JOURNAL FÜR ENTWICKLUNGSPOLITIK

vol. XXXV 2/3-2019

WASTE AND GLOBALISED INEQUALITIES

Special Issue Guest Editors: Nicolas Schlitz, Stefan Laser

Published by:
Mattersburger Kreis für Entwicklungspolitik
an den österreichischen Universitäten

Contents

Essays and Interviews

Journal für Entwicklungspolitik XXXV 2/3-2019, S. 197–216

Interview

Max Liboiron

Discard Studies: Doing Science Differently

The interview below with Max Liboiron, managing editor of *Discard Studies* and director of the Civic Laboratory for Environmental Action Research (CLEAR), deals with the establishment of the blog *Discard Studies*, the principles and practices of the feminist, anti-colonial research lab CLEAR (Civic Laboratory for Environmental Action Research), and a critical perspective on waste and plastic pollution. Liboiron is a feminist environmental scientist, based at Memorial University, who works with innovative methods and considers herself an activist. Our conversation functions as an alternative introduction to matters of waste and globalised inequalities.

A few notes on the setting of our discussion: the interview was held by Stefan Laser, Nicolas Schlitz and Kathrin Eitel in December 2018. Below, we the interviewers, appear as one collective voice, because we had prepared our questions collectively. Apart from a few minor corrections, we stayed true to the 'natural' occurrence of our Skype discussion. There is just an additional example of Liboiron's research materials that we added at the middle of the text (the text was provided by Liboiron herself). The example helps one to grasp the idea of embracing another kind of science – an open, reflexive and critical science. Last but not least, please note that we differentiate between *Discard Studies* (the blog) and Discard Studies (the interdisciplinary field of studies) with formatting. Both subjects will be introduced and discussed extensively. Only once we write "Discard Studies" (with quotation marks) – this has to do with a little surprise that Liboiron reveals at the end of the interview.

1. How to end up in Discard Studies

Interviewers: Can you please briefly introduce yourself to the readers? So, what is your background and how did you do end up in what you are doing now – Discard Studies?

Max Liboiron: I am an Assistant Professor in Geography at Memorial University; there, I'm the Associate Vice-President of Indigenous Research, and I am also the managing editor of *Discard Studies*, an academic blog. I'm a scientist who uses science and technology, especially Feminist Science and Technology Studies, to do science differently – namely to incorporate social science into scientific practices. My expertise lies in plastics in particular, but garbage more generally. I have been running *Discard Studies* since 2010, for a long time posting every week and now every second week. So, that's a lot of textual garbage (laughs).

Interviewers: Yeah, that's a lot (laughs). Today, you are working in the Sciences, but we find it very interesting that your background in fact is in Arts and Cultural Studies.

Max Liboiron: I actually started as a biologist, not as an artist. I dropped out of Biology into Art during my undergraduate degree, because I decided that science had very bad ethics, and so I'd go to Art to do the good work because they didn't have such compromised ethics. I got an Art degree and I have a major in Biology, without a Science degree. Yet during my Master's degree in Art, I started to decide that actually art had horrible ethics too, way worse than Science (laughs).

I started doing Cultural Studies, trying to find different ways to talk about accountability and representation. At the same time, I was making all of my art out of garbage. I did not think that was exceptional. I'm from a small northern place in Canada, where it's very normal to go both: dropping and shopping at the dump. You drop some stuff off, you pick some other stuff up, you always have a full truck to and from the dump. You build things out of discards. We had to burn all our waste in burning barrels and we weren't connected up to a curbside recycling – or any sort of municipal waste system where I grew up – nobody did. I had a very

different relationship with waste growing up; this was a very unexceptional sort of flow; this wasn't disgusting. It just was. People started remarking on this in my art, as if it was the point of the art that it was trash. And I'm like: "No, I'm just poor". There is so much good trash in New York, so clearly I made things out of *this*, instead of buying it, because that would be stupid. But again, over and over people were quite enchanted with that, and being a good artist I branded myself accordingly in order to be more successful. I became known as 'garbage girl', which was demoting me, because I was actually a woman the entire time. Trying to correct some of people's assumptions of our waste, I started doing a lot of research into waste, because I felt a lot of things to be true but I didn't have the sort of evidence that people seem to respect more than (say) experimental insights.

