

AT Welcome to the Infinite Women podcast. I'm your host Allison Tyra. And today I'm joined by Beth Linker, author of *Slouch: Posture Panic in Modern America*, to talk about "the strange and surprising history of the so-called epidemic of bad posture in modern America." What is the "posture panic" and how did it come about?

BL: It's a big question. When I first set out to write this book, I had the title for the book before I had a framing. Someone who goes about to write a book about posture could do a whole Western Civ treatment of posture, because it's not as if people didn't talk about posture, human posture before modern times. But when I really started digging into the topic, I realized that once you get Darwinian evolutionary theories and specifically Darwin, he posits that humans stood up straight before they had language acquisition and before they developed a higher order thinking. Prior to Darwin, most people thought what separated humans from non-human animals was intellectual thought, brain capacity. And so that's why you got all the skull collecting happening in the 19th century. But Darwin comes along and says, "no, I think the spine is actually the first thing to develop and upright standing and walking was the first thing to happen." And that is the necessary thing that distinguishes humans from non-human animals. So that is the context. So it's very much a late 19th century story that then gets picked up by scientists who want to go out and find fossil remains to prove that Darwin is right. Because until about the 1940s, what historians of science call the Darwinian synthesis, which means that everybody kind of came onboard and agreed that Darwin was right, you get a lot of contestation. Some people are still Lamarckian. Some people think Darwin's right. Some people mix and match Darwin and Lamarck together. So you have this group of scientists looking for fossil remains. It's a Dutch physician, anthropologist, Eugène Dubois, who goes to Southeast Asia, because that's where the Dutch colonized, goes to Southeast Asia and finds the fossil remains. So it's like an upright femur bone and a small skull. And he names it *Pithecanthropus erectus*, which then gets redesignated as *Homo erectus*.

AT: And so this led to this idea that if we have bad posture, we're actually devolving, if I recall correctly.

BL: Yeah, that's right. What I say in the book is that basically this is the beginning of evolutionary medicine. So a lot of these earlier anthropologists were also physicians and they start applying evolutionary theory to current times. So if it's that upright standing is really important to distinguish human beings from non-human beings, non-human animals, then what does it mean when they look around the general population or in their own clinics and they see a bunch of people slouching over? And so they end up putting a lot of meaning into that. First of all, they create it to be a disease category, a pathology. So if you slouch, that means you might not only have the risk of devolving, but you also have potential health ramifications. And so I talk about a group of professionals, healthcare professionals, but also physical educators and efficiency engineers. They got together and called themselves the American Posture League. And they were the ones who really developed public education pamphlets. They developed tools to measure posture. And it was a kind of propaganda campaign to get everybody on board to see what right posture was and also to see that poor posture could cause tuberculosis, poor posture could cause all of these kinds of diseases and the way to prevent disease and pain was to stand up and sit up straight. (AT: Or wash your hands. Just putting that out there.) (laughter) That was also in there. Interestingly, the anti-tuberculosis campaign in the early 20th century, that is one of the things that the anti-tuberculosis campaign was very much, like wash your hands and don't spit on anybody and don't sneeze on anybody. They have some fabulous early, early film footage that's just fascinating to watch. And the posture promoters basically took that part of their playbook and actually lined up quite nicely with the anti-tuberculosis campaign of the early 20th century. But what they both shared in common was the belief that preventive medicine was really important. And as I talk about in my book, that fit in with the fiscal conservatism of especially the 1920s. And then just of the US not ever having a very good welfare state and especially health insurance. So if you're living in a society where no one wants to pay for anybody's health care, what you do is you lean into preventative health, and then it becomes the individual's responsibility or their fault for getting sick.

AT: And I feel like this was also an era where a lot of things were being medicalized that we do not widely consider to be medical now. So for example, queerness, whether that's gender identity or sexuality, was widely medicalized. A lot of just things about women, like women being outspoken or having opinions, was treated as a mental health issue. So I do think that this is part of that larger pattern of just medicalizing everything they could, everything they didn't like.

