The Received Wisdom

Episode 4: Race, Identity, Reparations, and the Role of Ancestral DNA Testing ft. Alondra Nelson

Teaser

Alondra Nelson 00:02 What you want to understand is being so, so far in the past, we can't even wrap our minds about it actually is like in my lived experience and it's in my lived experience and the process of doing this testing.

Intro

[Introductory Music plays]

Jack 00:31 So, hello Shobita!

Shobita 00:32 Hi Jack! How are you?

Jack 00:33 I'm all right, thank you. How are you?

Shobita 00:35 Ah, I'm pretty good. It's finally winter in Michigan. So for better and worse,

Jack 00:41 Hooray! Say now you just, you just settle down. You, you hunker down until what May, August.

Shobita 00:47 No, not May more like April, March. I, I'm always, I always am hopeful about March, but then it snows and it's depressing. But...

Jack 00:59 So, so coming up this podcast, we have the interview with Alondra Nelson, which is very exciting. Before that, um, after last month's podcast, you, uh, sent out a thing on Twitter asking people if there were questions that people thought that we should discuss in this podcast. And some people actually responded, which was nice of them. Some of them are questions that were just, you know, so enormous that you need much cleverer, better

informed people than me, certainly. But they were just a couple that I thought we should pick up on. And the first one was I guess fairly straight forward question, which is given that we are both, you know, academics in science and technology studies, but who think that our discipline has wide irrelevance. The question was what particular ideas or writers have influenced us either to get us started in this world or to keep us going. Do you want to go first with your suggestions?

Shobita 01:55 Sure! And I should say we are going to try to incorporate these questions going forward in various ways. So we'll, we'll maybe pick up on some of the questions that we don't have a chance to answer today, we'll answer them hopefully in future episodes and also if people have questions, keep sending them in and we'll try to incorporate them into, into the podcast! So yeah, I mean, so I think there are basically two books that I read in the beginning of graduate school that to this day I come back to in different ways that have really had a long-term effect on my thinking. And the first is Steve Epstein's first book. It's called Impure Science: AIDS, Activism, and the Politics of Knowledge. There's been endless by now books and movies, fantastic movies like How to Survive a Plague. And, And the Band Played On among others about AIDS activism.

Shobita 02:55 So it's a well known story that AIDS activists had an influence on AIDS policy in a way that activists before them had not had such power. And so the question that Epstein asks essentially is what did they do? How were they so successful? And I should say since then, many, many social movements have essentially taken a lot of the strategies of the AIDS activists very seriously and adopted them to considerable success. And what Epstein talks about is how these activists made two moves. The first was that they worked really hard to understand that the dominant language around AIDS policy, both in terms of discovering the cause but also developing a cure was science. And so they worked very hard to learn that scientific language in order to be able to engage the science and policy making communities. They used, famously a mix of both insider and outsider strategies, but they were able to speak the language of the powerful.

Shobita 04:05 The second thing that they did was that they also asserted that they offered a particular kind of expertise, and Epstein talks about this as lay expertise. This is by now sort of a well known phenomenon in the field of science and technology studies, but the idea that by having the experience of being HIV positive or being a gay man or actually having AIDS, that they offered important experiential expertise that needed to be considered in developing drugs, identifying the cause of the disease, and in shaping policy, and that was the first moment when I read that book that I realized that when we talk about who is an expert, we tend to not think about what makes an expert, right. How do we decide who is an expert? And if you start to think about that question, you realize that we tend to think about experts usually in terms of an expert’s training or an expert’s credentials.

Shobita 05:11 But in fact there are all sorts of expertise that are really central to making drugs as in the case of HIV and AIDS, making policy. Also in the case of HIV and AIDS, but so

many other things in the world. And the book itself is compelling to me because it is really deeply researched and he really does exhaustive work to trace how these activists had this impact, to trace how they asserted these different kinds of expertise and then had an impact. So that's the first book. The second is a book by Yaron Ezrahi who died last year. It's called The Descent of Icarus: Science and the Transformation of Contemporary Democracy. So he talks about how science, uh, and in particular quantification plays a central role in a diverse and heterogeneous society like the United States because there's a belief that quantification produces transparency and that everybody can trust numbers.

Shobita 06:17 As Ted Porter famously said in his book, Trust in Numbers, but that everybody can trust numbers and therefore you can create a solid basis for decision making. But one of the points that as Rahi makes is essentially to foreshadow where we are now in certainly the United States, which is that that's a veneer in some ways that the quantification is actually still just as political and it's hiding particular kinds of normative positions and that those normative positions benefits some at the expense of others. And in particular those that tend to lose are marginalized communities. And so as marginalized communities have gained more of a voice, as there's been more civil society activism around science and technology, we see this, there's sort of more challenges to the basis of policy-making being, you know, sort of unproblematically about evidence or quantification. So it's this real paradox that we're certainly facing, which is that there's distrust in government decision making.

Shobita 07:17 The people no longer feel like government is making decisions in their best interest. And yet the thing that seemed to be the objective basis for decision making, that is quantification, is no longer an appropriate basis. So how do we then produce a different mode of making decisions that we all can actually trust is I think the central question that we're all struggling with. I should say that Ezrahi's book is super hard to read, I experienced, great pains reading it in graduate school.

Jack 07:48 Good pain?