So, I became a garbage expert. I started doing my PhD with some knowledge of waste under my belt, but I became an expert while studying under Robin Nagel[1], who's an anthropologist of waste in New York City. She was one of my professors and committee members. She is actually the one who started *Discard Studies*, the blog. If you go back in time, the very first few blog posts were all Robin Nagel and then at a certain point they all became Max's (laughs). That's when I started to go over and post regularly, building up a community around critical insights into waste, trash and pollution. Robin is the one who called it *Discard Studies* instead of Waste Studies, because she wanted to be very clear that this wasn't about trash. This is about a way of being and doing and valuing, that was very often brought to bear on trash, but also pollution, also people, also places, also history – there's a lot of things that get wasted, using very similar logics and only some of that is stuff we call 'trash'. And then during my PhD I'd come to look at this through Science Studies, which is the social study of science: looking at science as a culture, how value circulates in science, how objectivity is crafted as opposed to being given. I was originally going to do my dissertation on different moments in history when waste problems seemed absolutely impossible and then became possible, like universal sanitation in New York City in the 1880s.

And someone asked me if one of my case studies would be plastic pollution. I said 'No, because that's actually impossible.' Like, that's not solvable under business as usual, that's never going to stop. No, I can't use it as a case study because there is no success there. After thinking about

that for weeks, however, I was like 'Ok, I'll need to change my dissertation to only talk about plastics now' (laughs), to talk about the structures that make it currently impossible to not have global plastic pollution.

Because I had a background in biology already, I read a lot of scientific articles on plastics. At that time there weren't many available. This is before plastic pollution was a hot topic. I ended up knowing the science inside and out, and when I got my first tenure track job here in Canada, I was ready to critique the plastic science. But Canada already had a very conservative government, like America has Trump. Canada had its Trump earlier and less ridiculous, but still very conservative. He had stopped all environmental programmes for two terms, for eight years. So, when I came to critique the science, there was no science to critique. That's when I realised that having pollution science, as sometimes fraught as it is, is also an incredible luxury. I started doing the science in a specific way so that there is actually less to critique from the social science perspective, doing it with insights of social sciences, from the beginning. So that it's not as biased towards women and people of colour when valuing work. So that it doesn't assume that local knowledge isn't valid, that it doesn't think that universalism *exists* – as a real thing, as opposed to something you have to work really hard to produce. So that it doesn't think that pollution and waste is a ready-made molecule that is just in the wrong place. To know that actually there is a whole lot of valuation that goes into that first. That's how I got where I am, and how waste has played a major role in my career the entire way, and now I'm a scientist.

2. Doing Discard Studies: about a blog and a critical methodology

Interviewers: Earlier this year you closed the blog *Discard Studies* for a few months, and it got an update. What happened? What is new?

Max Liboiron: It turns out that posting every week or multiple times a week is really laborious. As a PhD student it was still extremely laborious, but I had more leeway with my time. I was still working multiple jobs, but it was part of my intellectual production. Now, as a tenure-track professor,

who controls over a half million dollars in grants, who has a lab full of 16 to 24 people (plus being an Associate Vice-President), I don't have that many minutes anymore.

What was starting to happen is that I was posting things that were good enough but not good, and I felt that *Discard Studies* was losing its critical edge instead of being at the forefront of demythologising, deconstructing and reconstructing waste critically. It just started being *about* waste, which was insufficient to its original goals. Therefore, I decided it could not go forward until it got back to those roots. So it was dormant for about six months. During those six months I got an editorial board together. It's now myself, Josh Lepawsky[2], Robin Nagel again, and a graduate student named Alexander Zahara[3]. That increases our board of expertise and it means that reviewing guest posts isn't just on me anymore; it's now shared. But also we decided to post less and really go back to the roots of *Discard Studies*, to break open what people think is common knowledge or common sense about waste and show that its roots are actually deeply cultural and specific, and not given or universal. And that's been our focus now.

Interviewers: What kind of experience did you make with your blog as a place for different opinions, to foster a debate? Does it work?

Max Liboiron: I think one of the most important, maybe not the biggest, but to me the hallmark of success of *Discard Studies,* is that our readers include traditional academics, waste managers, members of the public, high school students, and people who use it to teach. And it's been referenced in policy, it gets picked up by news and reporters. It is accessible, used and useful to such a great variety of audience members. I think that is its real story of success. We get between 300 and 500 unique views a day, on days we do not post – on days we do post, that increases a lot. But even when we were dormant, we were getting like 300 to 400 views a day. And I don't mean bounces, I mean people who've stayed on the page for over 30 seconds, which meant they were reading or maybe they've gone to the bathroom (laughs), one or the other.