BL: Yeah, it's about disciplining, and trying to create homogeneity. So this is the era of eugenics with white educated men very concerned about "white race suicide," that their wives weren't having enough babies. And all the immigrants, non-white immigrants, at that time they were non-white, so Italians were non-white. Whiteness is a change is a changing category over time. So all these non-white immigrants having many more children than the white middle-class women. And part of the story, too, is that these evolutionary theorists and eventually the American Posture League began to also speculate that Indigenous peoples, Native peoples, "non-civilized" peoples, would serve as the example of good posture. So the argument went that, so if humans separated from their animal origins first by standing up straight, the evolutionary theorists started getting up in arms, like, "oh no, we can't have an evolutionary weakness from the get-go, that doesn't make sense, why wouldn't that be selected out?" So what they all decided would be the cause of the bad posture was civilization, and then particularly over-civilization. And so each person would define civilization differently, but most would say once you get agricultural society, and then especially industrialization and civilization, and then in the early 20th century we have mechanized forms of travel, and then soon thereafter you get radio, soon thereafter you get TV, that appears to characterize, be the pinnacle of civilized life, man-made things. It creates this fear that we're going to be sick or ill or devolved because of it, like the technology is going to make us sick. And you can find that narrative popping up over and over again up until the present day today. So they used Indigenous peoples as the models, so the APL, the American Posture League, used the Lenape chiefs, the Lenape are a tribe where I am here in Philadelphia, and the man who cast this bronze medal was from Penn, worked at Penn. And so they have this romanticized vision of this Indian chief having this very prideful posture, and at the same time that there's all this removal going on where Indian Native American children are being taken from their homes and sent to these boarding schools for discipline and having their posture assessed and their posture disciplined when they're supposed to be the people who have the perfect posture. So that's this really a way of saying, making a distinction between us versus them, of applying worries about over-civilization, and then making these Indigenous people white in the sense of like, "oh, we stem from them, see these prideful people with their perfect posture." So it's a way of making this imaginary of the Native American almost white, when on the ground they're being stripped of basic rights.

AT: Yeah, we've talked before on the podcast, particularly episode about medical racism, how racism, particularly when applied by medical scientists, it's just completely nonsensical, and it is ridiculous in a scientific context specifically, where you're meant to be relying on evidence. But eugenics also was not known as a very logical, in my opinion, movement to begin with. And so other than this aspect that you've been talking about with the weird view of Native Americans, it was also applied racially to other ethnic backgrounds, and it was also classist, like there was a lot of different factors that played into what eugenicists considered to be someone who should be allowed to reproduce.

BL: Yeah, I should say that the posture crusaders were, the differentiation that we scholars often make between positive and negative eugenics. So negative eugenics being like sterilization and trying to actively prevent the "unfit" from reproducing. The Posture Leaguers were more on the positive eugenic side, meaning improve hygiene and physical health in order to improve for racial uplift. They don't really talk specifically about preventing reproduction or sterilization. That's just not their specialty, frankly, they're more like physical therapists, orthopedists. That's their jam, is physical fitness. So they're talking more in those terms. And if we think about the very fact

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that one of the customs that still, is not quite as popular today, but people still talk about it, of carrying books on heads in order to train posture. That's the US wanting to be part of empire, they're growing their empire, especially in the early 20th century. And they're going to other native places where they see head carrying, which is part of laboring of transportation of goods from one place to another in certain cultures. And again, they romanticize these people as having perfect posture, that these people don't have pain. So what you're saying about the medicalization and scientific racism, that again, unfortunately, we still see today of there being a kind of thinking that non-white people don't experience the same degree of pain. It was happening at this time, too, in the early 20th century. And they would see, especially these women who would head carry and say, "look at these gorgeous women," they would sexualize them and also say, "look at their beautiful spines." And then how can we bring this back? How can we train white people to do this and white kids specifically? And one of the indicators of education and being smart was a book.

