Gummo Clare: Welcome to studying media critically, a podcast from the New Books Network. I'm your host Gummo Clare, and today I'm joined by Jonathan Sterne, who is James McGill Professor of Culture and Technology at McGill University. We'll be talking about his wonderful book, *Diminished Faculties: A Political Phenomenology of Impairment*, which was published in 2021. Welcome to the show, Jonathan.

Jonathan Sterne: Thanks for having me. I'm thrilled to be here.

Gummo Clare: So, I guess can we start with you telling us a little bit about your academic and professional background?

Jonathan Sterne: Yeah, so I work at McGill. I'm a Professor of Communication Studies and cross appointed in Gender, Sexuality and Feminist studies, Music Research, and Social Studies of Medicine. I did my PhD in the 1990s at the University of Illinois in a sort of cultural studies version of commu, American Communication Studies. For those of your listeners who are not in the US, Communications can be quite social science-y, or applied, it's a field more than it's a discipline. And I was very fortunate to sort of find a group of teachers and classmates who were really into thinking about culture and power. And that's sort of the space that I occupied. *Diminished Faculties*, which we're talking about today is my third book, and I've also written lots of articles. The first book is called *The Audible Past: Cultural Origins of Sound Reproduction* and that, I mean, it does what it says on the tin, which is to take sound recording radio and telephony as cultural artifacts rather than historical causes, and say how and why did these things emerge when they did. My second book was *MP3, The Meaning of a Format*, but I should say *Audible Past* 2003, *MP3* 2012. An MP3 is a 100-year history of what was then a 19-year-old digital audio format, which is a conceit. There's also a New Books Network podcast about it, if you want to hear about it. But for that book, I was really interested in, like, I guess you could say the mathematical model of the gaps and absences, in an average human hearer or listener, and sort of how that got built into the MP3 and what that could tell us about sound culture and sonic history. And I wound up writing a lot about compression as well, and formats, both of which have become interesting sort of thematic preoccupations for me and other people since then. So, I'm some kind of blend of, like, a Cultural Studies person, a media historian, a media theorist, a Disability Studies scholar, a musician, and, like, a person, if I can, if I can include that. That's a good idea.
Gummo Clare: Yeah, no, definitely. I guess the usual question that I ask guests now is to explain how they were drawn to writing this specific book, and in the case of *Diminished Faculties*, this question is quite fundamental to the work itself. So, could you tell us a little bit about the kind of - your personal background - that led into the writing of this book?

Jonathan Sterne: Yeah, so this isn't going to be apparent to your listeners, probably, although if we talk long enough, my voice might change a little bit, which would actually be interesting. So, I have a paralyzed vocal cord, which I acquired in 2009, when cancer ate my right recurrent laryngeal nerve. At that point, I was already pretty well established as a scholar of sound, and technology and culture, and so of course, immediately, people started saying, isn't it ironic that something - you write about sound and something happened to your voice? And my response, which I recount in the book at one point, is nobody ever says that to, like, film scholars or art historians who wear glasses. Right? So, what is it about, sort of the politics of the impairment of the voice? So, I have a somewhat rare version of papillary, excuse me, I have a somewhat rare version of papillary thyroid cancer, which is normally considered the quote-unquote, good cancer, although say that to any thyroid cancer patient, and they would be, they would be right to bite your head off, but it is called that. Mine is a very aggressive kind, so I have metastases in my lungs, and usually, the cancer is not disabling, and in my case, it gave me a kind of impaired voice, which, as I said, is not terribly audible to you because I'm using a microphone and listening to my voice in my headphones. But if we were talking in a room while we're running a seminar, I would probably be wearing a personal speech amplifier if I wasn't, um, if I wasn't speaking through a PA to you. So, I have a voice in need of supplementation, which for somebody who writes about the mediality of the voice immediately becomes pretty interesting. So that's the personal part of it, but it's not like, it's not like this happened and I was driven to write the book. I was driven to write about it, and actually, I blogged - and even there's stuff that's not on the blog but in notes - um, that provided an important resource for my recounting some of that experience as sort of primary source material to analyze for the book. But I was initially super resistant to it because of that sort of contrarian, nobody asks, you know, people about their glasses thing, and it really took me a while to come around to it. I started teaching a course on Disability and Technology in the 2011-2012 academic year, and I teach that every year and sort of just thinking with, uh, now generations of undergraduate students really helped shape how I approached it. Also a lot of work, good work on disability and technology came out. I was already.....I was long interested in disability - I'm a child of people trained in social work - and my family, many of my family members are in one or another helping profession, or were, and deafness and muteness are major themes in *The Audible Past*. And so in the 1990s, I actually did a lot of reading in what was then quite emergent as a field of Disability Studies, and also deaf history and things like that. So, it's not like it's a new concern for me when it happened to me, but of course, that changes your perspective and then, you know, dealing with it in a sustained way over time, just really got me in the mindset to do the work to write the book. And also a few people just,
frankly, encouraged me because I always have too many projects, and they were like, no, you should do this one. And that, you know, I'm good at taking advice and I actually appreciate that from other people. So, so the voice... that explains the voice part of the book, but I also had unsettled business with phenomenology, which is like a weird sense, in some sense, only a scholar could love. I, um, In *Audible Past*, I really critiqued phenomenological approaches to sound and listening in part because at the time, pretty much every one that was presented to me - and this has to do with my situation in a sort of humanistic media studies, communication tradition - but every phenomenology of sound that was presented to me sort of came out of this Toronto school tradition sort of shaped by Marshall McLuhan, Walter Ong, you know, maybe I get a little Don Ihde, or Marie Schaffer, somebody like that, but I really wanted to push back against that. I was also, you know, like many people read a lot of Foucault in grad school who also resist the phenomenological impulse until the last two volumes of the history of sexuality. And I really thought I needed to reset my accounts, because if you actually look at my work, it's very concerned with other people. I'm not much of a... I'm not a very effective post humanist, because I like people too much, so I'm a little bit too, too humanist, I guess, by some, by some accounts, and a lot of my work has an ethnographic dimension, dimension has a cultural historical dimension, I talk about experience, I tell stories, people do things. And so I really wanted to go back and think about it and at first I thought I was writing in an anti phenomenology, and then I had lunch with a, with, with someone and she was telling me no, actually, you should just own up to it, you're doing phenomenology. And so I just was like, okay. Like I said, I'm good at taking advice and being told what to do so, so, this book is an attempt to make peace with phenomenology. You could say even like sensory phenomenology or something, but from a political standpoint, and very much in the wake of work, by feminists, by queer theorists, by disability scholars, and in the beginning of the anesthetics of experience, Cressida Heyes does a really, if you don't know the current state of phenomenology, Cressida Heyes at the beginning of that book does a really good outline of where the field is at now as opposed to saying phenomenology is who Cyril Heidegger, Merleau-Ponty, sort of the, you know, the dead white guys model, which you know, all some they'd be also but, but not today. So the book, so the book isn't just about my voice, I'd say it's about not speaking well, not hearing well, and not feeling well, and each section of the book tries to deal with those diminished faculties in a different way. And in the process, I tried to, I tried to decentre my own agency and command in the world a little bit, which is a difficult thing to do when you're writing a book I think. Michelle, my friend Michele Friedner says, you know, you tried to be an unreliable narrator but you actually failed to be unreliable. And I think that she's probably right, right, I mean, books are, books are always more ambitious than what they accomplish and so I think my failed attempt to be unreliable is actually a structuring aspect of the, of the text.