Shobita 07:50 No pain, no gain. I think! how about you Jack?

Jack 07:54 So for me my situation was a bit weird and I did a PhD in, in STS and then very soon afterwards went to go and work in the policy world. So the idea is that, you know, where we're really formative to me were ones that I thought, wow, this is actually practically useful. And that relates to another question actually that we're asked about, you know, how do you, how do you have constructive discussions based on science and technology studies, insights with the people that are making decisions. So I went to go and work for a policy think tank where at the time, you know, the big concern of policy makers was with what was then a recent controversy about the public rejection of genetically modified foods in Europe. And British policymakers were just in a complete state of shock and scientists were in a complete state of shock because this technology that has appeared to them to be so self evidently beneficial was being rejected and criticized on grounds that they saw initially is illegitimate at at a time at which they were sort of

scratching around for answers, the only real answers came from people in science and technology studies.

Jack 09:06 And particularly then it was the group that was working out of Lancaster University who I ended up collaborating with where, you know, these were people like Brian Wynne, Phil McNaughton, and Matt Kearnes and that group were developing a really important body of research about what members of the public actually think about emerging technologies. The sorts of questions they regard as important and the mismatch between public views of new technologies and the views that were imagined by policymakers and scientists who basically thought, Oh, well it'll be fine as long as we can show that this technology is safe. And when it was shown that members of the public had very different reactions, right, they cared about all sorts of other things, not just is this going to be safe for me to eat. It was STS that explained some of those things. So I mean, Brian Wynne was half of the bibliography in my PhD, which was a bit embarrassing because he then ended up examining that same PhD.

Jack 10:09 So it's quite an awkward first moment for a relationship. You know, it's a confusing first date. Um, but he was, he was very good about it and so his ideas were hugely influential and they'll make sure that we put some links to some of the key papers. Um, he tragically, um, uh, has, has still not got around to writing the major book of his thought since, uh, producing his original work, which was on the public inquiry into the Windscale fire, the nuclear power station fire. Um, but there are, there's, uh, a great stream of Brian Wynne's papers that I would recommend to anybody.

Shobita 10:46 Yes. I am also a great admirer of Brian Wynne's. So, but I think we should maybe move to the second question which you foreshadowed, which is that the kinds of work that STS is famous for is, you know, perhaps as you suggested in the GMO case, helping policymakers understand a public controversy, but also STS is famous for showing the normative commitments underneath particular decisions or technologies or scientific findings. But one of our listeners asked, okay, all of this deconstruction and critique is fine and good, but when STSers go out into the world, how do we think about actual construction, actually using our knowledge to build better worlds? And I'm wondering, I know that both of us have been involved in this to varying degrees, so I'm wondering if you can talk about how you approach the kind of traditional STS approach that is often focused in critique, but then in engaging in policy or engaging in technological development and design.

Jack 11:59 Yeah, it's a really good question. And so I find myself constantly worrying about whether in say, discussions with policy makers or discussions with scientists, and I do a lot of work with both, whether I come across as the, as the grumpy critic, and we've talked about this a bit on the podcast in previous episodes, but my approach has as far as possible been to try to engage with the language of science and use that language in ways that can open up new possibilities. So I find myself talking a lot, for example, about experimentation, about uncertainty, about open mindedness and those sorts of things that are often seen as sort of normatively important for scientists and there. And I just see my job as sort of pricing open those things and

saying, well, maybe other people should get to define those things as well as part of a journey towards a richer idea about the public interest.

Jack 13:01 And I find actually that a lot of scientists, they respond to that as an invitation to sort of interdisciplinary collaboration. But also a lot of scientists feel themselves concerned about the narrowing of their own agendas towards, in effect, private sector interests. Right. They're concerned, especially university scientists with what they're doing and whose interests they've served. And so if we can sort of give them some, some tools to, you know, bring some of that idea of the public interest back into their own work, then well, I find we can often start a constructive discussion from which, you know, new things can, can build. What about you Shobita?

Shobita 13:42 So I guess I'd say a couple of things. The first that I want to emphasize is that too often I think critique and deconstruction get a bad rap. We don't actually engage enough in nuanced and sophisticated analysis and critique of the ways in which both science and technology and science and technology policy are shaped by particular value and political positions. And so I don't want to cut off or limit that critique in any way. I think, uh, what that does is allow us to have a fuller understanding of what is at stake when we fund particular scientific projects. When we, uh, choose particular regulatory approaches to technologies, for example, I want us to be more clear-eyed. So I often start from that place. And then what I found in my own work is that two things happen. One, and this is true from the work that I did early on, on genetic testing for breast cancer and the gene patents related to breast cancer, was that that kind of work looking in detail at the values and politics underneath both the patents and the technology helped to both make connections about what are the implications of these patents that weren't necessarily obvious, right?

