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SPEAKERS:

[SL]: Sajni Lacey
[GG]: Greg Garrard

[0:00]

[Music Intro]

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[SL] This is Sajni Lacey and you're listening to Frequencies, a podcast from the Library at UBC Okanagan.

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[SL] Today we'll be talking with Greg Garrard, Associate Professor in Sustainability with the Faculty of Creative and Critical Studies at UBC's Okanagan Campus

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[SL] Welcome

[GG] Thank you

[SL] Um we thought we'd start by just asking you a little bit about your research interests just to kind of get a peg of where you are.

[GG] Mmhmm

[SL] So take it away

[GG] Okay, uh so I'm a I'm the Associate Professor of sustainability in the Faculty of Creative and Critical Studies um which might sound a little bit surprising for a faculty with the kind of arts and humanities focus I suppose most people assume that sustainability is gonna have something to do with engineering, or maybe politics or natural sciences or what have you. Uh so, my but my interests are in the area that's sometimes called environmental humanities uh so that's kind of environmental philosophy, environmental history, and my particular area is ecocriticism which is environmentally orientated literary criticism. A major project that I am working on right now is on climate skepticism and it's a collaborative project with co-authors in Canada and the UK and the U.S. and we're doing a transnational study of climate skepticism in different countries and the reason we're interested in that is partly because there are such big variations between different countries, so climate skepticism is quite rare in Germany, but it's very

common in the U.S. and when you look at the existing literature which all looks at it sort of on demographic grounds, you know, population level studies, it's kind of hard to explain why there is that big difference and we think that the difference is to do with different cultural histories we don't think that it's because of different levels of commitment to fossil fuels for example, because Canada is very dependent on fossil fuel industry but has quite low levels of climate skepticism. So we think that there are important differences, cultural differences, between different countries. Um a lot of the other stuff that you see about climate skepticism is also about the role of fossil fuel industries in kind of deliberately undermining people's understanding or kind of creating ignorance, and we don't dispute that, but we also think that it's not actually very helpful because you know everybody has interests and to identify the interests of climate sceptics invites the retort that environmentalist also have interests, right, so so it doesn't kind of get you anywhere. So what we decided to try and do was to tackle the kind of um stereotype of climate sceptics to try to take it apart because that's one thing that we think that literary studies is quite good at, so whereas most of the studies that have been done up until now have been population level studies that have sought to categorize skeptical texts. What we are trying to do is not categorize them, we're trying to address them as literary texts um and go into detailed, detailed analysis of how they function as literary texts whilst, and this is the tricky bit, bracketing out their scientific accuracy or inaccuracy. So in the talk that I gave last summer, uh that gave rise to a lot disquiet amongst the scientists present and I've heard that on more than one occasion you know, how can you ignore the science, the science is what counts and my answer to that is we agree with the science of climate change, we agree with the IPCC, we think it's right, we think it's procedurally right, like we think it's, you know, the way it works is the way it should work and that its conclusions are sound, but equally we're literature professors, so we're not in a position to dispute or to resolve any of those issues, so what we wanted to do was to put those aside, acknowledging that they're important, but they're not our problem, and to address the skeptical texts as texts um and that's a thing that people in literature do in other contexts as well. I mean the best example would be the Bible as literature, when you study the Bible as literature you don't ask is it true or not.

[SL] Wow, that's very interesting [laughing] it's a lot...

[GG] Yeah

[SL] So because you're looking at the texts I guess then in terms of just as the text itself, right, you're not looking at the science piece...

[GG] Mmmhm

[4:51]

[SL] ... but in the process of having students, or in your research, deconstruct these stereotypes and looking at that, do you see a translation to their wider literacy in terms of being able to look at and critically evaluate information that their seeing outside of those texts?

[GG] That's a really good question, I've actually not dared [laughing] yet to teach much in the way of skeptical texts, partly because frankly as literary texts, it turns out they're mostly not that interesting [laughing] so there are some, there are some very interesting examples and it's interesting to make some differentiations and comparisons between them, but as you know, when you're a literature teacher, you want teachable texts, right and they're not, they're not teachable texts. Their interesting texts, but they're not teachable texts. Although, by and large my teaching and my research align very very strongly I actually don't know quite how I would teach this. [laughing] Um I do want students to evaluate um environmentalist text critically, and in fact, you know, I often deliberately kind of put forward a skeptical perspective or or a critical perspective towards environmentalist texts, not least because so often they are sort of apocalyptic in really obvious kinds of ways um and I also want the students to have a more optimistic outlook than they usually [laughing] might get from sort of environmentalist texts but I, in terms of actually juxtaposing skeptical texts and environmentalist texts I, I don't think that's worked so far, I haven't found a way to make it work. I think part of the reason for that is that, in order to really make good use of these texts students would need to have a better grounding in science and technology studies than they have and that is a separate, somewhat separate field to the fields of animal studies and ecocriticism that I normally teach so I would actually have to be doing new kinds of courses on the cultural place of science, which is similar to what I already do, but I would have to, I think I would have to organize it differently. In all my work, I have this sort of very ambiguous relationship to science literacy, on the one hand science literacy is really important to me because I draw on scientific findings all the time in my work, so I taught a course last year on um dogs, it's called Dog Tales, one of the things we've spent a lot of time on was the current findings, really amazing stuff that's been in done, in terms of scientific research on dogs. Historically biologist didn't really look at dogs cause they were too close to home you know [laughing] it was just too kind of nearby, and then, but once that work started to be done, primarily