Interviewers: How charming (laughs).

Max Liboiron: Some of our most popular posts I published five years ago, and people are still referencing them. So, we're a public service and the reason we know that we're public service is *how* we're being used and who is using us. It was never its initial purpose, but because we've become that way we now also host dissertations, and we know that publishers go to our dissertation list to see who the hot new talent is. We host the bibliography and we know students go to that for their comprehensive exams. We host a list of news and events. Those are our highest ranked posts, job postings in Discard Studies, because there is no single department. There is a community that uses us, and through their use they start to cohere and find each other in different ways.

Interviewers: This is very interesting.

Max Liboiron: This is quite the most important academic thing I've ever done. Like, screw my papers, managing a blog has been way more important.

Interviewers: Is it a blog? Or is a journal? It's almost a journal…

Max Liboiron: … I call it a publication platform. We do have titles like editor, managing editor, co-editor. But we're also a little more flexible than an average journal.

3. Building a lab: striving towards new values in science

Interviewers: From our point of view this blog is also interesting because it could be proof of something new in science and technology studies. It shows how a field moves from a person-centred, Latour[4]- and Haraway[5]-based science to collectives: to doing something together. Against this backdrop we now would like to turn to your new project and talk about new approaches, new collaborations, new methods in engaged science: How did you come from Discard Studies to the Civic Laboratory for Environmental Action Research (CLEAR)? What exactly is your new project CLEAR, and how did it evolve?

Max Liboiron: Okay. I'm going to start with 'What is Discard Studies' and then we get to 'What is CLEAR?'. In Discard Studies I think one of the main theoretical commitments is its understanding that power is absolutely central to questions like 'What is waste? And what is not waste? What is wasted? And what is not? And: what flourishes?' Central to power is externalising certain things, certain types of people, certain types of knowledge, certain types of materials, certain types of claims to land or belonging in order for the power centre to hold. There is no such thing as power without its debris. Consolidated power.

The point of Discard Studies is trying to recognise things that seem very mundane and ordinary, and unexceptional, like a waste bin or pro-recycling-behaviour or something like that. Like what is wasted and recycled? Now the answer is 'China'. Because China said, 'We're not taking your trash anymore'. And suddenly recycling fell apart. Recycling globally was only possible by shipping half the world's recycling to China. Environmental good does not work unless we use China as a scrap yard**.** So that's one of many examples. This doesn't only happen to objects like plastic, it also happens to science, including science around plastic. One of the ways that conservative governments consolidate their power and legitimacy is by eliminating attempts to disrupt that centre, like environmental science. Like what is happening in the United States, like what happened to Canada before. So you show up, and there *is* no waste – because no one has been counting it. We didn't have a plastic pollution problem, because no one has written that down. Of course, we had a plastic pollution problem. But it didn't exist in any 'evidence-based' way that would be in a register that would challenge governmental power and government policy, which has a very specific knowledge production. You've got rid of that type of knowledge production; you gag ordered most of the scientists so that they couldn't talk to the media, even if they were doing this kind of work. It's a classic power-consolidating move towards science.

When I built my lab, a couple of things happened. Firstly, I needed to address this knowledge and power situation. Take for instance archives and libraries on fishery science. It just got wasted, literally in dumpsters. Like the department of fishery and oceans archive[6] got put in the garbage as a part of the cleaning out of science. The 'cleaning out of science' was the 'garbaging' of knowledge. I was like 'Oh ok, I start with

this science' and the government can't touch me because the government doesn't pay me.

Secondly, science itself also has problems where it pushes certain types of knowledge away. If the centre holds it has to waste certain things away from it, externalise certain things. Local knowledge is part of that. Reflexivity about its own values is part of that. It's often assumed in science that science is objective. The truth is out there and we go find it, as opposed to craft it, and where nothing outside it is political. But there's this great piece by Mary O'Brien[7], who is a biologist from the 1990s, it's called "Being a scientist means taking sides". As soon as you choose a research question, you've chosen not to do other research questions. As soon as you choose some metrics, you've chosen not to do other metrics. As soon you have chosen to work with these people, you've chosen *not* to work with those other people. All of these are political questions. And if you disavow this, and this goes to STS – think of Haraway and Harding – and you disavow that? Now you're doing 'bad' science. You're not doing bad science if you're like: 'Oh here's all the values that go into it'. You're doing bad science if you fail to account for those things and how they are affecting your science.