10:57

**Gummo Clare**: I mean that there's already tons to dive into there I think, but, em, maybe to start with the kind of broad brushstrokes question. One structuring concept you use is this idea of impairment phenomenology. So could, could you maybe outline what, what you mean by impairment phenomenology?
Jonathan Sterne: Why yes, I could. So, uh, there's two parts of the... I mean...there's two words, right, so we have to unpack both of them. There are lots of people who've done work on the phenomenology of illness or the phenomenology of disability. Now, phenomenology can mean three things, and could probably mean many more, but I think of three things. One is when it's just used as a fancy word for experience, like when you're reading a text and somebody says narrativize and they actually mean narrate. So, sometimes phenomenology is just a fancy word for experience. Sometimes it refers to the, the sort of written tradition of academic phenomenology. And then the third is phenomenology as a kind of a investigation from the standpoint of a subject of the conditions of possibility for experience. That is what I mean. Now, when one does phenomenology, normally one assumes that they are in command of their own faculties. So, if you read Merleau-Ponty, and they're... I'm so grateful for texts, searchable PDFs .... when you read Merleau-Ponty, there is this meticulous I can/I can't discourse throughout the phenomenology of perception. And you see that also in an inverted form like in Sara Ahmed's *Queer Phenomenology*, when she is playing on Martin Heidegger's discussion of a hammer, and she's like, well, what if the hammer is too heavy for me? And, uh, in general, it is assumed that a, a phenomenologizing subject is in command of its faculties, it knows its abilities, it knows its limits. And so, the other half of that term is the impairment, right? What if you don't know? What is it like to begin from a position of not knowing? And this is also my contrarian reaction to the fact that we're in a very affirmative moment in the history of disability theorizing, which I think is good because the academic world, and COVID has definitely shown us this, is profoundly ableist in so many different registers, and I'm certainly not the first person to comment upon this, and if you're interested, I recommend, like, Jay Dolmage's *Academic Ableism* and Margaret Price's *Mad At School* and there's lots more out there as well. But academia is so, so incredibly ableist that it makes sense, for instance, when my undergraduates walk into a Disability Studies class that one of the purposes of the course has to be to show disabled people as, um, protagonists in history, like everybody else, and, um, as agents and outside this sort of standard cliched crip narratives of like pathos or overcoming or inspiration or all these things like, I get that. That's good. But from a theoretical standpoint, isn't it interesting that even in Disability Studies when we recount experience, we assume we are non-disabled with respect to it? There are exceptions, especially in the Mad Studies literature, I think there are some really interesting exceptions. So, I did, the book is in part an attempt to think, well, what would it mean to do a more modest phenomenology and there I'm just, you know, Stuart Hall's call that we should all be modest as scholars. So that's part of it. Um, There's always more to say, and I could talk a bit about impairment versus disability but I want to let you do that was already a long answer so I'm gonna let you steer me.

Gummo Clare: Well, well, I mean, just before we get kind of stuck into more of the meat of the book, I just wanted to ask because you, you raise those three impairments in the book, um, you said, you
know, not hearing well, not speaking well, and not feeling well. I was just wondering whether there are others that you've considered including other impairments? Why those and you know, why not anything else?

15:35

Jonathan Sterne: Well, why not anything else is, like, the book was already getting long and this is the shortest book I've ever written, so why not anything else because I had to stop, and I'm certainly not done with the themes in the book, although I don't think, like, I will write another book like Diminished Faculties. I don't think that was the purpose of the exercise, as it were. Um, so I picked, the voice one is obvious, because it happened to me and people said you should write about what happened to your voice, so I did, and I tried to put it in dialogue with the literature on disability and design, and with the literature on voice and vocality, and especially this sort of ideology, what I call an ideology of vocal ability, the idea that a voice is tied to the interiority of a subject, voice as a metaphor for agency, things like that, what would it mean to think voice outside those frameworks. The listening chapter is actually the oldest part of the book, and I think I came up with the idea for it sometime in the 2000s, probably when I myself was attending a rock concert. So the, the listening section is called Audile Scarification on Normal Impairments, and the, the idea is basically that if you look at, um, your modern urban industrial society subjects, so me in Montreal, and let's just say in a non-COVID setting where people go in pub, loud public places, you're in London right?