So they're not even teaching head carrying for like any practical purpose. And I don't know about you, but I think books are probably one of the hardest things, they're not meant to be carried on heads. What is the purpose of that, except for something really symbolic? And as you said, too, there's definitely a class component to this. The American Posture League, I like to say, punched up and punched down. They were middle classers who were, the new professionals, and this included women. So, the two founders of the American Posture League was Dr. Eliza Mosher and physical educator Jessie Bancroft. There were men too, male physicians involved as well. And they were just fixated on the leisure class, the upper class, and complained all the time about how women would dress, how men would dress with their toothpick shoes, that would be bad for your feet. So this is where flat feet comes into this, too, flat feet and posture have a very similar historical story. And these people are kind of an outgrowth of the anti-corsetry movement from the 19th century. But instead of being anti-corsetry, they basically develop new kinds of corsets, which they're going to call girdles and braces and posture-right undergarments, but they're basically corsets. But they do make them for men and women, so there is some kind of equal opportunity. So they're worried about the upper class, and the influence of the upper class, and the upper class the ones who have cards, and travel around, and just are a bad influence. And the debutante slouch is the worst, the woman who has a debutante slouch. And you could find all these images of the debutante slouch turned into the old maid who has a dowager hump. If you become a debutante slouch, you're going to have a dowager hump. And then you'll never get a man. The whole heterosexual impetus of it and attractiveness gets very much baked into the posture crusade. They're also concerned about the lower class, and funnily, there are pictures in the one posture book by Jessie Bancroft. She has this immigrant boy in New York City carrying a basin of water on his head, and before child labor laws, he's carrying. And somehow that's not right, that's still not right, even though they glorified it in other contexts when it's a Native person doing this. So they're very concerned about disciplining these perceived unruly bodies, the literal huddled masses, and they're concerned about disease and cleaning up tenement housing. And posture just is one of these ways that they think they can discipline immigrant children, and those immigrant children will take it back home to their parents.

AT: And I think there's a very strong connection between particularly the classism and this idea that your health is your responsibility and supposedly within your control, because there was a lot of this push for, again, particularly people of color who want to be accepted into higher social classes to present themselves as "acceptably," like the respectability politics aspect of it. So in addition to things like straightening their hair, posture was also part of that. Whatever your racial background was, if you wanted to be upwardly mobile, it created this idea that posture was part of that presentation of a "successful" person.

BL: Yeah, yeah, absolutely. I write about in my book how, among African-Americans, the middle class African-Americans really took on this posture crusade as well, talked about it quite a lot. And you can imagine what's at stake there, of course, because if you don't have a posture problem among your race, and race, again, was defined very kind of capaciously at this time. Women even thought they were of a different race, you see that

kind of rhetoric. So, if you're a race that doesn't have a posture problem, that means you're not civilized. And that means you're way, way, behind the curve in terms of evolution, and in societal progress. So, African-American middle class, Du Bois and others take on this posture crusade as well and are very concerned about in the United States, the Great Migration from the south to the north of former slaves, and they haven't been properly trained in the politics of respectability. So you see these different groups and the stakes for them are much higher, obviously. Because I have a Trevor Noah quote in my book about how, growing up in apartheid South Africa, he was always told Black men look like apes, you have to stand up straight like a white man if you're going to be respected. And there are serious stakes in the politics of respectability for African-Americans if they're going to be taken seriously as a group. But by the same token, they're still being dismissed. They're still being lumped in, or derogatorily talked about as ape-like. So, it's a complicated story. Because in some ways, it looks like African-Americans are capitulating to white ideals of beauty and respectability. But they're between a rock and a hard place.

AT: And so one of the more insidious trends that we see with eugenics was what they called healthy or beautiful baby competitions. And you still actually see variations of this today. Like a newspaper says, send in photos of your baby and we'll judge the prettiest baby in town. I find that really weird. If you want to do it, go nuts. But there was a definite element of ableism and racism and all of that in these beautiful baby competitions. And in the posture context, specifically, I feel like there is a corollary there with so-called posture pageants. So can you explain to us what those were?

BL: Yes, the posture queen and posture king pageants. The posture crusaders, many of them in elementary schools, some in universities and colleges, but also in their community outreach, knew that they had to somehow motivate people to actually buy in on these, "yes, you should walk around with a book on your head. And yes, this does matter that you stand up straight." And they were also really concerned, interestingly, a lot of these were early physical educators, and they really despised the then-burgeoning popularity of sports. And so one way to make posture a sort of sporting activity would be to have a contest. And it is around the time that we get the Miss America contest, and they find that too low class, painted women who are scantily walking about. So they start to organize posture contests. In the early days, it is for men and women, but it quickly, not surprisingly, becomes just something that women do. And you have these posture pageants also, so all the way from the Seven Sisters schools, which are elite exclusive schools, primarily white, but they do have some international figures and some non-white. And then you see it though in the African-American communities as well. So you see this starting and different schools taking it on, different churches taking it on, different little communities taking it on as this fun little activity to see who has the best posture.