actually in Hungary, where a lot of it's been done, really extraordinary findings have come out about the relationship. The differences between dogs and wolves for example a lot of the stereotypes about dogs that we have and that are still prevalent about them being dominant seeking and pack animals, dogs aren't actual pack animals it turns out, at all [laughing] wolves are, dogs aren't um but then kind of putting that alongside the literary treatments of dogs, which is what we kind of focus on, so that, I'm drawing on scientific findings all the time um in my, whether it's climate fiction or books about dogs, or whatever. On the other hand I also want that to be a kind of reflexive relationship, so that students come away from it feeling that there is, they have a better understanding of the value of science literacy, but also an expanded sense of what that might mean. So we tend to, when we talk about science literacy we tend to mean knowing more science. [laughing] Right? and I think that is a great thing, I want students to know more science, but I also want them to know more about the history of science, the philosophy of science, the cultural place of science. And to do that in a way that contextualizes science without undermining it, that's the real, that's the real challenge in teaching and research for me.

[SL] So do you find that, because, especially in the kind of current political climate that, because science is so polarizing, that students do have to look at these texts or look at how climate change or climate issues in these kinds of things are portrayed from kind of these multiple perspectives to kind of see how it's represented and how that plays out in a narrative of fiction, or...

[GG] Yeah, yeah, I mean I think that as I say in pedagogical terms I haven't necessarily found exactly the right, but then in pedagogy you never find the right answer, you just keep trying different things uh [laughing] um so so I think that that what I hope to do is as I say to broaden students sense of what science literacy is about. One of the things I love about teaching in Canada, is that in the UK students only really study their own subject, so English Literature students are just English Literature students and most of them stop doing science when they were 16 and it shows [laughing].

[9:56]

[GG] Whereas in my classes here at UBC I have, I have, last year I had in my pollution classes, writing pollution classes, I had people from chemistry, from environmental biology, I think some slightly wandered in by accident, but they seem to really and I had biologist in my Dog Tales class, and they seem to really appreciate it.

[SL] Okay, so you been talking about how science plays out in fiction, I'm wondering if you can talk a little bit about science as a broader culture process as well.

[GG] Scientific findings don't exist in a vacuum, you can't just, it's not the 1950's, you can't just publish something and say, you know, and wave your pipe at somebody, and say there, there's the answer now go and do it, um science is interpreted in a polarized and complex media environment um and and so we now have much more access, immediate access, to how science works and it turns out that it's not a kind of this idealized process of like scientists discover the truth and then they tell it to us, um but it's it is science is itself um an argumentative and complex iterative and institutional process. And I think also the the, what happens a lot with science and this thing happens, happened very clearly with climate science, is what has been called scientification. Scientification is where an issue that has very large political ramifications, economic, and cultural ramifications gets defined at the outset as a scientific issue, and sometimes that, that works really well so it worked really well with um ozone depletion and CFCs, the discovery of the effect of CFCs on ozone, experimental proof then there was the discovery by scientists in the Arctic of the ozone hole, then there was a political process following from that, there was a difficult negotiation, a set of political and economic solutions were found and and it was very very effective. I mean the the Montreal Protocol has been much more effective than any of the other climate agreements in reducing greenhouse gases, let alone gasses that affect the ozone layer. But climate is inherently political and cultural like from the very beginning, um, the IPCC scientist Mike Hume pointed out, that nobody before the Montreal Protocol had any ideas about ozone. There were no cultural ideas about ozone it was already a scientific fact that had no salience to anybody else, and you know apart from hair spray nobody really cared CFCs either [laughing] they were just you know oh well get rid of CFC's yeah fine, you know as long as my hair spray still works, it's fine. Carbon is completely different [laughing] carbon dioxide is inherent to all natural processes - we breath it out, it's in fires, its in, it comes out of exhaust pipes, its fundamental, it comes out, it's implicated in agriculture, there is no area of life that does not involve CO2. Furthermore, climate is also cultural like everybody already had ideas about climate [laughing], in fact you know in the UK, the weather is one of the most fundamental forms of conversation, so everybody had ideas about it already, so the idea that you could take something that was already cultural and have a purely scientific intervention in it, and then have vast political and economic consequences following from all of that. I mean, yes of course, the fossil fuel industry felt threatened, and they mounted a stout defense,

but it was much bigger than that, you know, there so much of our, so much of our lives are mixed up in climate and carbon that the idea of scientificating it was doomed and in fact it, you know, it has turned out that it isn't working [laughing] that that approach of you know from science to politics and then to culture um is, didn't work, and there's been a sort of gradual reluctant realization that actually it was probably never going to work, that the science was political from the outset um, and by that I don't mean that it's unreliable, i just mean it was inherently politicized, you couldn't get away from that and also that the cultural intervention and the cultural work needed to be going on from a much earlier stage.