Gummo Claire: mhmmm

Jonathan Sterne: Right. Same thing in London, right? You go out in public, there are many situations in which it appears, like if you just read the environment, that there's a cultural preference for hardness of hearing. And if you look at literature outside of Deaf Studies, the assumption is always, you know, hearing loss is bad for you, people don't want to lose their hearing, and the reason that they do lose their hearing is because they don't know that it's bad for them, right? It's like the anti-smoking discourse, which is equally ineffective in persuading smokers. And so I said, well, what if we take a slightly less moralistic standpoint? What if we learn from scholarship on the, on, on deaf gain, and frame Deaf Studies where deafness is understood as a way of engaging with the world, and sign language is understood as an linguistic modality, and we say, okay, well, what is it? You know, how does a culture work where, you know, it's better to be a little bit of hard of hearing, when you go into a public bathroom, and there's one of those high throughput hand dryers, or you're on an airplane next to the jet, or you're at a concert, or you're at a Hollywood film, or you're at a bar, or a sporting event? All of these things would be painful for people who had quote-unquote, normal hearing, according to the way audiology is normally done, and in fact, I found there is an international standard for, for hearing loss, and hearing loss itself is, of course, a metaphor because some people as their hearing is transformed, actually gained sensitivity and acuity, sometimes in quite problematic ways, like if you're, if you have hyperacusis, or you are, um, if you have misophonia, and so you're super sensitive to
certain kinds of sounds, that can be a problem. Maybe you have tinnitus, where you constantly hear a sound and so, that chapter as I'm once exploring that, and also challenging this idea that's very common in Disability theory, and in Queer theory, that norm is the opposite of this, sort of, diminished or negative category. Right? And so the chapter proposes this idea of normal impairments as the flip side of the coin of something like compulsory able-bodiedness. Okay, so the third chapter was supposed to be on seeing, but it didn't work. I, and I tried all these different things and they just couldn't find a good hook. I felt like Georgina Kleege had already said everything I needed to say then, in her two books, and so the scene one didn't work that well and someone had also suggested moving, but there's actually a lot on that, and I'm not the person to do that work, in part, because I feel like you'd need to go into areas like dance that I'm just not that educated in. But the fatigue thing came and came along kind of naturally as something that cuts across the mental and physical disability, mental and physical impairment boundary, and also fatigue is interesting because it is usually described as pure lack or absence. I call it a depletionist model, like you don't have energy, your energy is gone, you've used up your fuel, and that is a model that is rejected elsewhere in disability theory. So, what would it mean to have a positive theory of fatigue and what would it mean to parochialize the negative model of fatigue? And so that's the last chapter, and, uh, actually, as I was working on it, I developed a kind of chronic fatigue as a result of the medication I take to keep the spots in my lungs from growing, and I talk a bit about that, but you can't really do a phenomenology of fatigue, because when you're fatigued, you're not able to give it and when you're not fatigued, at least in my experience, it's hard to imagine what it's like to be fatigued. So it's a kind... and people in disability studies write about this and people have written about this with pain, too.... it's hard to imagine when you're not in it, and when you're in it, it's hard to describe. So, those are the three pillars of the book. You could have had a chapter on, on motion and movement; could have had a chapter on seeing; I mean, you could have had chapters on, on other faculties, right? Intellection, sobriety versus intoxication, there's all sorts of things that I could have done, but that's what we got. And I have to say, because of, because so many people are getting COVID now, the fatigue chapter - I like to call it the sleeper hit of the book - because it seems to really, uh, it seems to be resonating with people because they're dealing with it and trying to make sense of it.

22:21

Gummo Clare: Yeah, yeah, I mean, I have to say it felt extraordinarily prescient, a kind of, you know, couldn't be more timely in some ways. Um, yeah. So I mean, moving back to the, more towards the start of the book, you you mentioned a couple of alternative models of impairment that can be traced in the history of communication engineering, in particular, and I found that really fascinating. So, could you tell us a little bit about that, and how these might help us think differently about impairment and disability?

22:50

Jonathan Sterne: Yeah, for sure. So, um, that is mostly inspired by the work of Mara Mills, but also inspired by years of like studying and talking with engineers. So, uh, when humans talk about
impairment, well humans, I'll say we and by we, I mean, sort of the bourgeois academic habitus that is likely listening to this podcast. When we talk about impairment, we generally talk about it as a lack, an absence, something to be avoided, and, uh, something that's exceptional. But in communication engineering, the term transmission impairments developed in the early 20th century and especially, this is, like, around the telephone system, as a way of describing obstacles to the goal of transmitting a signal. It was never assumed that infrastructure would be without impairments, transmission impairments, and it was never, I mean, in media theory now the hot thing is information theory and Claude Shannon and the idea of noise and you know, maybe Michele Sayers and the idea that there is no signal without also noise. So, this is a slightly earlier version of that where, um, the, the all, no communication can be perfect communication, because it exists in a material context. And so, the goal is to have a transmission system that has a certain level of impairment but we know what it is, we can specify it, and we can live with it. That is very different to how people talk about their own impairments, at least in my social world, I don't know about yours, I don't know about the, um, that of the listeners. So that's part of it and then there's this specific role of impairment and disability theory. So very often, well, I should say, for those of you who aren't familiar with disability theory, let me backup. So, in Disability Studies, there is this thing called the social model of disability, which probably makes immediate sense to you. Disability is not just this natural individualized thing that inheres in the person... it is constructed... it is, um, disabilities don't inhere in individuals, environments are disabling... disabilities exist because of context, right? If you don't ever read print, you do not have a print disability. Right? A mobility impairment means something different if you have to walk upstairs versus if there's an elevator or as Susan Wendell puts it, how far must you be able to walk in order to not be disabled? Growing up in the American suburbs as I did, there, there's one answer to that question. Living in the city of Montreal now, that, there's another answer to that question. So, this is a social model of disability and disability scholars have criticized this, just as we've seen with the new materialism and other fields. They've criticized this sort of hard constructivist position because how do you deal with the reality of neurodivergence or pain, or, for that matter, this sort of cultural expansion, expansiveness of deaf or blind culture, right, a notion of disability as social construct doesn't get at those things. Some are, like, material and real in the sense of, um, seem as if they exist outside culture, others are cultural, but they're real, and to say it's constructed is maybe, um, not sufficient to give an account of it. But so far, this hasn't been done for impairment and people have called for it, people have talked about it but impairment is often treated as the substrate of disability. So it's sort of like Gail Rubin's old Traffic in Women essay where sex is the biological substrate of gender, which is a social construct. So if we want to use that metaphor, I am trying to “Judith Butler” the disability impairment dyad by saying impairment, just like sex, is also itself produced, constructed, contingent, and everything else, but it is also material and real at the same time. I always tell my students more than one thing can be true and this is very much a case of that. I misspoke a moment ago. There are actually people who've made this suggestion before me, I'm not the first. Alison Kafer makes a suggestion like this at the beginning of Feminist, Queer, Crip, and a number of other scholars do too and impairment comes up in disability theory pretty consistently from the 1990s as a thing that needs to be theorized and addressed in one way or another. So I don't want to say I'm the first but I'm
perhaps the most obsessed, I don't know, maybe not even that. Maybe that's also too self-aggrandizing but it's a major theme of the book is: How are impairments produced and how do they relate to disability? And just to foreshadow my conclusion, one of the things I say is disability becomes this, it becomes something that's legislated and becomes an identity category in a way that impairment does not. And so if you say, well, what's the difference between an impairment and a disability if they're both physical and they're both constructed, it's that they're constructed differently, right? Disability, you know, there's a Jasbir Puar line about, like, who gets to be disabled, by which I think she's really referring to sort of the way neoliberal states label people, and, uh, one could also say who identifies with a disability versus not. And you can go even further, I mean, Kafer, in that same introduction, has this great line about how most of the people whose lives might be addressed by disability theory would reject the label. That doesn't mean they're all automatically, should be understood as impaired but I think impairment gets at a different aspect of that experience, which is not one that sort of rises to the level of self constitution but is more processional contingent, and I mean everything's relational, but relational at a sort of micro level, I guess. So yeah, that's, that's what I'm trying to do there.

