apology. So you'll have to tell me what the apology was like.

Andrew: Oh, I think it was... I think its seriousness is in question, really. I think that it's on top of statements made to in the House of Commons saying that no parties took place, and it's also on top of the big campaigns that happened in last spring, for example, on making sure that people didn't break lockdown rules because the NHS, our National Health Service, would have been overwhelmed, as any health service would have been overwhelmed if there hadn't been actions taking place. I think most people... certainly the immediate opinion polling suggests that it's disingenuous, but, of course, these things can change very quickly. So I don't think people accept it. The story has a long way to run yet. It's only the first, for example, of the fines. There are other parties that are being investigated and we'll have to see what happens over the next few weeks. Before this, before Ukraine, before the Russian invasion of Ukraine, there were a number of MPs in his own party who were lining up for a vote of no confidence in his leadership, and it was thought that that may have gone through, but of course the international situation has changed that. But certainly the feeling I get is that people see it as disingenuous. But on the other hand, his colleagues are rallying around him.

Cathy: It's interesting to me, the lawyered-up apology. I think you guys have a litigious society, we have a very litigious society. I talk about Harvey Weinstein's lawyered up apology/non-apology. It is interesting to me, because, again, we do forgive people with real apologies. So the lawyered-up apology is self-defeating, because lawyers never allow you to admit wrongdoing. But without that admission, it's just a fake apology, and it will never actually clear you. I don't know really what lawyers think that they're accomplishing. They're just sort of extending the conversation longer, which is not to the benefit of the person who's trying to get the conversation to move forward. And I think you're right that the war in Ukraine is probably the distraction that Boris Johnson wanted and possibly needed to end this

conversation. But it might just continue. Once people get used to the shock of this European war, I feel like they're going start paying more attention to domestic matters again.

Andrew: I just want to ask you about a couple of other cases. You've talked about Harvey Weinstein. You talk about a number of successful cases of punching up. Larry Kramer's work, for example, was one during the AIDS crisis. And the second one, interestingly, going much further back, was the work of Mahatma Gandhi. Could you just tell us a little bit about those two?

Cathy: Yes, so Larry Kramer was an AIDS activist, a gay man who was simply sort of reviled as just too much at all times. He was too extreme, he was outrageous, which he was for the norms of the time. And I wanted to make the point that punching up is never considered polite. Shame is not a polite tool. Shame is a very crude, vicious tool, actually. Sometimes it's the only tool. And for civil rights movements, it is sometimes the only tool.

Mahatma Gandhi's Salt March, I talk about how he was viciously punching up at the British Empire for just not living up to their own stated ideals. So there's a norm there. And he was saying, you know, you're not what you think what you claim to be, you're hypocritical. And that's never polite, right? It's brutal. To actually punch up successfully requires you to topple the status quo, to expose them as cowards and hypocrites and to force their hand. And these are people who are in power, they don't want to change.... For that matter, Martin Luther King... we have a Martin Luther King Day in the United States, and people always pull out the sweetest, most peace-loving quotes that he said – it's highly edited. It's a very sort of sanitised version of his actual speeches, which were much more progressive and fiery. And it should be said that as much as we all claim to love Martin Luther King today, he was actually hated at the time because, again, he was punching up and he was doing it well. He was not considered civil – that was the biggest complaint, he was asking for too much too soon. It's not civilised.

So one of the most interesting things about punching up is that it's sometimes the only way progress is made and norms are changed.

Me Too is the movement I've referred to with respect to Harvey Weinstein. It doesn't look good for the folks who are put being targeted, right? They don't like it. They complain about it. They think they're going too far. It's uncivil. It's, 'How was I supposed to know, give me a pass because I was raised in a different time, blah, blah, blah.' The point is that, yes, it feels bad to be punched up at. You shouldn't expect, if you join a civil rights movement, that people will thank you for it. People will in fact tell you to stop because it looks bad. And that isn't a sign that you should necessarily stop if what you're doing is what you think is right. But you should, of course, make sure that it is in fact punching up, that it's not just punching down in a performative way.

Andrew: I want to move on to how this can be used progressively now, but just before that, you refer in the book, which is a big debate here in certain circles, about cancel culture. How serious a problem do you think this is? Or is it a problem at all?

Cathy: I think cancel culture is real. I think there is a chilling effect based on the policing of everyday people on social media. Again, there's a kind of pseudoscience going on, if you don't mind me saying it this way, of selection bias. The people who are most loudly complaining about cancel culture are the very people who have a voice and probably made a bad choice and were shamed for it and don't like it, right? So the true people that are being cancelled, the people that are truly being cancelled, I should say, are being silenced. You don't hear from them. There are people who make a mistake, and get publicly shamed for it, and you never hear from them again. Or the people that never get a job because of something they posted or a friend posted on social media that makes them look bad. You just don't hear from those folks. You hear from the people who don't like having consequences to their actions. So it's this ironic thing where the very people complaining

about cancel culture are probably not the ones that are suffering from cancel culture.