When I built science, I had to ask questions like 'What are our politics? What are we beholden to? What are our goods, what are our bads?' For us, we're going to be action-oriented, we're going to be activists. We're going to put that on the table. We're going to be feminist, o.k. We're going to do equity, o.k. And now we do a lot of anti-colonial work as well. That's what we've evolved into. That means when I go to count plastics, I got to figure out 'Who am I counting for? Whom am I counting with? What am I actually counting?' Most scientists don't worry about that! (laughs)

4. Doing research differently: from getting fish from fishermen to new place-based ways of counting plastic pollution

Max Liboiron: The only plastic pollution research I do (almost exclusively) is about ingestion, about those animals that people here eat for food, because in Newfoundland and Labrador most people depend on wild food in a way they don't in Toronto or they don't in Berlin. People here catch

their food, especially Indigenous people. That's what I count. It's a form of Discard Studies, it draws on a Discard Studies methodology brought into science, which doesn't happen very often. So yeah, bring the methodology in, bring the politics in – to do science differently.

Interviewers: Can you please explain the feminist and anti-colonial approach behind CLEAR with a little more detail?

Max Liboiron: Sure, we started CLEAR as a feminist lab, not because I am more feminist than I am anti-colonial, or more Métis. But because feminist science exists, and anti-colonial science didn't exist when I started the lab – to my knowledge. Feminist science is all about recognising the values that are already in science and how, weirdly and magically, say, primatologists who are from America study the way apes do violence against women, and scientists from Japan study the way apes honour their elders. How weird, right? That those cultural projections would have to do with what questions are asked, and if you don't realise it, you are doing something wrong. Feminist science is all about recognising those things *and* correcting them. In so far as we can be really accountable to our positions, our social positions, our economic or political positions – and direct our science accordingly.

In the lab we value equity. The most obvious example of how this plays out in the lab is our "author equity protocol". When you write a paper in science usually, there are many authors, unlike the social sciences, which have a lot of solo-authors. Usually, there are 6 to 12 people on a science paper. And the order you are in really matters in science, where the most value goes to the very first and usually the very last person.

Interviewers: So, how do you decide who goes in?

Max Liboiron: Usually the head of the lab, who in this case would be me, would decide it. I would just say 'By the way, I'm first, by the way, you're second, you're third, carry on...' That's how that decision usually gets made. "Of course, it's obvious, because I did the most work, you did the second most work and you… barely didn't work, so we're not writing you on the paper."

What we do in the lab is, number one, we do this decision by consensus. It is not the most powerful person's decision about who gets left in, who gets left out and what order they're in – which is following key insights of Discard Studies: the valuation does not come from the centre of power. Number two: we value forms of labour that are usually not recognised in science. And they are usually not recognised because they're feminised, like cleaning up, like contamination protocols, like organising meetings, like taking notes of those meetings so we can tell what we are supposed to do. Cleaning up the freezer is super important to our science. Without that scientific labour we don't have any validity. That's part of what gets counted in a paper, because that's part of what produced the knowledge, the good knowledge. And number three: the equity part, too, is that we recognise that people start from different social locations. Magically, weirdly, women of colour who are queer and have disabilities, for some reason, aren't winning the Nobel Prize as often as white males. How strange? Why is that? Is it that they don't know things? Absolutely not. It's that entire systems keep those people from succeeding, while white men continue to succeed. Over and over again, in seemingly magical ways that are actually structured. And that is actually what Discard Studies is about: those structures that constantly value some things, and constantly devalue other ones. Not because someone is an asshole. But because it's a system that just steers things in certain ways.

Interviewers: What does this imply in practice?

Max Liboiron: What we do is to say: 'O.K. if there are two people who have done basically similar work in the lab, what is the social location and how is one social location often devalued over the other – and let's promote the one that is usually devalued'. So if the two of you do exactly the same work, you guys are both white males[8], but let's say one of you is gay disabled and has five kids and no partner. You would get the bump in author order. And the other person would go second. That sounds very competitive, but because there's a lot of care work that goes into the lab, what ends up happening in our lab is, people say 'You go first.' 'No, you go first.' 'No, you go first.' 'I think she should go first.' 'Why? I think he should go first.' 'Let's both go first.' 'We can't both go first.' 'You go first.'