29:57

**Gummo Clare:** And that, that kind of the blurry line between impairment and disability in the process of coming out as disabled in some way is something you touch on as well in the first couple of chapters, right, and I think that that's your, your writing there really helps illustrate the distinction you're making, I think. I don't know if you could talk about that a little bit.

30:15

**Jonathan Sterne:** Thanks. Um, well, could you say a bit more about which, when you say really illustrates, which illustrations are you thinking of?

**Gummo Clare:** Well... haha

**Jonathan Sterne:** Just so I made sure I do what I'm told.

30:26

**Gummo Clare:** No, I mean, I'm thinking specifically about the passage is, it's I think from a blog post, you talk about going to a party with cue, like, cue cards upon which you write

**Jonathan Sterne:** Ah yes.

**Gummo Clare:** And how, at the time yourself conception of, of yourself and your voice shifts, as you are then writing about the blog, if that makes sense. Do you see what I'm getting at?
Jonathan Sterne: Okay, so the story is that I went to a 40th birthday party for a couple friends, and this was right after I had three surgeries on my throat in 2009, 2010. This is after the first one. My voice.... can we swear on here?

Gummo Clare: Absolutely.

Jonathan Sterne: My voice was fucked, and it was really, like horse gravelly and quiet and hard to hear. So we go to, and this is a dance party for two friend's 40th birthdays over, over Christmas break. So, I'm like, how am I going to communicate with people because I can't just sit there and yell. So, I made all these index cards with the kinds of phatic communication people have at a party. How's it going? Fine. Would you like a drink? Yes or No? Tell me more. How are you? I'm fine. Cancer sucks. You know, so I made up this list of cards and I go to this party but, of course, a 40th birthday party means that a significant proportion of the people at the party are over 40. And so, the, a lot of people couldn't read my flashcards because they didn't bring their reading glasses and so it was this spectacular failure, and then they would ask me to talk more, or they would whisper at me because they would meet my level of, of speech, and by the way, good advice to de-escalate conflict is if people are raising their voices lower yours, and very often people will will match your your tone of voice so - hot tip there. Well, though, it didn't do me any good in the, at the party. So, here's a situation where I was attempting to negotiate an impairment that I had, that I didn't even fully understand yet and, um, I walk into another situation assuming that everybody else around me is unimpaired which, of course, was not the case at all. So it's like, you know, it's a simple realization, it's like, a good plot for a, for a sitcom episode or something. But, but to me that really spoke to the ubiquity of impairment and also it's, you could say, it's submersion as a sort of discursive category. It's everywhere and it's nowhere.

33:16
Gummo Clare: Mhmmm. I guess that takes us on to the, the chapter two, I think, where you discuss your experience using voice amplification, which you've touched on a little bit already, but could you tell us a bit more about what you call the dork-o-phone and your experiences using it and how you use this to, as a jumping off point to think more through the ideology of vocal ability?