Shobita 15:15 We could then imagine what might a world look like if we do we really need these patents in the first place. How would we be able to design these technologies to produce different kinds of social worlds, emphasize different kinds of values and those kinds of interventions have had policy impact. I have gotten the opportunity to shape policy based on that kind of approach. The other place that I think that this deconstructive work can be useful or at least the kind of pointing out the normative dimensions of both, um, the technical and the sort of technical policy is also in showing where there are actual opportunities for more democratization as you were saying, more public engagement, that if we show, for example, that these technical decisions that the patent system makes are simultaneously political, then we can start to talk about whether the folks who were involved in that political activity are the folks we want in that political activity. But I wanted to, perhaps on this note, I wanted to talk to you a little bit about, I'm very curious because the very famous and very strange meeting that happens once a year in Davos, Switzerland, there's the meeting yearly meeting of the World Economic Forum, and you got to go earlier this week. And so I would love to hear about what your observations were with that lens, with the critical lens that you bring to it. What was your experience like there?

Jack 16:49 Yeah, so I had a sort of last minute invitation from my own university. That's where basically they said, Oh God, we need somebody to come and say something about artificial intelligence. And so yeah, I jumped on a plane to Switzerland and I mean my first thought is that if that is the meeting of the 1% of the 1%, right, I was very much in the 99% of the 1% of the 1% so there's always somebody more important than you at Davos and there's always, you know, most of the places in the town you can't go because there's somebody more elite with a different colored badge that lets you get in. So we were sort of on the fringes of the fringes, but I did have a walk around to just try to make sense of that place. And the first thing I would say is that it's definitely not a meeting of minds and that the point of it is not to engage in a battle of ideas.

Jack 17:41 You know, it's not the marketplace of ideas. What it is is a huge networking opportunity for elites who need an occasional place where they know that they're only going to bump into other elites. And so it's very, peculiar in that regard. It's a safe space for elites. I was, yeah. And I had a wander around the town to try to get a sense of, you know, what, try to get a sense of, I guess, where the power is in that high concentration of power. You know, you get a sense that, that China is asserting itself more and more as the American, and to an extent European enthusiasm for globalization starts to wane. And you also get a real sense that the world's most powerful companies are now the tech companies. But you walk around the town and you know, these companies, Google, Facebook, Palantir, they've all bought out enormous buildings and done them up to look like their own corporate showcases where you can go in and they will preach to you about tech for good and how they aren't just making profits.

Jack 18:49 They're also making the world a better place. And so you could, you sort of get a sense of what narratives they're trying to tell. You'll get an interesting sense of who's no longer in charge. Um, but what struck me is it a sort of interesting thing. It's the ideas that get communicated and sort of vacuous ways through the media. They're sort of big one from this year was I guess the calls that technology companies are making to regulate artificial intelligence. And I think, you know, it's fascinating whenever you see a, an industry issuing a call for more regulation, then something peculiar is going on. And my skeptical I would suggest, and a few of them, you know, news takes have suggested this too, that the reason they're calling for regulation of artificial intelligence is as a form of distraction from what they are currently doing in the here and now.

Jack 19:40 Right. The future becomes actually quite convenient way to, in fact, what they're doing is kicking the, kicking the ball down the road, um, and saying, Oh yeah, regulate artificial intelligence. Cause it could be a problem in the future rather than think about what artificial intelligence is already doing in the here and now and think about what we're already not doing as elites to tackle. You know, the big issue still for the social movements that hang around Davos was climate change, right. Inaction on climate change? Yeah. But let’s worry about artificial intelligence. So it's a fascinating, peculiar dynamic and if anybody out there is desperate to go, let me just say that you don't have to, um, it's, it's just simply not that interesting. Um, so tell us about the interview that's coming up, Shobita.

Shobita 20:23 We are going to talk to Alondra Nelson who is at Princeton university. She's the Harold F Linder Chair in the School of Social Science at the Institute for Advanced Study. And she is currently the President of the Social Science Research Council in the United States, which is sort of a think tank slash research funding organization that's really focused on social science and the related disciplines. It's a unique institution in the US. Alondra has a long history of thinking about the intersections between race, science, and medicine. Her most recent book is called The Social Life of DNA, which is what we spent most of our time talking about, which talks about the history and politics of ancestral DNA testing, which is incredibly fascinating and controversial in terms of what kind of information it gives you and what accuracy means in this context. But what we spend a lot of time talking about was how ancestral DNA testing plays a really important role in the context of African Americans because in the absence of other kinds of historical knowledge, DNA becomes the basis for carving out and determining one's history but also in contemporary policy conversations about, for example, reparations for slavery. And I just want to note that Alondra's new book and she's written some opeds so we'll include some of that stuff in the notes for the podcast, but her new book is focused on the Obama administration's approach to science and technology policy and I'm excited about that new book that'll be coming out soon.

Shobita 22:09 Hi Alondra. Hi Shobita. I'm really excited to talk to you today, especially about your important work on the rise and ancestral DNA testing and how that's figured in the project of racial reconciliation, particularly in the US among African Americans. The centerpiece of that work was your beautifully written book, The Social Life of DNA: Race, Reparations, and Reconciliation after the Genome, which came out in 2016 so I thought we might start by talking a bit about the most important ways that you think ancestral DNA testing has affected how the African American community sees itself today in historical perspective, but also how it sort of sees itself socially and politically.

Alondra 22:52 Yes, happy to. So part of what the book is is the story of a startup. I mean, it's a story of a new startup industry. And you know, one of the questions I faced sort of three or four years into the research is, you know, why is this thing sticking around? So it's a question that we might ask of, you know, any kind of social phenomenon of particularly a, a socio-technical phenomenon. So you might ask it of Facebook or you know, you might ask it of Napster. I think we're about 15 years into the industry in the United States. And so, you know, I like to remind people that there was a time when it was not a foregone conclusion that a direct-to-consumer genetic testing industry would actually take off. And that there was a lot of work into creating the market and the desire and one of the sort of clear markets from the beginning for in some ways quite tragic historical reasons were African Americans, right?