I started a blog in 2010 and I really experimented with ideas. I was wrong half the time, people corrected me, and I thanked them. I said, 'Thank you for correcting me because it is a faster way to learn. And I'm going to come out tomorrow with another idea which might be wrong. And thank you for correcting me tomorrow if I'm wrong.' That's just not something I would do right now. I don't know anybody who would do that. Because the benefit of the doubt, the assumption of the benefit of the doubt, is no longer there because we have so many ways to be embarrassed and shamed for making mistakes that we know will live with us forever. I do think cancel culture is real, but I don't think it's being represented by the complaints about it.

Andrew: I think one of the problems with social media is that ability to trawl back and see things that have been said a long time ago. I'm just absolutely thankful that it wasn't around when I was younger, for example, because of the kinds of things that I know I said, which were not, I don't think, particularly dangerous or whatever, but you might not wish to be reminded of them sometimes. And the implications are just so, so intense now, I think. So how do we use shame in a positive way? Presumably you've got to be really careful how you use it. You've got to be sure you don't victimise people.

Cathy: Yes. Well, look, there's two levels that I'm going to give advice. The first level is individual. I will advise people to recognise shame when it's happening. So this is a lens through which to see shame. I want to think punching up, punching down, is it bullying, is it appropriate, will it work? I want you to analyse that before you engage, or even analyse it when you see it happening to other people and go to the defence of somebody who's punched down on, but also just don't punch down on people yourself, including your children, by the way. Don't shame your children for something

they can't control like their body. Very basic things like that. Don't try to control your child's eating. That is inherently shaming and punching down.

So individually speaking, I would say aim higher. Just as important, I think, because I want to aim higher, I'm not trying to blame people for falling victim to the purposeful design, the intentional design of social media, if it's happening to you, it's because you're on social media. It's like you're a pawn in their game. They've gotten you to work for free for them. So I really want to aim higher. And I want to say social media has to be designed better. I want to say that our prison system in the States is inherently a shaming machine. Our welfare system is a shaming machine. Our rehab system is a shaming machine. People who have the power to design institutions, they must design institutions to avoid punching down shame.

And I have this handy way of thinking about that which comes from Donna Hicks, who is a really interesting woman who negotiates peace treaties and reconciliation conversations after wars. She has this list of dignity violations, and she claims that people need to sort through the dignity violations that they experienced before they can go on to a peace treaty. I feel like the dignity violations as a list really encapsulates quite well the signs that your institution is punching down, is inherently shaming. And so what we want to do is design institutions to avoid the dignity violations. And so that's the more important, specific call I'd have for people who read the book is that if you are part of the design of a system or of an institution, avoid dignity violations, because it's going to improve that shaming situation.

Andrew: And I think this is also critically important to what you talk about towards the end of the book, about having the basic services that a good society should have, the free childcare, the decent education, a roof over your head, a job, the chance to work, and even when the jobs aren't there for some people having some kind of guaranteed income programme.

Cathy: From my perspective, the inherently undignified situation of being deeply impoverished is something we can and should avoid. We should take it upon ourselves to control it. And we have that capacity. We just simply choose to blame the victims of these society-wide scourges, instead of addressing it directly. So I think that would be certainly the most direct way of countering poverty shame, to give people money. A large part of the shame of poverty is shaming people for taking welfare. And in fact, a large chunk of people who are eligible for welfare don't get it because of the shame attached to it. And of course because of stupid bureaucratic intentionally shaming processes like paperwork. And when you think about the fact that half of the people living in poverty in the United States are actually children, you're realise just how completely unreasonable this is. It's unreasonable for anybody, but it's deeply, deeply unfair, unreasonable and shameful for us – shame on us for letting that happen. So yes, I think it's pretty clear what we need to do.

Andrew: And a final question, because it's an issue for us here as well – Bristol was one of the leading cities in the trade in enslaved African people and there's been talk about reparations here. And that's something which you cover in your book as well.

Cathy: Yes. I wasn't the person who invented this, and I won't quote her perfectly, but I found someone who said something along the lines of if we can be proud of our heritage, then we can be ashamed of our past. I devote some part of my chapter to the concept of white shame. In the United States, we, as a society, manage to talk all the time about all the people in our ancestry that we're proud of, all the American innovations and the American way and the American dream, and, for that matter, manifest destiny, which is part of that whole story. But it really was an excuse to kill Native Americans and then to have slavery. Somehow we have shed or claim to have shed responsibility for our past shameful acts. But we haven't. We haven't also gotten rid of the things that we're proud of. I don't think that it makes sense.

What I think is actually happening is that as a society, we're stuck in phase two of the shame system. So we're in denial. We're in that cognitive dissonance denial phase. We haven't really gotten through to the reckoning, not as a society. We saw some progress after the George Floyd murder. As a society, we saw more people saying this is just wrong. Racism is wrong. Police brutality on unarmed Black men is wrong. So we have seen some amount of reckoning but we haven't as a country finished that job. And of course, part of that reckoning would require reparations. I'm sure that there's a similar story that can be told in the UK.

Andrew: Absolutely. Thank you, Cathy O'Neil for joining us today. *The Shame Machine* is published by Allen Lane and is available now. Thank you very much.

Cathy: Thank you, Andrew. Thanks for having me.

This interview has been lightly edited for length and clarity. The full version of the interview is in the recording.