And then you can find these like celebrations of the posture king or queen in the newspapers, all the way from a school reporting on it. So Barnard College in New York City, the sister school to Columbia, had one of the first posture queens and they gave her like specs, what her height was, what her weight was. They noted that she did not wear any rouge or makeup. She had a natural beauty and natural uprightness. There was once, a couple years later, there was an international student from Japan. There was once a Native American student as well, was once a Native American student as well, but they kind of glossed it over as white because they would comment on how the winner that year was like dressed in this like very perfectly, what you would see a white woman wearing. And she didn't have any of her "war paint" on. But what was interesting though is reading the African-American, the historically Black press on this and you just have families writing in like, "my daughter Doretta won the posture contest for school," and really proud of that.

So I can't even tell you how ubiquitous they are. I can just say that from reading newspapers, which as historians is just so much easier now than it used to be, you can get a wide range of very hyper-local newspapers, and from digitization, they're just all over the place. It was not hard for me to find posture queen and posture king contests. And it's just really interesting to think about, that this would, I guess it captivated people. And I should also say, it makes me think, remember too, that in schools, in elementary schools, and

this is typical of a certain era of physical education, you would get into groups and your group would have to be collectively graded on posture. And so I have these reports of these kids beating up another kid for not doing well enough on his posture exam because that kid brought down their score and they didn't get the A in posture or whatever. And the teacher who reports this was like, "oh, this is good." They called certain students in the Seven Sisters schools and in other elite schools who were students training to become physical educators, they would often designate those students to be posture police. And the students would go around and can give demerits to fellow students who did not have proper posture. It's a very discipline and punish, really fixating on outward appearance and straightness, which as I talk about in post-World War II, it carries also the sexual component of it as well. This emphasis on straightness and you will be surveilled by other people if you fall out of form.

AT: Very Orwellian. Wasn't there also situations where kids could actually be held back a grade if their posture wasn't good enough, regardless of their grades?

BL: Yeah. Certain schools - in order to graduate with a degree from Smith College, one of the Seven Sisters schools, you had to have a B- at least on your posture exam. And I guess I should say we've been talking, talking, talking. The standard of posture that the American Posture League ended up putting forward was what was called plumbline verticality, which is a line in profile, if you're looking at another person in profile, a straight line that goes from like the middle of the ear down to the ankle bone. And artists use it. It became popular when neoclassicism was all the rage in the early 20th century. And so that was what they considered the perfect posture. And any deviation from that by degree would be A, B, C, D. They would grade it like a class. So a B grade, they would find some deviations from that line and C would be even more deviations from that line. So at Smith College, yes, you had to get a B- in order to graduate with a degree. And this was a time too, so I should say, you brought up ableism and disability discrimination. This tool of posture became something that immigration officers used. And we have records of people being turned away from this country because their posture was just too bad. And the fear was that this person would either become very sick and therefore a burden on the state or wouldn't be able to work and therefore be a burden on the state. In schools, anybody with a severe enough disability would not be in a public school. It was perfectly legal until the early 1970s to discriminate against children with disabilities and certainly in higher education as well. Also in the workplace, it was perfectly legal to discriminate against disabilities. And it was so extreme, I guess one way into this is I, not only in this book, but in other articles, I've looked at the history of scoliosis. And I have reports from people who have like a 30 degree curvature saying, "I was passed over for a job because they said they needed someone who they needed someone who would look better than this." And one of the papers that are in the book, but it's about the rise of the surgical procedure, where you insert metal rods on either side of the spine that's developed in the 1950s, '60s, and '70s. I have all these patients who have scoliosis, what would be considered mild to maybe moderate, asking to get the surgery. And a lot of it's about cosmetic and fitting in because they have, from those accounts, felt very much discriminated against. It's one of those things where I don't know that we can, I think we can imagine what that is because I don't think that the stigma has just fully disappeared, but I don't think we appreciate how much in the workplace, in schools you could be physically examined. You often underwent a physical exam. You had to go undergo a physical exam with you near naked, naked, no clothes on. And then that physician was trained to say, "if your posture is not correct, then it's too much of a liability. It's too much of a risk. This person is disabled."

AT: Well, and that brings us to the so-called posture photos, which to me, that is just the most absurd thing in this entire book, which, there's a lot of things that are just ridiculous in the book, but the posture photos in particular caused quite a scandal at one point. So can you tell us about what they were, the purpose they supposedly served, and then what happened?

BL: Yes. Posture photos come out of the American Posture League, as I mentioned, developed a standard. The first technology they developed was by a woman, Clelia Mosher, Eliza Mosher's cousin, Dr. Clelia Mosher, also known for early sex study.