Alondra 23:48 There was this sort of prevailing enduring desire to know information about identity, and about ancestry of the past. That's difficult for many of us going back several generations. But that sort of hurdle is higher still for African Americans because records were lost and language was lost and kinship was lost and cultural ways were lost and not just lost

like, oops, I dropped them. But you know that there were sort of systematic endeavors to deny, destroy identity and culture and the like, and to create the kind of caste or the category of the slave of the enslaved person. So here you have a new startup industry, and you had a population of African Americans, particularly the early adopters who turned out to be African American, senior citizens who, you know, were kind of coming of age. And were young adults during another moment in which an interest in ancestry had reached a high water mark, which was in the late 1970s with Alex Haley's Roots, first the book and the mini series.

Alondra 24:55 So what that does for a generation of African Americans is to create a desire for connection to pre-slavery roots. But what Alex Haley accomplished and part because we now know that some of his account was fictionalized, was, you know, a tremendously hard thing for any one individual or any one family to take on. So here you have and the aughts, the turn of, you know, the new millennium, this technology, this startup industry that offers the possibility or African-Americans of providing an answer to longstanding questions about identity. And you know, the question is why are people interested in, why is it sticking around? I think for all of us who are social researchers in some way, when something that we're not sure of or that is not the clear forgone conclusion that it's going to stick around sticks around, then that stickiness is telling us something. It's a social practice that is doing a lot of work for people in the world.

Shobita 26:00 So what do you think it did specifically for the African American community than, for example, other ethnic groups?

Alondra 26:0 Sure. So what I mean, what it did in particular was to offer, you know, an answer, a very complicated answer that is really qualified and in some cases hardly discernible as actual science, but offered answers to questions that in some cases could not otherwise be answered about the past. And so it did provide in some cases, forms of, uh, racial and ethnic identity, forms of sort of nation state identities, and mixtures of ethnicity and nation state and race and things in between that allowed people, I mean, we know that identity is powerful, you know, and so these new ways of thinking about selves and families and communities were then able to be marshaled into the world. Um, and these projects that I called reconciliation projects and they kind of vary, but they're all these sort of attempts to, I think, take the sort of DNA ancestry testing results and sort of make them meaningful and actionable in the world.

Alondra 27:12 Right? So there's a concept, you know, in, in sort of history, we also use it, um, and sociology about the usable past. And these are usable pasts that allow people to do other things. So I write about an experience, a religious ceremony called Asara with a group of people who understood themselves based on direct-to-consumer ancestry testing to be DNA Sierra Leonean. So who had inferences to the contemporary nation, state of Sierra Leone based on, in this case, mitochondrial and Y chromosome DNA testing. And I sort of spent the better part of a morning with a small group of folks, about two dozen folks and sort of observed this religious ceremony that was very somber, that included people crying, that included sort of eloquent speeches about the loss of ancestors and about sort of having ancestors who had, might have been lost in the middle passage who weren't sufficiently buried.

Alondra 28:10 And moreover, of course you had been cheated as chattel as you know. So for people of African descent, there was this sort of sense like, you know, I'm not exactly sure where on the African continent my ancestors might come from, but for all sorts of reasons, I understand myself, whether or not I'm in Harlem, in New York city, or I'm in Barbados or in Brazil to be a person of African descent. But for the people that I met who were engaged in the Asara ceremony, for them, this was the first time that they felt that they could really reckon with the sort of what felt like a tremendous spiritual loss for them. And that the tests, even though one could have said to any of them, look, I can tell that you're a person of African descent. They would have said, you know, that was not enough. And it was these tests that for me became an entree point to doing a kind of healing and reconciliation and my family life and my community life and in my spiritual life that was not otherwise available.

Alondra 29:07 So, you know, the challenge for us as scholars of science and technology is that that kind of deep reckoning is being built upon a foundation that is not solid. The scientific assumptions are actually deeply cultural and historical assumptions, um, that can be questioned and should be questioned. And then there's the issue of course, of, uh, the capacity of the reference databases and the opacity of the algorithms that are used to give these inferences to people. But that said, um, and you know, spending 10 years doing this research, it was also profoundly the case that these, not solid rock solid, foundations nevertheless allowed people to do things in the world.

Shobita 29:53 Part of the book, you talk about the reparations discussions and the use of the genetic test results for the reparations case. And then more specifically how it becomes fuel for the fire of reparations in the courts and it sort of engenders, these court cases. And then the courts are sort of stuck dealing with the challenges that you were just talking about in terms of this knowledge being partial and of course ancestry being genealogical and historical and not just genetic. And so I'm just wondering if you can talk a little bit about that.