Over and over again, these celebratory, generous things start happening, because we start recognising people's social locations and how they're different and how some of us have privileges. Even if you cannot always do something about your privilege, because they're in a system – here's a moment where you can. This is the thing I get the most hate mail about of anything I do. And I do a lot of political things. But white male scientists usually write me in a very concerned way about this process. Because they feel that (say) black women are getting kudos that's unearned, because they get to go first for *no reason*, other than they're black women. They are not understanding the overall process. That's an example of equity. We've now matured into an anti-colonial lab, where we also include things like humility: that we're connected to things around us, that we're on stolen land, that we're guest on this land. And that we're behold to care-takers of this land that might not be us.

Interviewers: Is this what you refer to as "place-based science," a notion we find very prominently in your research?

Max Liboiron: Some of this is the place based-ness. We stay in place, we stay to this land, because land is all about the specific relations that are here. To go and universalise things really does a lot of damage to land relationships. For instance, if you're a scientist and you go to count plastics in fish, what you're supposed to do is to grid out the ocean and get a certain number of fish from each of those locations, so you can say it's representative of the ocean. That's universalising, that's how you can say: 'This is true of fish.' We don't do that. We go to the people who have harvested fish, and killed fish, and who are eating the fish, and say: 'Hey, can we get the guts of that fish that you're about to eat?' Since almost no one I know eats fish guts – seals guts yes, fish guts no, because they are gross – they will give us the guts and we will do our work on that. It means every single sample has been from eaten fish, which means we're studying people's actual food webs. It means we are getting truths about human food webs, not fish in general. This also means that we don't take samples that are not eaten, we have to eat them. We often have fish during lab meetings, we cook actual samples. So that also means we are studying *our* food. It locates the study in our lives, on this land, and is also behold to people who depend on this

food. That's not normal scientific protocol – although it's not 'unscientific' protocol either. There is extra validity, because we're also dealing with social things, we're also dealing with political things, we're doing things that matter. And then also we get scientific peer review.

Interviewers: Thank you for this beautiful example of methodology and its accountability in 'place-based science'. But, how do you actually connect to the community you are working with and what is their role in laboratory?

4. Towards an anti-colonial understanding of plastic pollution

Max Liboiron: One of the core components of colonialism is the assumption of access to Indigenous land for coloniser's goals. In this case colonisers include a lot of settlers… *and* academics. Academics often assume they have access to land for their science. We don't assume that. Which means that you need permission from the Indigenous groups that live there or have lived there, to do the research. We do that – first of all.

The second thing is that we understand plastic pollution as land, because land doesn't just mean dirt, soil and air, it means all the relationships, the spirits, and all the sort of stuff that I don't even understand a lot – that go into that. That means plastics are land, plastic pollution is land. Because that's still in relationship, it might not be a great relationship, but still in relationship. And so because that's land we bring into our lab, I specifically hire Indigenous people from those nations to process the samples. The people to head up those projects are people from those nations, they're called 'beneficiaries' here. It means they are beneficiaries of those lands. My lab manager is from NunatuKavut[9], and another student who processes geese is an Inuk from the Nunatsiavut[10]. We do this because it is their land, and they still steward it.

When we're done with the guts, what you do in normal scientific protocol is you incinerate them as bio-hazardous waste. Back to Discard Studies. We say: 'No. this isn't hazardous waste, this is food. This is life. This is kin for some people.' It would be so rude. You don't incinerate

grandmother after dinner, that's rude. So, what you do is you bring that back to the land and you put it back. We have these big gut repatriation parties. There will be a ceremony and we put the guts back into the water. We have someone who has Inuit teachings on how to do that. Because when you hunt you distribute guts in a certain way, and he leads that and distributes guts in a certain way that he was taught. That's our discard protocol, because it is wasting in a good way. Which means it's not exactly wasting. It's 'discarding' in a different way.