AT: Yeah, before Kinsey, she was doing a sex study and I love her for it.

BL: I know. Yeah. And so that's why it's fun that she comes in here in the posture story. She develops a schematograph, which is a camera obscura, which traces the outline of her female students and posture. She, very early on, is very aware of privacy and concerned about, because camera technology existed, it was more expensive, it was a little bit clunkier, but at the time that she was developing this, Yale University was using camera photography already. And she wrote, "I cannot use this because I worry about patient privacy, about student privacy." Now, it was slightly gendered probably, but there are higher stakes, and there still are higher stakes for women. But once more male physicians take over in the American Posture League, they keep insisting "no, it has to be camera photography to do posture assessments," and there's no concern for privacy. And so you get early pushback, I think at Wayne State University of Michigan, a couple of women and their parents are like, "you can't have this exam where my daughter is near naked and you have a photographic record of it." And talk about the politics of respectability and how high stakes it was, and a respectable woman did not strip down in front of any man, and nor was there photographic evidence of it. So this is happening in a lot of universities. Some people for a while thought it was only Ivy League, that is not true. It is happening in a lot of universities, it is happening in state schools, it is happening in small schools, it's happening in some high schools, it's happening in hospitals, it's happening in prisons, that these posture photos are taken. But it was at Cornell University, which was historically co-ed, and this is one of my favorite cases of the pushback against the posture photos. So what happened every year, and this was ritual on a lot of university campuses, and this includes historically Black universities as well, there would be what there were called panty raids, where men would have this parade, banging pots and pans, going to the all women's dorm and saying, "hey, we insist on having your panties, give us your panties, give us your underwear." As you can imagine, in certain cases it became pretty violent, and women co-eds would feel threatened. And it was usually on the heels of these panty raids that then there would be stories about how the posture photos had been stolen. And when we're dealing with urban legend, rumor, what's real, what's not real, there was one person who said to me, "do you really know for sure evidence that posture photos were stolen?" I've just seen it so many times reported that I have to believe, and there's actually one alum from Yale, he's now since taken down his website, but he would brag about still having some of these posture photos and how he and his frat brothers, secret society brothers, went to an all-girls school, Vassar, to steal them. So I don't know if it happened as much as was reported, but I tend to believe it. And at Cornell, what happened was there was another report of like stolen posture photos. And I found one piece of evidence that suggested that it was actually the women who went in and stole it so that they could make it even more of a scandal and more of a PR problem for Cornell. And so Cornell did stop posture exams, but they did not stop posture training classes, physical education classes. They would put anybody with mild scoliosis into a remedial physical education class. So that was still going on. So that was in the '50s and '60s that that was starting. And it wasn't until the 1970s when you have FERPA so that in the United States, before FERPA universities ran on a system of in loco parentis, which means in place of the parent and university officials could do anything as, the students were children. The students were children, essentially children of the administrators.

AT: And that's a legal rule. Like this wasn't just a social norm. It was legally, these colleges have that level of control and power over their students.

BL: That's right. And that's how these posture photos were able to happen. And you talk to somebody who lived and went to school in that era, there were things called parietals. And what that meant was there were

certain rules. So there were curfews and you weren't allowed to have this happen and that happen. And so it was very structured. Some universities demanded church attendance, all of that was part of the parietals and the control. And so these posture exams fell underneath that. And FERPA, don't ask me what that stands for. But basically it's a law that provides protection and autonomy to students, and privacy. So once that passes, you can't do these photographs anymore. But even before that, the civil rights movement, the women's movement, this is when at the 1968 Miss America pageant that they have the big protest, right? And so that is happening on a lot of college campuses, also the disability rights movement. Some of the early disability rights activists, the ones that we know, Ed Roberts and Judy Heumann, universities tried to keep them out. So Ed Roberts went to UC Berkeley. At first he was rejected because they didn't think they could accommodate him. But another reason he was rejected was because he couldn't pass a driver's test and he couldn't pass his physical education mandate for high school. And he took that to court, he and his mother, and they fought against it. So, if physical education really kept the scientific ableism, what I talk about in the book, alive and well, I would say it probably still does. And so it's when disability activists started fighting against that, these rules and regulations and mandatory physicals. All of that together made this practice of posture photography come crashing down.