Jack 30:28 Yes, sure. So in the course of my research, you know, I make, uh, you know, I, it started out as a survey project if you could believe that. So that initial thing was a series of about 30 questions, which was asking people about, you know, why they had done the testing and how they thought about it before and after and these sorts of things. And so, because when I was getting started in 2003, there wasn't a market. I mean they're just, it's, it's really hard to post 23andMe post the sort of cottage industry of genetic genealogy, reality television shows that spring up pretty much first in the UK. And then in the US it's really hard to emphasize this and it's hard for people to understand. And so I'm often at great pains to emphasize the fact that there was no market. But anyways, so I have to switch gears and I, I mean, I'm still interested in the personal experience of individual, um, uh, folks I call root seekers, but I also become interested in the kind of circulation of the meaning and the circulation of the information after people are given these inferences about who they are.

Alondra 31:31 Uh, you know, I started just to hear people saying places that they had seen these tests appear or rumor to appear. So sometimes this was apocryphal, these stories were apocryphal. And one of these was, um, you know, someone said to me, you know, I think they're being used in the reparation suit. And, uh, I had been following a little bit that slavery reparations case, that's a civil lawsuit. It's called Farmer Pellman vs Fleet Boston. It's a class action lawsuit that begins, it's filed first and a Brooklyn court in 2002. And I had been following it a little bit because I write about an African American geneticist who starts one of these early companies called African Ancestry, who had worked on a research project at the African burial ground in lower Manhattan and Farmer Pellman, the lead plaintiff in this class action suit for reparations appears in the archive and the news archive of the African burial ground because she is an activist on the site.

Alondra 32:29 So that's how I come to know her and you know, and then I hear these sort of whispers, these rumors about it being used in a reparations case. So in this case, you know, members of this class decide that they're going to use a, kind of genealogical approach and sue initially 21 multinational corporations, um, including Fleet Boston insurance, Aetna insurance, CSX transportation company and other corporations that exist today in our claim to exist today on the basis of wealth and proceeds that were made from the slave trade. And this was a strategy, I mean, there'd been attempts to use the courts for the struggle for reparations for slavery, which goes back almost two centuries in the past. But there it ran into all sorts of sort of restrictions around whether or not one could sue the executive branch and these sorts of things.

Alondra 33:22 So this was a new endeavor or a new strategy which was using the civil court and was actually suing corporations rather than the federal government, which to many reparations activists even today is understood to have reneged on a post civil war agreement that was going to provide restitution to people who had been enslaved and forced to work without compensation. And so in this case, the plaintiffs suggest that they are the descendants of enslaved people and that they are owed reparations from these companies in particular that to their mind and by their argumentation would not even exist in 2002, if not from the wealth accrued, particularly during the era of the slave trade. And so this goes to court, there's a dismissal and part of the dismissal says, this is not quite verbatim, but, um, something like the plaintiffs cannot demonstrate that they're not merely alleging a genealogical relationship to enslaved Africans of a hundred or 200 or 300 years ago.

Alondra 34:22 And so, um, Farmer Pellman and her lawyers, you know, kind of go back to the drawing board. So this is in 2004 this dismissal. And they come back with a narrower case. They decide, and this is a year, not a year or two into the direct-to-consumer genetic testing industry. And they go to the African Ancestry company. Their office is in Washington DC and purchase genetic genealogy tests for the plaintiffs in this, for this class action suit. And the tests come back with things according to the sort of briefing that the plaintiffs submit inferences to places in West Africa, the Gambia, Niger, Cote de Ivoire among other places. And they suggest to the court that this is proof that they are not quote unquote merely alleging some genealogical relationship to formerly enslaved people. And so in the end, the court says this is not specific

enough and we can talk about the fact that genetic genealogy testing, you know, was kind of a, you know, there's a slippage here because it's upscale and that their tests that come out of human population genetics and the, the sort of us court of law is always only interested in the kind of the liberal individual.

Alondra 35:32 Um, and so, you know, part of the slippage here is that the claim here was a more kind of community claim on behalf of a community or you know, a generation of people and things that they had lost, wealth and as well as identity and other things, but that the court really only recognizes kind of individuals. And so the court would have wanted, one can intimate, would have wanted the ability for one of these individual plaintiffs to be able to trace themselves back genealogically, like very specifically on like a family tree and also to have been able to demonstrate, you know, how that also traces back from a contemporary company to whatever subsidiary of Fleet Boston or Lloyd's of London existed in 1859 or something like that. And so, you know, these tests don't offer that kind of specificity. And so in the end, this is a reconciliation project that's not fully successful.

Alondra 36:28 But on the other hand, this is happening in 2000 from 2002 to about 2006 this is occurring. There's national reporting about this. So there's New York Times articles. It's also the case that around this time the Chicago city council makes its own kind of statement about reparations, you know, as a municipal entity. And so by the time we get to 2014 and the June 2014 cover story of the Atlantic written by Ta-Nehisi Coates, that becomes a, you know, an international phenomenon. And certainly by the time we get to the 2020 presidential news cycle, you know, one needs to imagine that this particular reconciliation project, even if it wasn't successful, succeeded I think in sort of keeping a conversation going about the issue of reparations. And so one needs to understand it. You know, just as we can think about attempts in the 19th century to do this or in the 20th century, you know, this is really the first kind of big endeavor and the 21st century to really make a case for reparations. And so one would, I think by necessity you need to understand anything that came after it in the 21st century as being indebted to it even as it didn't fully succeed.