33:38
Jonathan Sterne: Yeah, so I wear for, I mean, again, this is, we speak as if the pandemic hasn't happened for two years and I've been like, you know, teaching on Zoom and like everybody else using a microphone not like everybody else using headphones as well but but...um, back in the day, I would need a personal portable speech amplifier, some kind of amplification in order to address this seminar for three hours and be able to keep my voice and not, you know, I can be quite loquacious but I'm not the type of teacher that lectures for three hours so it's not, it's, it's not that kind of thing. So, I got a device called a speech amplifier, which is, a, it's like a transistor radio without the radio, so very small amplifier, batteries inside it, square box - there's a picture of it actually on the cover of the book - inside a faux leather vinyl pouch with a string that goes around my neck and then there's microphone
that I wear on my head. Now, this is an unusual thing to wear. It's not unusual to wear a microphone, right, like lots of, you know, the bluetooth earpiece sort of thing which granted isn't considered a cool aesthetic but it is, it is plenty present. So, so, the device clearly marks me as a, as, as having some kind of difference or disability and after, after I acquired my paralyzed vocal cord, I had to learn how to speak again. I had a speech therapist who actually introduced me to these devices. I call it the Dork-o-Phone because the “ofone” part is, like, futuristic technology of the past, and of course, dorky things aren't cool. Which is, like, always the problem of crip tech, and I named it probably after reading Graham Pullin’s Design meets Disability, and Pullin has lots of great things to say about, sort of, the aesthetics of disability and design and confecting with objects, and I'm very confected with my Dork-o-Phone, but in a slightly ironic way. So, I wear this thing and it marks my voice is in need of supplementation. So again, to give you a, an example of a conundrum, I give an invited seminar somewhere on another campus where people don't know me, they just know as me as this guy that wrote about sound. So, if I do not explain the Dork-o-Phone... I'm wearing a microphone and a speaker on my person as I address a roomful of people... am I making a profound philosophical comment on the mediality of the voice in the supplementaries of all communication or am I just wearing this weird thing? Right? So of course, the answer is yes, I'm doing both by virtue of wearing a marked prosthesis that, like, all quote-unquote assistive technologies shows that I'm a person in need of assistance, and, of course, all technologies are actually assistive but assistive technology is a term that is, in English anyway, reserved usually for technologies designed for disability. So, I started researching the sort of the history and making of these things; I experimented with alternative versions of it as well. And, yeah, I use that to sort of think about the politics of the voice, right? We are, you know, my voice is supposed to come from my mouth, not from my chest and, of course, what happens is people get used to it and then it says, if it does, it's like going to a theatre and you think that the voices are coming from the mouths of the - I mean, a movie theatre, by the way - the mouths of the characters when actually there's a pair of speakers on the side of the screen or something like that. So, um, so, so I spent some time talking about sort of the politics of the design of the thing, the expense of the thing, and just the, the sheer practicalities of having a voice in need of supplementation and then using a prosthesis. Then it's very much inspired by Vivian Sobchack's essay on her artificial leg, which I absolutely love, and which is, uh, cited, um, cited in the piece. But the other thing that got me thinking about was this ideology of vocal ability, which I sort of, kind of, touched on in The Audible Past but I didn't describe it in these terms. Ideology of Ability is a phrase from Tobin Siebers who says the ideology of abilities, the preference for ability over disability, the inevitableness of the able over the inevitableness that able should be norm and disabled abnormal as this whole long list of oppositions, um, ending with disabled people must be, must try as hard as possible to be non-disabled, but non-disabled people can act disabled if they feel like it. So I, I took that and sort of did a mash up with, um, you could say the critique of the metaphysics of presence from Derrida or some of the critiques of the sort of transcendence of the voice that have emerged in voice studies, people like Nina Eidsheim, who've written a lot about the race, racing and gendering of the voice; Kathy Meizel and multivocality; Amanda Weidman. Lots of scholars have sort of addressed this and said, well, um, what would happen if we thought about the voice in some way other than as a metaphor for agency or intention or efficacy
in the world? What if it was just one potential faculty among others? We sort of desensationalized the voice and that's really what I'm, I, what I do when I wear the Dork-o-Phone and I also think it's what I'm trying to do in the third chapter, which is this imaginary exhibition of alternate vocalities. So yeah, in a way, it's a very simple point, which is, you know, we tend to equate voice with agency, I mean sometimes literally, if you look at the etymology of like, voice and vote, and that's ableist, it's problematic, and it sometimes obscures more than it reveals. And there's this line from Wendy Brown's *Edgework*, which is a book from, I think it came out in like, 95, I could be wrong - in my bibliography, you can look it up - and she's got this line, classic sort of Foucaultian thing about like, well, why do we think having a voice is the source of agency, maybe power is making us speak? And, that also, I think, was, you know, that's from a political theory standpoint, and I think also quite profound and significant that, and you hear this all the time and, like, Left movements, like, silence being used as a metaphor for the removal of agency and voice as, like, the source of agency, um, and I think we really need to question that, especially when you look at how our media systems work now, I think, you know, to use an old Foucault term, and this book is not very Foucaultian at all, we are very much living in a moment of an incitement to discourse.

**Gummo Clare:** Yeah, I mean, that, that was a point that really stuck out to me is something that I hadn't occurred to me whatsoever, um, and it immediately struck me like, oh my god, yeah, of course, in so much Left discourse that's exactly the framing, you know, voice is so front and center. Yeah, that was a really striking part of the book, I think, and so you mentioned the imaginary exhibition, which is entitled “In Search of New Vocalities”, and I thought this was a great way of presenting kind of a combination of sources, renderings of artifacts and theory as well. Could you explain why you chose this kind of mode, this register, as a way of presenting the chapters contents?

**Jonathan Sterne:** Yeah. So, the chapter is written as a, uh, audio guide, the text of an audio guide with a few, a few flourishes, right? Like there's also a map, uh, of the exhibition and there's also some, I guess, you could call museography, or, um, um you know, text plates, like you'd get if you walked up to an object in a museum with the description. And there's also audio descriptions of the, of the images that are in the text and by the way, if you listen to the PDF of the book, there are audio descriptions for every image in it. They're just only surfaced in that chapter. So I, the simplest and most honest answer is I kind of gave up, I was collecting all this great and interesting art about voices and I was able to classify it and connect it and, um, and sort of give you lines of dissent, conceptual dissent, but there wasn't an argument coming together, and I sort of felt like if my argument is really, like, couldn't we just give up on the... my argument’s basically negative, let's give up on the ideology of vocal ability and let 1000 flowers bloom, maybe rather than telling you this is how you think about, should think about voice, this chapter should be here's a bunch of different ways of thinking about and representing voice and negotiating it, and now you go find others or be inspired by these if you are. And so, they, it went through multiple, multiple iterations but Zoë De Luca, who actually designed the layout based on an
Australian museum, read it and said, you should, you should take this more, you should take the exhibition thing more seriously and really, like, do the work of laying it out as an exhibition and so that's what I did. You know, I'm also very much committed to, um, there are many ways to present and disseminate knowledge and I spend a lot of time in the 2010s engaging with friends who do sort of multimodal work in the digital humanities and experimenting with it myself, and I think that this is, it was a good way out of a situation where I wasn't gonna be able to present a linear argument and you know, also hopefully presents this stuff as entertaining to read and it allows me to present the work of artists as sort of, intellectual, intellectually, without having to give a definitive hermeneutic interpretation. This is what it means, this is how it works. And without having to make the assertion that this is, this is intellectual work because it makes a proposition that's the same thing as a proposition I would make in a linear argument, which I think is a mistake people sometimes make when they say, well, we should treat art philosophically, um, that may be so but it doesn't necessarily mean it has to be propositional in the way a scholarly argument would. So, um, so yeah, that's, that's that chapter. It was really fun to write and put together, I had a lot of help from Duke's design department too, in terms of, like, putting the book, putting the look of it together, making sure that in the PDF the images were in color, and figuring out how to integrate the audio descriptions into the text.