AT: Well, and then there was this scandal, which I find interesting because I have to wonder how much of the outrage that came out of this was because the women in question, A) were women, but specifically were typically wealthy, influential white women. So can you tell us about the grad student who wanted to use these photos for research and what happened from there?

BL: Yeah, yeah. So the practice of posture photography ends about 1970s, although I do have a case where once Vassar became co-ed, male students could still have a posture photo taken and get posture classes. And I have a male student saying, "I really like these because I care about my looks." So again, this double standard, like, okay, he can do that and they're not high stakes. So pretty much the practice stops. And then in the 1990s, Ron Rosenbaum, who's a journalist, writes this exposé for the New York Times Magazine. He himself was a Yale graduate. He himself had a posture photo taken. He ends up at the Smithsonian archives in Washington DC and in the William Sheldon papers, which William Sheldon is only tangentially related to this history of posture photography, even though Ron Rosenbaum makes him more central than I think is warranted. In any case, Ron Rosenbaum is like, "I found all these nude photos and he calls it The Great Ivy League Nude Photo Scandal: Nude, Nude, Nude. And really is like, "I think there are famous people like Hillary Rodham Clinton and Meryl Streep and there're nude photos of all these people." This was in 1995. It creates incredible outrage among alumni. The morning after that New York Times Magazine article was published, archivists who I interviewed talk about the nightmare of the day after, of the phone ringing off the hook - this is 1995, no email - the phone ringing off the hook, really incensed alum. And because Ron Rosenbaum tagged it as an Ivy League thing, is primarily alum from the Ivy League. Rosenbaum is saying that all of these photos exist. And what happens is that university officials make their archivists go into their file, and do we have these photos? And by the way, if we do destroy them. Even though a lot of archivists are like, "wait, that's not how we operate." And university officials and legal is like, "I don't care." Because they care about donors. Because in the US, a lot of universities bank on getting donors and money from alum. And they can't risk it. And what they find out, at Smith College, so I did interview an archivist who was working at Smith College at the time. And even though Ron Rosenbaum names all these people from different places at Smith, for example, the photos had already been destroyed.

And that's because of this graduate student you were talking about, Gretchen Dieck, who is a graduate at Smith, but after the posture photo photos had ended that practice. But her advisor at Yale had had a posture photo done at Smith. And her advisor at Yale, they're trying to actually do a legit scientific study on, "people who have scoliosis or slight postural moderate deviations earlier in life, are they more likely to have back pain? We're going to test what this campaign has told us for so long. Is there really causation? Or is it bogus?" And

so the graduate student went off to do this study, because it would be a longitudinal study. Her plan was to take photos from the classes of like '55, '56, '57. And so then she started reaching out to these classes through the alumni network. And a lot of the women became, I would say, re-traumatized. I would say, angry that the records still existed, because the universities didn't really tell students what happened to those records after. There was no informed consent because they were subjects, right? It was a total patriarchy. And universities were in control of their lives. So they never knew what happened to those records. Eventually, Gretchen Dieck did end up, this was early days IRB, she followed everything. They were going to be de-identified. And so she did end up doing her study. And she found out that indeed, there is no causality that she could see that people with mild scoliosis or deviations were not more likely than the "normal" population. There was no difference between the two groups in terms of likelihood of developing back pain, which is a significant scientific finding. It's not one that a lot of people want to finance or do much with because you can't sell anything with that. So it's not very popular. But it was a decent study.

But the alum then, Smith decided that since they had a lot of back and forth, and basically, it just became too problematic to store these photos, it was going to cause too many problems. And this isn't an era when before you have official, at Smith and at other places that are processed, and you have professional archivists on staff. And so I think they just decided we're going to get rid of these. And a lot of schools had done that already. They had already destroyed these photos, but Ron Rosenbaum in 1995, opens this up all again. And the reason why the person, William Sheldon, in his papers still had these posture photographs is that Sheldon used posture photographs for his own pretty nefarious system of biotyping, where he argued there were three types of human physiques. And those physiques were biologically determined and also indicated what kind of intelligence and personality a person would have. And so he had already been discredited by this point. But he did have a whole cache because he just basically asked any university he could to give him posture photographs, so he could perfect and to develop this system. So that's what Ron Rosenbaum found. And then, long story short, a lot of these photos were summarily destroyed, where the archivists were sent down to the Smithsonian to look through their records to destroy anything that has to do with their particular school. And what I show in the book, though, however, is that part of the archives, of the Sheldon archives is restricted, the photographs, but thousands of photographs still remain. And based on the guide to the archives, these are going to be pictures of prisoners, of hospital patients, maybe some military, and then non-elite school students. And so those people are still remaining in the archive, but the people who have the power to demand to be erased from the archive will not be there.