Shobita 37:42 I think your point about the fact that we have in this country a very individualistic approach and structures that promote an individualistic approach, especially through the courts and that in some ways the DNA testing regime kind of fosters that. It doesn't necessarily foster an understanding of the history of slavery as something that occurred to a community. And that's interesting in the context of what you were just saying about both the discussions about reparations among 2020 Democratic presidential candidates. But then on the other hand, we see Georgetown university's efforts. In that case, I know you've written a little bit about this, that Georgetown has tried to focus attention on the descendants of the 272 slaves who were sold and essentially tied to ensuring that Georgetown university had a financial future. And DNA testing, I think has played a role in that case. Is that right?

Alondra 38:40 So, yes, I mean like it's a very interesting case for all sorts of reasons. You know, it is a kind of turning point for a series of institutional projects around a kind of historical

and political reckoning with the history of slavery. Um, that begins to happen. And the early aughts, again, so this is, you know, this is another instance in which you've got one case in 2002, some graduate students at Yale who write a report called Yale Slavery and Abolition that's really talking about Yale's ties to the slave trade. And then a couple of years later, I think it's 2003, Ruth Simmons becomes the first African American president of an Ivy league institution and her first year establishes a commission to study the links between slavery and, uh, Brown university. And so the Georgetown case that we're seeing now, you know, has these interesting antecedents of institutions really kind of looking to their past and trying to recommend as university communities of sometimes as town-gown communities about this history.

Alondra 39:42 So when you get to Georgetown, what's different is that when this report comes out, the Georgetown commission, which I think is called something on Georgetown, reconciliation and slavery. So it specifically uses the word reconciliation. We've had a decade or more in which it's been become possible to do conventional genealogy at a speed and scale that wasn't possible before. So what's really distinctive about the Georgetown case, which kind of has come to center around close to 300 enslaved Africans who were owned by the Jesuit priest of then Georgetown college. Now Georgetown university at a time when the institution is facing some fiscal constraints in 1838 decide that they're going to sell their property and they're going to sell about 300 Africans from their plantation in Maryland down to another plantation in Louisiana. And so these folks were sold. And because you know, we don't have great records about many things from the era of slavery, but bills of sale, you know, capitalism is good with the record keeping.

Alondra 40:47 And so there was a bill of sale for this large purchase of these enslaved Africans and many of them were related to one another. And so after this kind of came to pass, it had been known by some people on campus, but this made it a lot more public. An alum, there am gentleman named Richard Salini says, you know, the local kind of alumni and university community and later to The New York Times, um, you know, that these just aren't nameless, faceless people that we need to find out who they are. You know, up to this point, we'd had about certainly two dozen, maybe close to 30 institutions that had really endeavored to interrogate their ties to slavery. And in many cases like Yale, I mean you had undergraduates bringing, you know, enslaved Africans to basically be their sort servants and butlers as they were doing their studies.

Alondra 41:35 But this is the first case in which someone says, you know, what are we going to do about this? And so Richard Salini actually hires a bunch of genealogists starts. It's a nonprofit to do genealogy to find the descendants of the GU 272 and part of that project and part of what the genealogists are requiring is that people also do genetic ancestry testing, using the services of ancestry.com and they've created a kind of private group of people that they've used both conventional genealogy and genetic genealogy to infer, you know, connections between folks who claim to be descendants of the GU 272 so here you have another reconciliation project for me, which means a, an instance in which genetic analysis genetic

evidence is being used to sort of intend to answer questions about the past or to resolve issues about the past. And in this case, you know, it's still ongoing everyday in the news.

Shobita 42:30 On a couple of occasions you've emphasized the fact that we're talking about a marketplace, right? That this is, you know, the rise of private companies that are engaging in genetic genealogy. And I'm wondering if you can talk a little bit about how you think that shapes the story.

Alondra 42:50 You know, there's a moment that happens with the African burial ground project in which what we would now understand to be, I think ancient DNA techniques, but they're trying to use these techniques that are still not well established to examine the remains of people who are buried in what was known to be the Negroes burying ground. Very early on, the researchers talk about the fact that they want to basically as you say, create a nonprofit entity, like create a kind of open, you know, maybe a museum based or community centered based database that would use, allow these techniques to be used. And that, um, some of the phrasing was that, you know, it is a human right to have one's identity and that, you know, people should not endeavor to capitalize off of providing this kind of information to people of African descent. And so what I recount is that part of the struggle, the political struggle among the research team at the African burial ground is precisely around this issue.

Alondra 43:45 And there's a lot of dissatisfaction on the part of some, on the research team when Rick Kittles who's, uh, an African American geneticist goes to start a private company precisely for the reasons that you suggest. Precisely because there are people who say, how can you dare charge people for this? And I think it's a little bit of an issue in the Georgetown case as well. I mean, you know, if you write to the Georgetown memory project is I did and say, Oh, you know, I think I might be a descendant. They say great, go to ancestry.com and you know, fill in your family tree as much as you can and do the DNA testing. So like to even participate in this reconciliation project that's run by a nonprofit that is doing truly a world of good. I mean it is actually just history making work, but even that has a ticket price.