[SL] So it sounds like too with these different kinds of cultural histories, the narrative that's been structured around what the environment is for that country, so in the UK it's obviously a very different type of environmental consideration than in Germany...

[GG] Yeah

[SL] ... and so that obviously reflects why some of these kind of issues arise.

[GG] Yeah, yeah and not only the kind of cult...I mean you should probably, I guess cultural narratives plural, right, because every country has every ethnicity and country has multiple competing kind of what I would cultures of nature.

[15:05]

[GG] Right, there isn't, no no country has one culture of nature, they always have lots, it's sort of in competition but there nevertheless are sort of relatively dominant stories, um and in in British sceptics, climate skepticism for example you get some quite genuinely environmentalists climate sceptics um people who dispute certain aspects of the climate science but also think that the solutions large scale renewable energy uh are going to be worse for the UK environment than climate change would be.

[SL] Can you speak to any skills or outcomes that you hope your students gain from your courses that might then help them to reflect and make decisions in their own life on these topics?

[GG] I guess for literature students what I hope they get out of it is that they, you know taking my courses is that they get better at understanding literature because that's kind of what I really want them to do, but I also hope that for students like

the biologists that took my dog's course or the uh the chemists that took my writing pollution course, that they will get some sense of this broader idea of science literacy that I'm talking about and that if they get that then I hope that they won't be as surprised or perhaps as irritated when uh they find that, that inevitably find I should say, that scientific, their scientific findings are not just kind of accepted in society, uh so I was at a panel discussion recently I attended it listened to it um by uh they're all chemists and biochemists answering the question, are people right to be afraid of chemicals. And to a chemistry professor the answer to that is very simple, people are really dumb to be afraid of chemicals, it's really straightforward because as far as a chemistry professor is concerned there is no difference between artificial and natural chemicals, that difference is simply meaningless um they are just chemicals, everything is made of chemicals, we are all made of chemicals, right? Of course they are right about that, but then what I found kind of amusing was that in the conversation the same people who had said that those distinctions were meaningless themselves had recourse towards certain notions of nature [laughing], right of what nature is and isn't because actually none of us can do without it, it's a in many ways scientifically meaningless distinction but it is also a culturally extremely prevalent and uh obdurate one you know [laughing] in fact we, you know, the anxiety about chemicals goes back to pretty much late 19th, early 19th Century romanticism [laughing] the the distinction between nature and artifice that we now have was largely kind of articulated in that period, and has been reinforced and contested in different ways ever since.

[SL] So it sounds like you're saying there's a bit of a two way street, it's not just science literacy is not just about people understanding science but it's also about scientists or the people putting out that information recognizing how it's being read and interpreted and evaluated and critiqued from the other side...

[GG] Yeah

[SL] ... of that spectrum

[GG] Yeah exactly, um I'm, I, I've been involved in a, um, the at the moment a development stage of multidisciplinary team in the EU to look at EU rules for um ecological restoration, because uh the European Commission announced that they wanted I think it was 30% of degraded ecosystems in the European Union to be restored by, let's say 2030 or something, it's just that, basically meaningless [laughing] meaningless statement. 30% of them? 30% of each one? But anyway um [laughing] they wanted this done and great, great that they want to invest in in

ecosystem restoration. The scientific team asked for me to be involved and and what I hope my contribution will be will be to say restored to what? I mean [laughing] it because you find, what you've learned ecology the science of ecology now is that habitats, landscapes, don't have a baseline condition to which they return, they're in a perpetual process of change not least because of evolutions, cause the organisms in them are changing, right? So the habitats change, climates change, organisms change and so you can't, there isn't a status quo ante that you can just say, this is what we want it to be like, that isn't already a cultural choice and so that just doesn't mean that it's up to us and by us I mean much more broadly citizens, students, to determine what kind of environment we want. We can't, again we can't appeal to science per se, to tell us what kind of climate we should have or what a bog should look like or how much pollution is too much pollution. None of these are scientific questions, they're all cultural questions.

[20:10]

[SL] Well thank you so much for participating in our podcast and contributing to science literacy week um it's been incredible, I really enjoyed it.

[GG] Well thanks very much for inviting me, it's a real pleasure, thank you.

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[Music fades out]

[SL] You've been listening to Frequencies. A podcast from the Library at UBC Okanagan. Your host today was Sajni Lacey. Editing by Karin Haug, Larissa Macklem, and Mathew Vis-Dunbar. Music by Trevor Neill. Artwork by Alison Ward. Additional support provided by Michelle Tinling and Arielle Lomness. Thank you for listening.

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[End]

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