AT: I'm just trying to think of all the legal restrictions that are meant to be in place now that they didn't have back then that would have protected not just naked photos that the person probably didn't want taken in the first place, but also your medical records, like that's just... (BL: Yeah.) Now, I am curious, though, about Gretchen Dieck's research because you said that there's not a lot of support for research that shows that actually you're fine because there's no money to be made there. And one of the things that I was curious about, because I don't know that the book actually addresses this, but speaking for me personally, if I have to sit at a desk all day, my neck and shoulders are just aching. Even if I'm sitting up straight, it's fine. But when I work from home and I'm in whatever position I want, like I'm lying on my stomach or leaning at different angles, I've not had that issue since I was able to work from home. So as far as we're aware, is there actually any health benefit to this upright posture that we've been told is correct, or is this more just medicalized nonsense?

BL: Well, there's not enough scientific study on it, but there is more, and you over there in Australia have the most studies on it, actually. So Peter O'Sullivan, I think himself a physical therapist, started having back pain, was like, "I'm going to do everything I can to like sit and stand straight," and his back pain got worse. And so a group of researchers there have been doing controlled studies with a control group, and also a cohort group, so they can do a little bit more longitudinal. So they are following these kids who were brought into the study earlier, and now these kids are like 19, 20 years old, and they're finding that, all of the fear about phones



and teens leaning over their phones, they're finding it's not a very good indicator for back pain or neck pain. That sustained, nobody is going to say like, "hey, why don't you stay in that position five hours?" Sitting up straight, working on that for five hours probably isn't good, nor is any one position for five hours good. And then this one study coming out of Curtin is that actually they found that in 19-year-old women, a slight slump actually promoted more of a pain-free existence. So I think that there's pretty good beginning evidence to say this is just a reductive health belief that has very little predictive value. And when I put on my physical therapy hat as a former physical therapist myself, to tell somebody to sit up straight or stand up straight, it's like, "what does that look like on that particular person?" The notion that there would be a universal ideal of posture that would fit all of our different anatomies is absurd. So I think what we have is a health belief that people want to think is true.

They want to think that somehow they can prevent back pain or neck pain and that it's as simple as sitting up straight or standing up straight. And then we have a commercial marketplace that is very willing to play into that and say, "look, I have the latest invention that will help you sit and stand straight." When the human body is so much more complex than that, the spine is pretty resilient. And so I always say I'm not a posture denier in the sense that, again, as a former physical therapist and then as a person who goes to physical therapy because I have chronic back pain, my therapist will work on postural things, like posture is talked about, but that's that's in the realm of treatment or an already existing pain. It's in the realm of looking at me as an individual. It's in the realm of, "huh, you kind of overuse this particular muscle group and you don't use this other one." And that is much different. No therapist is going to say "sit up straight" because what does that mean? And I think the other way to think about this question is like, if someone tells you to sit up straight, you want to say like, well, for how long would you like me to do that? Because that's the other thing, like there's no dosing. There's no, like what we consider to be like good medicine. It just doesn't have it. And so it's incredibly reductive. It leans into preventative medicine because it's fiscally more, it doesn't cost as much money for a state to do anything for you. It places the blame on individuals. It increases health inequities because suddenly your health is up to you and how much time you can spend on whatever, standing up straight or buying all the things to help you to stand or sit straight. And a lot of people don't have that disposable income to do that. So as I think you can tell, I think it's just really overly simplistic. And then early research is also showing that there's not truth to this.

AT: So when you mentioned the study with the teenagers, I was actually picturing earlier when you were talking about technology, I think we've all seen this outline of the evolution of man, because of course it's always a man, that ends with him being slumped over a computer or looking down at a phone and being hunched and that very visible Darwinian depiction that we see even today on t-shirts and whatever. So the idea that this is something of the past is obviously not the case. And one of the things that you talk about in the book is the more recent paleo-posture trend. So what is going on there?