Gummo Clare: Yeah, I mean, it's a really, really enjoyable part of the book, all of which is enjoyable, but I did really like it. I wondered if you could maybe discuss a couple of your, like, favorite new vocalities that you present in that chapter, and maybe how they help to reveal, you make a point at the end of the chapter that voice has no necessarily bodily or sonic dimension, which, as you say, kind of might pose a couple of aesthetic and political challenges to some scholarship.

Jonathan Sterne: Yeah, okay, for sure. So, I'm going to pick two favorites and if you hear rustling sounds, that's me looking through the book. So Hodan Youssouf's “Masques”, this one - really hard for me to convey in print. I saw this video at a Disability Studies conference down the street at Concordia University and I want to say 2018, yeah, probably 2018, and it was part of a group of scholars from the University of Québec à Montréal who are doing deaf music video and trying to come up with a sort of natively deaf form of music video. So it's a video and in the, in the text, there's just a still from the video because I don't know how you put a moving image in a print book yet, although you can go watch the video online now, and I saw it blown up on a big screen in a totally silent auditorium and it was really quite explosive to see. It presented, it had, it had everything you would want out of a music video, except it was deaf. And there's definitely a voice line being, I think, being performed by Youssouf's hands and there's multiple images of her, um, in it as well. So, I really liked that and I wanted, there's a, there's a few artifacts of deaf culture that in, in the exhibition and I really wanted them there. I've always said you know, to understand Sound Studies, you need to at least know something about Deaf Studies, and I wanted, sort of, deaf cultural and expressive practice to be part of
it because I do think, you know, it is possible to have something like a deaf voice beyond simply deaf speech for hearing people. So that's one. Another favorite of mine because it's funny and because it's so high concept is Nina Katchadourian's Talking Popcorn. So, um, Katchadourian takes a popcorn popper, puts a microphone inside of it, the microphone records the sound of the popcorn popping, this is then, uh, trans, using, using Max MSP software, this is then translated into Morse code, which is then translated into words which is then spoken by a text to speech apparatus, right? So the popcorn popping is literally speaking, but there's no subject there, and Katchadourian then transcribes some of the speech. At one point, talking popcorn self-immolated and basically burnt itself to a crisp. And so it had, it had first words, it had last words and Katchadourian interviewed psychologists, cryptographers, death doulas, to get them to interpret the last words of talking popcorn. So, like, if you want a, want a performance of speech without a subject, I think this is a really great and a funny and gentle example of that. And the sheer contrivance of it, you know, the Rube Goldbergness of it, I think reveals something about all the work that you and I might do listening to speakers speech in order to produce something like an intending subject. And that's sort of the, that's the sort of trick of the pieces. There's no intending subject to there but it can work totally like speech and totally like a voice and in fact, reveals the degree to which all voices are produced in the hearing. So, um, that's another favorite of mine.

Gummo Clare: Yeah, I absolutely loved that one as well. Particularly the fact that yeah, at one point, it burst into flames. Yeah, so let's move on to the, your chapter on hearing loss and audile scarification, which we have covered already a bit. But, I mean, there's tons in there. But one of the things I thought was really interesting was how you talk about, em, the notion of consent and implicit consent to the loss of, to, to a degree of hearing loss as part of the process of acquiring a normal impairment. Could you expand on that slightly?

Jonathan Sterne: Yeah, thanks. Um, so first of all, when I say consent, I'm using very specifically the Gramscian notion of consent, and for Gramsci consent is like saying uncle, or like, giving into the general direction of the situation, I think is the way he puts it in one point. It's not consent, for instance, in the way we would talk about consent in a sexual relationship or in a legal relationship, like, I consent to having my voice recorded for this interview. That's really important to understanding what's going on, which is it takes a lot of work to not consent, and, uh, so audile, I use the term on audile scarification to, you could say, anthropologize the transformations of hearing, that are produced by large cultural institutions and sort of default technologies so, as I said, you know, movie theaters, restaurants, rock concerts. You know, if you're sitting in front of the piccolo flutes in the orchestra, uh, if you're in a loud restaurant, if you're sitting next to the jet on the airplane without earplugs, all of these things transform, over time, transform a person's capacity to hear. And so rather than looking at that as, uh, a sad side effect, or a, you know, result of false consciousness, I said, well, what if we say our culture actively produces this kind of impairment? To what end? And how does it work? And one of
the things I wind up doing following that anthropological thread and actually following the literature on scarification, and tattooing, uh, and piercing, is the idea that through bodily participation, bodily transform, that sorry, let me just start again... through bodily transformation one performs a right of institution, and becomes open to new things and able to participate in a certain way, right? And this is the opposite of the way people usually talk about hearing. Right? So if speech is one's agency in the world, and again, I'm criticizing that idea in the ideology of vocal ability, there's this romantic idea that hearing is openness to alterity, and you'll notice that both concepts have a way of dehumanizing deaf mute people, and this goes back to Aristotle actually, like it's an old, it's a very old ableism. So, hearing is the openness to the other. The most radical statement I think of this is Jean-luc Nancy's *Listening*, which is like a cuddly warm book, I just don't think it's actually a very accurate description of how listening works. I think it's using a metaphor of listening to describe the kind of intersubjectivity for which he wants to argue, in which I don't see a nice rosy version of how social life should unfold and so, I have no quarrel with that, but if you say this is how listening works, I think not at all. So, audile scarification becomes a, uh, an openness to certain environments, and I, I talk about, like, the very intentional use of loud music, for instance, in industrial manufacturing context. There's this great line in *Rivethead*, which is a book about assembly line workers in an auto plant, you know, and I also have quotes from musicians and sound engineers talking about loudness as a way of being together and being in a place. And of course, there's all this discourse as well, written discourse, on loudness and the sublim, the sublimity as well, right, the awesomeness of things that are sort of beyond, uh, beyond the body, and I don't want to romanticize it, because then I'm just inverting this sort of, uh, this sort of romanticization of hearing and listening as openness to the other. But I think it's important to take it seriously as a set of cultural practices and I actually end the chapter with a, with a, with discussions of misophonia because misophonia, which is a sensitivity to certain sounds, for instance, say chewing sounds is a really common thing that misophonic people struggle with. One way you deal with misophonia, to be able to be more open to the world is to play loud music for yourself. I mean, not everybody who has it does this but, but I have an interview with someone who's misophonic who talks about this in the chapter. I also talk about earplugs, as a kind of auditory prophylaxis that also provides access and I was surprised at how little history, like cultural history, of earplugs there was when I was doing this work. In fact, one could imagine writing a whole history, a whole, a whole other history of earplugs where there’s... anyway, there's more to be said but I will, I will leave it there.