BabyLegs is a surface trawl that can be used to skim the surface of water for microplastics that are smaller than a grain of rice. Created with baby's tights, soda pop bottles, and other inexpensive and easy to find materials in the North that cost ~$20, BabyLegs is an open source, DIY tool created by Max Liboiron that allows community members to ask and answer their own research questions. For instructions on how to build, use, and analyse samples from BabyLegs, see: https://publiclab.org/wiki/babylegs

Interviewers: It's giving back, basically.

Max Liboiron: Yes!

Interviewers: You mentioned 'kin', and I was reminded of Haraway. Making kin, or making kinship in the Anthropocene, Haraway shows us in her book *Staying with the Trouble*[11], is key. With this, she wants to emphasise how human and non-humans are intertwined, which should help us reflect on new modes of critique, and new collaborations – that are based on connections, which perhaps already exist but usually are neglected. It is fascinating when you tell stories about your very local and corporeal research; this also appears to be linked to global issues. Do you also experience your research as a global endeavour?

Max Liboiron: It depends on what you mean by global. We refuse to universalise, we refuse to say 'this is true of all places', because that's a very colonial move. But we do believe in generalisation and there are different methods to understand whether something generalises or not. There is something called 'provocative generalisation', which means that if it moves people in another place, that means those are the politics that are resonant and so it can generalise to that other place. There are also different ways to think about the power-relations that put plastics in Newfoundland's waters in the first place. Especially when you think about Labrador, which is the northern part of this province. There is oil extraction there, but there are no plastic factories. It's mostly Indigenous land and there is ton of plastic moving up. There are certain power structures in the world that produce plastics, that produce disposables. They assume that there's a place for them to go away, which includes Indigenous land, which actually requires Indigenous land[12].

That's another way to think about imperial networks, which tend to be on a planetary scale, and that's why waste moves to China and not to (say) San Francisco, when you ship your recycling. That's why now the new hotspot to dump things is Vietnam, and why Malaysia is protesting against recycling, because they don't want to be the next China. And who wasn't on that list? Britain and France were not on that list of places to dump things. These are global power relations that show up in Northern

Canada, in the Inuit territory, as well as in China, Sri Lanka, Malaysia, and the Philippines. This is not only because wealthy nations went and plopped their garbage down, although that happens all the time too, but because when things had to be discarded, they needed someone else's land.

The initial reaction of a lot of my students, especially when they start, is to blame consumerism and to talk about recycling when they think about plastic pollution. They're talking about recycling… but they're not talking about dumping in China, which is what recycling currently requires. 'Do you want to dump in China?' And they are like 'Oh no.' Of course. And I'm like 'O.K. so, let's talk about land and pollution?' And we start talking about oil extraction and the petrochemical industry, which is also a plastic industry, which is also the American Chemistry Council – which is the largest chemistry lobby in the world, which supports a lot of recycling when those programmes fail, because supporting recycling lets them keep making disposables. We start talking about oil production as opposed to bad consumer behaviour. It points to the routes of this global problem much more effectively, we believe.

Interviewers: So, you're really pushing your students.

Max Liboiron: Yes, it is my job. (laughs) It is my job to push my students, and to get them to think critically, to see systems (instead of instances), to think about power (instead of objects that already exist).

Interviewers: We would like to make a catch-up question with what you've already started in the beginning, how you started to engage with plastics. You said that "plastics is unsolvable ", as a problem, and then you thought about it. A week, right? (laughs)

Max Liboiron: Yes, a whole week (laughs).

Interviewers: Then you decided, 'Ok, that's the thing I have to deal with.' Since then, various things have evolved, especially the way in which you understand plastics: as part of the land. If you take this notion of "land" and "waste colonialism" on the one hand, and the notion of a "permanently polluted world"[13]-on the other – with these two notions at

hand, how would you today answer this initial question of 'solving the plastics issue'?

Max Liboiron: That's a big question. When I realised that I needed to work on plastics, it was not because plastics themselves are an impossible problem to solve, but that within business as usual, plastics are an impossible problem to solve. My job was to describe what business as usual meant, so that we could properly locate and dismantle it. What I've come to realise over nine years of working on that problem is that part of that problem is colonialism: this idea that you get access, that colonisers get access to land for their goals, whether that goal is disposability or oil extraction – or even environmentalism. We just get to get to that beach and clean it up and we don't have to ask whose this is, and who else is looking after it, or whose it was.