BL: Yeah, it's in some ways depressing because it's as if certain evolutionary anthropologists and biologists haven't yet reckoned with their racist past. But either it's fitness gurus, which there are some of them out there, or a Harvard professor who I name in my book, Daniel Lieberman, he's known as the barefoot professor and, the funky running shoes that aren't really shoes or like webbed toe socks. He came upon this by researching supposedly "hunter-gatherer" groups in rural Kenya. So automatically, someone who talks that way, I think, "well, I don't think they're really, again, like uncivilized really in today's world," also insists that these people don't have pain. And so this is the paleo movement of "we have to eat and work and sleep and all of these things like early human beings, where do we find examples of that? Oh, we can find them today in remote places that are 'untouched by civilization'." Meanwhile, there's a researcher there who's bringing in treadmills to research them. And then this refusal that those types of peoples might have pain. So to me, it's just all pretty much very similar to what was happening over a hundred years ago. And there's a whole fitness industry, so people who have this imaginary of an Indigenous person in their head or of a "caveman" and how life was so

much better and getting back to roots and authenticity and it feels very much like a commercial scheme to me because it's mainly the white professional class worried, who are buying into this. Because you have to have money to buy into it. If you're going to buy all the keto diets or personal training or whatever it is, you have disposable income to buy these various things. And that makes you believe that you're being more authentic or living in a type of life that you were "meant" to be, your body was meant to do and the way it was meant to be.

AT: We've touched on different aspects of how the focus on posture is gendered. So obviously the appearance for women that is often considered more important than it is for men, but there was also going back to the start of this when we were talking about Darwin and the idea of de-evolution and all that nonsense. Not to say that evolution is nonsense, but this part of it, yes. And I believe there is more focus on that when it comes to women as the bearers of the next generation, when we treat women as their primary purpose is reproductive. So was there this idea that from that evolutionary standpoint, not just their own appearance, not just the risk that accompany naked photos that you're forced to have taken of yourself, but also that idea that you are the bearer of the next generation and therefore this is more important for you to be doing "the right thing?"

BL: Yeah, gender is an interesting story in this history because there was a time when I thought, "oh, I could write this as a women's history." And indeed there were other kind of women's historians saying, "but isn't this just a women's history?" Yes and no. First of all, what I think is interesting, going back to our friend Clelia Mosher, and yes, she is one of the people who insisted on plumbline as like the standard. But if you think about it, these women scientists intended the same standard for men. The posture line in some ways was supposed to be universal for all races, creeds, sex, class. And that's different than a lot of medical anatomical standards that we know about in the history of creating those standards. So in some ways, someone could say it's kind of progressive. Clelia Mosher, for her own part, did studies where she argued that men and women have the same muscular capacity, which was very radical for her time. She considered herself a physiological feminist. But then when you see it play out, there are different gendered expectations. For men, the posture was important in the sense of conforming to a norm, either if it's a military norm or if it's gray flannel suits, in mid-20th century. What I found striking about when I'm doing research on this book is the cosmetic concern of men. Men are in many ways just as concerned about their appearance than women, and they're buying these products for similar reasons.

But it still is the case that women have more at stake when it comes to, are scrutinized more. Their appearance has to be a certain way. From their parents saying "you're not going to find someone to marry you if you don't look a certain way." In an era when they aren't supposed to get a job because they're supposed to be relying on a man for income. And then if they go out and try to get a secretarial job, they can't because they have a curvature. So the stakes, again, become higher for women than white men to have this good posture. And then the stakes when it comes to nude photography is very much different because I talk about in the book the rise of pornography, the rise of print, of nudies. And then what this then means for a woman's respectability. And to then force women to undergo nude posture photography and for that record to be some place was a huge concern for women who had felt like they had to retain their own respectability at all costs. Otherwise they would be cast as loose, basically a Jezebel, whatever, all the bad things, all the misogynist things that are said about women. So I think it's about stakes. I think of JFK, who I talk about in my book, and he was measured as a Harvard student, and he was known through his whole entire life being pretty sickly. But JFK had enough money, support, his family had enough political clout, all of that, so that it wasn't going to matter that much. He was still going to be able to succeed. But then as you go out from there, class and gender and non-white, and it just becomes harder, like any other facet in life. You have to overcompensate for that. You have to do better. The white man can be a buffoon and, everybody outside of that has to do better, 10 times better, 100 times better to be taken seriously. And that's the same with posture.

AT: Join us next time on the Infinite Women podcast and remember, well-behaved women rarely make history.