56:36

**Gummo Clare:** No, I mean, I mean, yeah, that whole section was, was really fascinating. And, again, one of those things that reading it, it felt like yeah, it really clicked about the idea about, em, yeah, reframing hearing loss as, as gaining access to certain conditions, states of being, social situations, in that context, it feels instinctively accurate, I think. And then, you also, you touched on it there, provide a kind of really interesting account of how 120 decibels specifically becomes accepted as this. What is it? It's the high volume where, that is deemed to be dangerous? Is that the...
Jonathan Sterne: Yeah, except it's not.

Gummo Clare: yeah

Jonathan Sterne: I mean, that's the funny thing about it, it becomes this thing that everybody just, this number that people use, I think I call it the number of the sublime, it's like the number the beast or something, the 666 of audio, and it actually is a very nonspecific measurement in the, in the, like, if you look at the decibel range, if you're exposed to less than 120 decibels regularly, it would be expected to erode your hearing sensitivity in certain areas. And 120 decibels also is not quite as loud as say, like, an airplane taking off or something, so it's also not the, like, limit of hearing or even the threshold of pain necessarily, but it's become this weird marker in this, like, arbitrary precision term I get from Dylan Mulvin, right, it's this like arbitrary, it's strangely precise, but in fact, it's quite nebulous. So you'll see this term come up as a kind of signifier of sublime loudness or painful loudness or loudness in access, and I, I quote from Barry Blesser, who, who's at an audio engineers convention, he talks about, you know, music being played at 120 decibels, right, that his guess. I talked about a Marco Fusinato art installation that calls for sound at 120 decibels, like, it's this very strange, um, mock precision, um, but somehow tries to capture this aspect of very loud sound and represent it.

Gummo Clare: And that connects to points, other points you make about the kind of yeah, again, the like, slightly alluring subcultural qualities of very high volumes, and the connection that also can have with machismo and stoicism as well, which I thought was interesting. And then moving on to your final chapter, where you, where you discuss fatigue. What you expand on there is a common touchstone in conveying the experiences and challenges of living with fatigue as well as other impairments and disabilities, which is Spoon Theory. So could you explain the benefits and maybe some of the limitations of Spoon Theory as a way of thinking about and maybe politicizing fatigue and disability, and then how you maybe try and move beyond it a bit?

Jonathan Sterne: Yeah, sure. Okay, so the Spoon Theory, the phrase is coined in a blog post in I think 2002 by Christine, or Christina, Miserandino cited in the book, and The Spoon Theory is basically equally her explaining to her friend what it's like to live with a chronic illness and the fatigue that comes from it. So, she's in a coffee shop, she goes around and collects a bunch of spoons, puts them on the table and says, look, you wake up in the morning, with a certain number of spoons. Then, you do things which costs spoons, so you, you get up and you take a shower. That costs a spoon. You have breakfast, that costs a spoon, and on and on and very quickly, you run out of spoons. So, there comes a point where it's, like, you can either do something with your friends in the evening, or you can, like, do basic self care but you don't have the spoons to do both is, uh, one potential example, and of course, your friend is immediately like, but wait, I don't have enough spoons, and that's what she says, and that's the moment I knew it was gonna work. And so, you know, there's a spoony hashtag that you can
find on various social media platforms and then, various permutations of the Spoon Theory like the
Fork Theory, which says, like, stick a fork in me, I’m done, which is sort of like what happens when, it's
a version of the straw that broke the camel's back where, um, where some very small event triggers a
meltdown or like a complete, uh, yeah, just, basically a complete meltdown because you're so
overextended and so exhausted. So, um, this is a very powerful and persuasive way for people to talk
about their fatigue. I've heard students who don't seem to understand themselves as disabled say I
don't have the spoons for that. So it's, it's sort of moved its way into common parlance. So it's been
really powerful for people. When I've given talks about it, one of the first questions I almost always get
is how, how do I get more spoons? Which is the wrong question, but also fascinating that that's the
first, that that's the first question. So, on one hand, super empowering and also interesting because it's
an inversion or an appropriation of the disability discourse that so commonly treats, treats fatigue as
lacking a subject, right? So in a way, it's like, it's analogous to the appropriate cultural appropriation of
queer where I don't have the energy becomes a kind of identity claim, and a sort of, um, way of
representing yourself and mobilizing yourself in relations to other people, right, hence, the spoony's
hashtag. So it's a really interesting sort of form of cultural re, reappropriation. But what is being
reappropriated, and that's really the body of the chapter, is where does this idea of fatigue as
depletion come from? Right? So as I said before, in most other disability theory, and disability studies
scholarship, there is an attempt to challenge the idea of disability as lack. And what I'm trying to do is
say, well, what, what if we could do that to fatigue? What would it mean to parochialize and historicize
the idea of fatigue as lack, and second of all, to try to come up with alternatives? And so that's really
the body of the chapter. So, part of it is sort of Marx's labor history, right, sort of looking at how
management is trying to get more out of its workers. Part of it is looking at the traffic between ideas of
metal fatigue and body fatigue in the 19th century. Part of it is looking at the medicalization of fatigue,
where medical concepts of fatigue structurally exclude fatigue from work as a kind of medicalizable
fatigue. There's a little bit on Chronic Fatigue Syndrome, or ME CFS, as a lot of people like to call it now
and all of these ideas I describe as depletionist models of fatigue because they treat the human subject
as a subject that's energetic, that is depleted of energy, and then it's replenished, usually through rest
and care and things like that. Now, obviously, chronic fatigue is fatigue that does not resolve through
that, right, because the model, these models of fatigue, say, well everybody gets tired, right, the
problem is when the tiredness never goes away. So how else can you think about fatigue? And here's
where sort of phenomenology returns a little bit and also, this is not what I expected at all, but like
existentialism, which is not like the new hotness and cultural theory at all. Emmanuel Levinas, of all
people, wrote about fatigue in his early work, which is not the work that most Levinassians cite, I didn't
know this when I was reading about it, but fatigue is a presence. And then in the mid 20th century in
sort of, like, existential psychology, one finds these ideas of fatigue as a presence rather than an
absence in a subject. And so from that, I say, well, what would it mean to treat fatigue as a presence as
something about a person and how would you build a politics from that? And so, there I draw on the
burgeoning scholarship on refusal, which is, there's some stuff on refusal and disability theory,
especially around the politics of accommodation and the idea of that, for instance, if you are disabled,
you want the same media experience as non-disabled people. So Georgina Kleege, who I mentioned
before, writing about audio description for blind audiences; John Lee Clark, one of the main sort of thinkers and teachers a protactile, which is a language for deaf blind people, talks about also refusing, refusing certain kinds of accommodation; Chauncey Fleet, a blind educator also uses that language. But of course, you know, you’re looking at Indigenous Studies, you look in Black Studies, like this is a very, very big place of political theorizing today, right? Which assumes refusal is about refusing the legitimacy of the claims being put upon you and it is saying no, to say yes to something else. So it’s not a negative politics, even though it sounds like it, I refuse or whatever, talk to the hand. It’s actually not. It’s saying no to say yes to something else, which is usually about building your own life ways and institutions and something else. So, how does that work with a very fatigued person, right? You know, and as I said before, when you’re fatigued, you’re not necessarily able to, like, give an account of yourself. Refusal is understood as a very intentional agentic act and so I tried to construct this, this moment, you could say, of what happens after refusal, like the state of already having refused without the agentic act of refusal, and I have a few examples of this from, from other people. So, for instance, Nap Ministry, this sort of rest is resistance. Principle or a story about, uh, uh, protesters on the Capitol Mall in Washington, DC in the US who were told that they could stay there, but they could not sleep there. But of course at a certain point, they had to fall asleep, right, and so that was a moment not of active resistance, or active refusal, but moving into a state of having refused, and so how might we theorize a politics of, or a demand of fatigue from that standpoint, and ultimately, that loops around back to the epigraph of the book, which is there needs, there must be no litmus test for being human. Right? And again, like I said, I'm sort of a failed posthumanist in the sense that a lot of Disability politics is still about asserting the right to be, the right to be fully human, and so what would it mean to take the fully fatigued or the state of full fatigue as a moment that is both entitled and dignified, I guess you could say. And then the book ends with a cat throwing up on me and I won't say more about that, so I'll leave you in a little bit of suspense. And originally, I wanted to book just to end there but then the reviewers were, like, you have to have a conclusion, so then I wrote a conclusion.