Alondra 44:36 There's one question I guess Shobita, which is about the sort of ethics of charging people. It's like almost compounding the wealth extraction that creates the very dilemma that makes these kinds of reconciliation projects around racial slavery even necessary. And then of course the market creates some real opacity around the technology. And the assumptions that are made in the technology. So, you know, I used early on this idea explicitly of this being a startup and part because I want us to understand direct-to-consumer genetics as having everything to do with, you know, a kind of new data industry that is emerged parallel with things like Facebook and Google. And so the issue that's created and this sort of heated sort of race for access to data and other things is that you no longer have academic normal science happening. What you have are people making claims about being able to have a niche market or needing to keep their algorithm secret or keep the composition of their reference database a secret because these are trade secrets.

Alondra 45:46 And so it creates, I think, a conundrum for the consumer. You know, you have to trust that, you know what is in the database or that you can trust the company. You have to trust that if they say they've improved their algorithm and they've gone through all of the most recent scientific papers, um, to really create an algorithm that you know, weights the different genetic markers, you know, as precisely as they think they can, all of that, that you've got to just trust that that's the case. What that has created that's also now become part of the sort of larger field of all of this is you know, consumers are left to and opt to. So it's both volition and I think a kind of constraining of choice often to use third party applications to sort of drill down and the results themselves to compare the results of different companies to learn more on their own about different genetic markers that might be in there.

Alondra 46:43 And sometimes these are to your point, kind of citizen science, open science databases and these are the databases like GEDMatch that are increasingly being used by criminal justice authorities, you know, and totally unregulated to apprehend, you know, suspects.

Shobita 47:04 One of the things that you talk about in the book, I wanted to shift gears a little bit. It seems like one of the most important points in the book is that you talk about the problem with using DNA to settle debates about identity. And I think that that's something that keeps coming up in public discussion and social discussion. Of course, last year Senator Elizabeth Warren famously takes this DNA test to prove her native American ancestry. And you wrote a wonderful oped about that. And I'm wondering for broader public where these kinds of issues invariably get conflated, how do you think we should think about this in a better way? What are the ways in which we should really try to understand the problem with using DNA to settle debates about identity?

Alondra 47:49 So are we, we're just, we're talking about the ways in which, you know, direct to consumer genetics is on one sort of data terrain is like Facebook is like Google. On the other hand, we also think that DNA is the code of codes, the Holy Grail, you know, the sort of scientific alphabet, like we give it a kind of mystical, magical kind of heightened power in the world. And so because of that, because of those kinds of connotations around DNA and also because we live in a world in which we think even even in a kind of post-truth moment that sciences can tell us powerful things in the world. I think there's, um, an unfortunate sort of faith that if you get the right scientific answer, um, with genetics, you know, with a non peer review, you know, science standing in for, you know, direct to consumer genetic standing in for science.

Alondra 48:43 If we can get the right scientific answer, we can just get all of this stuff behind us. Um, you know, I think that the takeaway is for most of what I do research on is that the reconciliation is never really accomplished. You know, there's no sort of final resolution. And so we're seeking science to offer a kind of zero one. Yes, no wrong, right answer. So that's, I think part of the issue. And then I think part of it is, is that we want it to be easier than it's ever going to be to deal with these really tremendous issues of political and historical reckoning that we are going to have to just as university communities, as municipalities, as a national community. And indeed as an international community slog through. I mean coral things have been done in the

name of colonial expansion. Horrible things have been done in a desire to increase markets and to make profits.

Alondra 49:41 And those things don't just go away. And you know, I think as much as particularly in my specific case, which is about racial slavery in the Americas, you know, as much as you want to be able to say to people, Oh, it's a long time ago, get over it. You know, it's also very clear that like until we have these conversations, they're not going away. So with the reparations piece, you know, there was the now retired Congressman John Conyers, you know, for decades, tried to just get a bill passed HR 40 that would merely allow a congressional committee to have a conversation about the history of slavery. And reparations. It was not permitting reparations. It was not a bill for reparations. It was quite literally a conversation. But he could not get that out of committee. Like he could not get his colleagues to say, yeah, let's have a conversation about this.

Alondra 50:33 And so I think, you know, you're faced with a kind of return of the repressed again and again, and in some quarters this sort of sense that science can fix it. And of course science cannot fix it. Um, you know, this science certainly couldn't fix it such as it is. Um, but certainly what needs to happen are really hard conversations and really, you know, people being willing to be culpable for things that happened in the past and people being willing to apologize and people being willing to have, you know, perhaps tense conversations about, um, and science can't do any of that.

Shobita 51:08 One of the things that I really admire about you and your work is that you have really tried, I think to engage in the public conversation around these issues. And I'm wondering, uh, you know, when you tell this story, you know what you were just saying, which is incredibly powerful, which is that, you know, these are these big complicated issues and science cannot solve them. How do you try to make that case and how is that received?

Alondra 51:34 You know, I made a choice. I had some university presses that were interested in publishing The Social Life of DNA and in the end I went with Beacon Press. And in part because I felt like I really wanted to try and reach a broader audience. But I remember the book agent at one point, I was finishing the proposal and she was reading a draft and she said, well, you know, what am I supposed to do with this? I can't sell. I mean she's afraid like I can't sell the No. You know, in my work, the reconciliation projects, like they don't, they're not, there's no success stories, right? The outcome is not like, Oh yes. And genetics, genetic ancestry testing, like saved the day and solved it. And for me that is precisely the point.