That's a serious nuancing of my thoughts a decade ago, when I started this thinking. The other thing is that I've come to realise that plastic is only a very specific thing as we know it now. Plastic isn't inherently bad, which is often the way it's cast in environmentalism. The industry says this a lot, for instance the American Chemistry Council: 'Well, do you want a pacemaker that is not plastic?' 'No. I want a plastic pacemaker. Of course, I want a plastic pacemaker. Because there isn't another type of pacemaker.' 'Do you not want,' they also insinuate, 'young babies who are suffering and would die without the plastic tubing?' Of course, I want the plastic tubing for that baby. What I don't want is disposable packaging produced at a mass scale. What I don't want is plastics to have replaced all of my clothing. What I don't want is things that could be glass to be plastic. What I don't want is industry to externalise its costs to municipalities with recycling. I want the industry to be accountable to that waste. There *are* other ways to plastic that would require less or no extraction, but also not massive cornfields, which is the other alternative. That would not require access to Indigenous land. One of the core questions of Discard Studies is: 'How to waste well?' The question is: 'How do you plastic well?'

I'm not the first person to say that plastic is kin or pipelines are kin or pollution is kin, Zoe Todd[14] has talked about it, Kim Tallbear[15] has talked about it, Kyle Whyte[16] as talked about it, a ton of Indigenous scholars

talked about this – mostly women. If plastic comes from organic matter and it's very old, coming literally through the earth that you're part of it, then you stay in relation to it. It might be bad kin, it might be acting horribly, but that doesn't mean you have to exercise bad kinship. Everyone's got an asshole uncle. He's bad kin. That, however, does not mean you have to be an asshole niece or nephew. You can still do good kinship with your asshole uncle. There are better ways to deal with him. Same with plastics. Doesn't mean you have to fix your crazy uncle. It means you relate to him in a certain way that is respectful, while also staying safe for yourself. The same can be true for plastics.

On top of that I spend, sometimes all day, looking at one piece of plastic and getting to know that very intimately, and I can see things. I know where it's been, I know whether it was in the water for a long time or in the ice. I know whether it went through the guts of an animal, got stuck in the gizzard or not. Or whether it got pooped out immediately. I can tell some of these things in different ways. Those are land stories. It's not isolated. And, to be like, 'We need to eliminate all plastics, period,' is another universalising move without recognising that plastics come from some place. There are some places that belong and a lot of places where it doesn't belong. That belonging is cultural and specific – and not universal. How to work through this is a hard question.

Interviewers: Is it, in a nutshell, a politics of production? Or is it too narrow a perspective?

Max Liboiron: That's one of the many perspectives that you may come from, Marxism, and it is great that Marxism gets in there. One of the problems with Marxism, this is something Sandy Grande[17] has pointed out, is that Marxism will *also* assume access to Indigenous land for a different set of goods, for a shared mode of production. We have to make sure that our Marxism doesn't accidentally go colonial. But there is also an anti-colonial Marxism, that's possible. So, let's do that. You can go through this topic through modes of production, you can come through it through accountability, you can come through it through local markets, you can come through it via toxicants and chemistry. There are many different ways you can approach the question of 'good plastics'. I think a great variety of those

are needed. Because the centre of power is so incredibly strong, you can't get it with one pitch from the front. When you're taking down power, you need a movement.

6. About Max's upcoming work

Interviewers: You twittered something quite exciting a few weeks ago: that there is a new book coming up. Maybe you can use this example to talk about your future work? So, what are you planning to do, what is your next project?

Max Liboiron: There are actually two books coming up, and you are the first who publicly hear about one of them – which is that MIT Press has agreed to publish a book that Josh Lepawsky and I am going to write, called "Discard Studies"!

Interviewers: Congratulations!

Max Liboiron: We are going to publish the blog! But a fresher and sharper version. So that's really big news. It is going to take a few years to come out. But we're excited about that, and very happy that MIT is picking that up. That book, however, hasn't been written yet, although we have a lot of post-it notes. The other book that does have a full draft, and is currently under review, is "Pollution is Colonialism", which I'm authoring with a lot of help from a lot of people. It is trying to basically talk about this project we've just been talking about: how the root of almost all environmental pollution is colonialism. And also the science behind most environmental pollution is colonial. It paves the way for more pollution. Pollution science has colonial roots, because it assumes more access to land – it makes a land 'pollutable' to begin with. There are regulatory thresholds that say you can pollute up to a certain amount, supported by a science of identifying and measuring thresholds... That book ends with the lab and our efforts to try and do science differently, so that we can imagine pollution differently. It has a little manifesto at the end.