1:09:10

Gummo Clare: Oh, well, yeah, I mean, we've got a bit short on time but I wanted to talk about the fact that in lieu of an orthodox conclusion, that it is a user manual. There was just one phrase in there that I thought was really, really neat that I wanted to ask you to unpack a bit, which was the phrase impairment is a detour, which I really liked. So I wondered if you could speak to that a little bit.

1:09:32

Jonathan Sterne: Oh, that's great. Thanks. Nobody's asked me about that yet. Yeah, I like the idea of impairment as a detour in the same way that... this is the idea of disability and impairment as affordances and possibilities just as detours put you in, um, put you in contacts that you might not have intended and you might see or encounter things that you didn't expect. I mean it in two, in both senses of the term detour, right? There's the detour, where you are going somewhere and you couldn't get there so you had to go around, right, and that's the sense of impairment as, like, lacking a certain ability. And then there's the intentional detour or taking the long way, Stuart Hall's “Detour through
Theory”, where it's a very intentional reconstruction of the world, and so that's what I'm trying to do with that phrase and it's certainly been the case in my life. I mean, in a way, I'm very lucky to have become more impaired after having read a lot of disability theory but that's how I view it as a sort of, and I say this a number of times in the book, is, like, the acquired impairments I have I'm relating them to you not as like a tragic story, but as a way of studying, engaging with, and encountering the world.

1:10:56

Gummo Clare: No, absolutely, em, yeah, and I think that it comes through so strongly throughout the book as, as exactly that. So yeah, I'm glad we could kind of draw to a close on that. And then I guess what's next? What are you working on now?

1:11:10

Jonathan Sterne: Oh, God. Well, I'm doing a bunch of stuff. I'm writing a series of essays, mostly with grad students, on machine listening and machine hearing. I just put in an application to do a pilot project on, of interviews with musicians with acquired impairments that relate somehow to their practice, and I've been co-writing this book with Mara Mills called Tuning Time: Histories of Sound and Speed. That history of time stretching and pitch shifting which sounds super technical but it's not. Imagine that there was no history of slow motion cinema and someone wanted to write one. This is about speeding up and slowing down recorded audio and sort of hist, the cultural history of the technique rather than the technologies to do it. So it begins with, you know, I want him there's always engineers, but also blind phonograph hackers, and it ends with like audible.com, autotune, Ableton Live, and university undergraduates speeding up their lectures during COVID, um, the recorded lectures, so, um, so yeah. The book is about sort of the history and politics of, of, you could say, rate, which is not a term that gets, like temporality and time are, like, the big fancy theoretical terms we like to use in Media Studies, but we're sort of giving a history of the politics of rate and we have a couple pieces out already, one’s in PMLA, one’s in Triple Canopy, they can give you a taste of what we're, what we're up to there.

1:12:50

Gummo Clare: Cool. Well, let's just go and read them in anticipation for the book, I'm sure. Oh yeah, thanks very much for your time. It's been really great to chat about the book.

1:12:59

Jonathan Sterne: Yeah. Thank you so much. Thanks for all your work prepping for the interview. It's one of my favorite podcasts and I'm thrilled to be on.

Gummo Clare: That's brilliant. Thanks.
(Thank you Kirsten! -- JS)