Alondra 52:15 And so I try to leave people with, you know, and I think you'll reckon you'll resonate with this as a fellow scholar. I mean, I try to leave them with nuance and discomfort and I try to leave them with, you know, hopefully a kind of bigger spectrum with which to sort of think about these things. So, you know, I also say in my work that I think genetics is important. I think it has been, even if the science is not solid, it's been kind of important. And I think opening up a public conversation about the past, right? And you know, for people to be able to do the

testing and say, you know, I know that you, uh, you know, my colleague, my friend, um, who's not of African descent thinks that has nothing to do with you and feels really far away. But this test, even if imprecise, is giving me an inference that suggests, you know, that not that long ago, these were the impacts of racial slavery in my life or in my family's life.

Alondra 53:10 And so what you neighbor, friend, coworker want to understand as being so, so far in the past we can't even wrap our minds about it actually is like in my lived experience and it's in my lived experience in the process of doing this testing. So I think that for me the answer is not like if you want to take these tests, you have false consciousness and you are being ridiculous. The answer for me is, like, if these give you a useful pass that you can do something with in the world. You know, I want to understand what that is, but understand that this is not gold standard science by any stretch of the imagination and understand that you know, there's no way around the issues of political reckoning, racial reckoning in this country and in this world, but sort of through them and through a kind of deliberate confrontation with them.

Alondra 54:00 And so to the extent that you know, these tests sort of allow people to an entry into the conversation like that Asara ceremony that we talked about earlier. Again, those people at any moment could have been, could have said, I'm a person of African descent and I want to have a ceremony because I feel like something's really unresolved in my life. But they'd not done that. These were people in their forties, people in their 50s, and some cases in their sixties. So they had lived decades and not done that. And it was this testing experience that allowed them to have that moment, right. Even as we can be critical about all sorts of things about that moment. So I just want to leave open, I guess, um, a space of, um, I, I feel like the work of reckoning that has to happen needs people to be open to kind of uncertainty and discomfort.

Alondra 54:51 So that's what I try to leave people with and I know it's not going to be, you know, that's not a satisfying Ted talk. Um, but I think it's the truth of it.

Shobita 54:58 I think what's amazing about your entry point is that you're trying to make that case to a broad audience, right? It's a different endeavor I think to make that case, right, in a university press for your fellow scholars. Before we close, I wanted to just talk to you a little bit about what you're working on now.

Alondra 55:19 So, it became the case that at Columbia, President Obama announces in his 2015 State of the Union address a $215 million investment and what's, uh, being called the Precision Medicine Initiative and Columbia, my home institution working with some other institutions, research centers in New York City, becomes a sort of hub for this work. And it becomes clear that, you know, Columbia is going to be an important player. And so some colleagues in I, you know, bio folks in the arts and sciences, sociologists, political scientists, philosophers, political theorists, um, but also, you know, business school people, legal scholars and the like.

Alondra 55:58 We began to get together and I co convened, co-found with my colleague Paul Applebaum, who's a psychiatrist and also an attorney, uh, something called the, the sort of Precision Medicine and Society initiative at Columbia, which is trying to, to sort of emerge at the same time as this work at Columbia on the precision medicine initiative. But be independent of it. You know, we tried to sort of be formative too or upstream in the process of this work and to really pose independent questions about what does it mean for subjectivity? What does it mean for the person? What does it mean for issues of justice? What does it mean for issues of racism? You know, how should we think about this project? So I'd spent the last year or so thinking about the Precision Medicine Initiative and I became just more generally interested in the kind of big science initiatives of the Obama administration.

Alondra 57:00 Um, and so I've been, that's what I'm writing about. So I'm writing about the Obama Office of Science and Technology Policy that as I looked into it more and more, it was clear to me that it was really distinctive and lots of different ways. So it, by just the sheer scale of it, it was, um, you know, had the most staffers I think in history, uh, for that office, but also for President Obama's interest in these things. I mean, he, you know, he, he had the first ever White House science fair, you know, he was personally interested in science. So I think he's a, he's a pretty interesting figure as a, and it's an interesting moment to think about kind of federal science. So that's what I'm working on. I'm gonna write about precision medicine initiative. I'm going to write about how they framed issues around AI and big data. I'm writing about behavioral and social science that was done in the Obama White House.

Shobita 57:49 It sounds incredibly interesting and I think from what I know of the Obama White House, one of the things that seemed to me to be a sea change was also that they seem to take the “and society” part seriously in some really interesting ways or at least try to do things differently in terms of participation, in terms of intellectual property. They seem to take a different avenue than previous administrations. So I'm very eager to read your work on, on the project.

Alondra 58:28 It's, you know, it's deeply interesting and I think that precisely as you say there, um, something to be said about, I mean, as someone who's written about science activism in the sixties and seventies, I think that, you know, a lot of what we see in recent years, everything from the March for Science to, as you're suggesting, you know, the Obama administration at its best, you know, recognizing that there were issues of ethics and inequality and, you know, participation and inclusion and citizenship that they really needed to address as they were trying to roll out these big projects.

Shobita 58:44 That sounds great. It's been really fun to talk to you. I think what's exciting, as I said about the work that you do is, I think you're, you not only are working on issues of broad public interest, but you're writing about them in a way that is accessible to the public. I admire those efforts and, and hope to follow in your footsteps maybe a little bit. So

Alondra 59:44 thank you. It's such a pleasure to talk to you.

Closing musical interlude...