The newest area in the lab is trying to produce animal respect protocols that don't waste animals. Like, how do you deal with killing well? Ending life well? – which are Discard Studies problems. How do you deal with the fact that you have more power than that fish, and you do not want to externalise that fish as a matter of course. What do you do with guts? How do you stay accountable to those guts? When there's no longer a flopping, feeling thing? We do not yet have answers to this, but we're working on it, with Nicole Power[18], who does Animal Studies, with other people in the lab. That's our next big methodological area. Killing.

Interviewers: What an ending, thank you very much for your time!

1 Robin Nagel is Anthropologist-In-Residence for NY City's Department of Sanitation and author of the book "Picking Up: On the Streets and Behind the Trucks with Sanitation Workers of New York City" (2013, Farrar Straus Giroux). She is founder and collaborating editor of the blog and researches mainly on the anthropology of waste and on Discard Studies. She also works on the establishment of a Museum of Sanitation.

2 Josh Lepawsky is an Associate Professor at the Department of Geography at Memorial University of Newfoundland and author of the book "Reassembling Rubbish. Worlding Electronic Waste" (2018, MIT Press). He is Collaborating Editor for the Discard Studies blog.

3 Alexander Zahara is a PhD Candidate in Geography at Memorial University of Newfoundland and is a Collaborating Editor part of the editorial team around the blog, too.

4 Like Latour's *The Pasteurization of France* (1988, Harvard University Press), and *Politics of Nature: How to Bring the Sciences Into Democracy* (2004, Harvard University Press).

5 Such as Haraway's *Simians, Cyborgs, and Women: The Reinvention of Nature* (1991, Routledge), and *When species meet* (2007, University of Minnesota Press).

6 Huffpost (2019): Why is the Harper Administration Throwing Away Entire Libraries? https://www.huffingtonpost.ca/desmog-canada/destruction-of-dfo-libraries_b_4569748.html, 28.01.2019.

7 Mary O'Brien was a feminist political philosopher who published, besides *Reproducing the world: Essays in feminist theory* (1989, Westview Press), and also the article *Being a Scientist Means Taking Sides*, in BioScience 43(1) in 1993.

8 The interview on Skype was conducted by Stefan Laser and Nicolas Schlitz.

9 NunatuKavut is the territory of the Inuit of NunatuKavut, located mainly in southern and central Labrador, Canada (www.nunatukavut.ca).

10 Whereas Nunatsiavut is an officially recognised autonomous area by the Inuit in the eastern parts of Labrador, Canada.
11 Haraway, Donna J. (2016): Staying with the Trouble: Making Kin in the Chthulucene. Durham: Duke University Press.
12 See Liboiron, Max (2019). How Plastic Is a Function of Colonialism. In: teenVOGUE, https://www.teenvogue.com/story/how-plastic-is-a-function-of-colonialism , 28.01.2019.
13 See Max Liboiron/Manuel Tironi/Nerea Calvillo (2018): Toxic politics: Acting in a permanently polluted world. In: Social Studies of Science 48(3).
14 Todd, Zoe (2017): Fish, kin and hope: Tending to water violations in Amiskwaciwâskahikan and Treaty Six territory. Afterall: A Journal of Art, Context and Enquiry 43(1), 102-107.
15 Tallbear, Kim (2016): Annual Meeting: The US Dakota War and Failed Settler Kinship. Anthropology News 57(9), e92-e95.
16 Reo, Nicholas James/Kyle Powys Whyte (2012): Hunting and morality as elements of traditional ecological knowledge. Human ecology 40(1), 15-27.
17 Grande, Sandy (2015): Red Pedagogy: Native American social and political thought. Lanham: Rowman & Littlefield.
18 Dr. Nicole Power is a full professor in Sociology at Memorial University and a CLEAR lab member. Her new work focuses on animal relations in science.

Stefan Laser
Department of Sociology, University of Kassel
stefan.laser@uni-kassel.de

Kathrin Eitel
Institute for Cultural Anthropology and
European Ethnology, Goethe-University Frankfurt a.M.
eitel@em.uni-frankfurt.de

Nicolas Schlitz
Institute for Geography, Osnabrück University
nicolas.schlitz@uni-osnabrueck.de