

PODCAST: EMBODIED INEQUALITIES OF THE ANTHROPOCENE

EPISODE 4:

"Factory farming and human-hog entanglements"

00:00:00 Nehla Djellouli: Embodied inequalities of the Anthropocene. Building capacity in medical anthropology. A podcast series that analyses the human and non-human health impacts of this geological epoch of profound transformations.

00:00:26 Jennie Gamlin: Welcome to this episode of Embodied Inequalities of the Anthropocene, a space dedicated to exploring the health and well-being of human nonhuman societies in this geological epoch. This podcast is an international collaboration between universities in the UK, Mexico and Brazil. In this series, we will be exploring the research areas of experts involved in themes relating to the project, including indigenous experiences, ontologies and coloniality of the Anthropocene, gender reproduction and environmental justice, multispecies ethnography and human animal health, COVID-19, epidemics, pandemics and public understanding of the Anthropocene and chemical toxicity and exposure.

So, for this purpose, we've invited Alex Blanchette, associate professor of Anthropology and Environmental Studies at Tufts University. Alex has written broadly on how planetary transformations are altering values and qualities of work, while spending 15 years researching industrial meat production. He's author of "Prokopolis: American Animality, Standardized Life, and The Factory Farm", which is an ethnography of mundane work among one of the world's largest pork complexes, and a study of the biological limits of capitalist growth. With Sarah Besky, he also edited the volume "How Nature Works: Rethinking Labor on a Troubled Planet", whose chapters question the sustainability of societies organised around labour. In light of this podcast's theme, his scholarship engages with the politics of farm animal biosecurity, disease, antibiotic resistance, workplace injuries and, more generally, the class and racial remaking of human and animal bodies of the 20th and the 21st centuries.

I'm Jenny Gamlin. I'm an associate professor of Anthropology and Global Health based at the UCL Institute for Global Health. And on this occasion, it's my turn to conduct the interview. So over to Alex. Hi, Alex, could you start by telling us a little about how you became interested in human hog relationships and the standardised pig, and what led you to the ethnographic research that you did in order to write "Porkopolis"?

00:02:40 Alex Blanchette: Yeah. Thanks for thanks for having me, Jenny. I'm excited to talk about these issues. So, I should actually start by saying I don't think I began this book actually focusing on human hog relationships or the standardised pig or even environmental matters. Back when I was proposing to do this work to enter graduate school in 2004, I was more looking at transformations to the community in rural Ontario that I grew up in, which was seeing what appeared to be a number of factory shutdowns, deindustrialisation matched with an increase of industrial chicken and pork production. And so, I actually proposed to go to graduate school to actually look for, in the United States - one of the most industrial of industrial pork production facilities - in part, however naively, to see what might be coming down the road for the community I grew up in if I continued in this path. And, you know, many of my friends I grew up with were like taking on jobs like chicken catching at night.

And in 2004-2005, there was really little that had been written on what it means to work in industrial meat production. You know, there was many, much writing on the ethics of eating, sort of germinal work on animal ethics, but not so much about what it means to live and work amidst these massive industrial animal complexes. And so, my idea really was to actually try to do kind of a sociology or anthropology of industrial work or factory work within a place - so called factory farm that was ambiguously factory like or industrial. I was interested in the class relations, the racial relations and so forth, that underlied the mass production of life and death, which is a long way of saying I wasn't that concerned about pigs, you know. So, I moved to this area, it's a pseudonymous area in the Great Plains of the United States that annually generates, births, raises and kills about 7 million hogs and I spent 27 months there. So, I did a lot of different things. But over time, I ended up shadowing managers, senior managers, across kind of every phase in the production of life, production of death. And I also worked in artificial insemination and piglet delivery. And it was really, actually throughout that process, in many ways, I was really just focussed on human work, perhaps ironically, even less concerned about the conditions of pigs than some of my very co-workers in industrial confinement barns. But it was only after I kind of started writing my dissertation that led to the book, I started asking myself, this is starting to sound a bit almost ridiculous. Like I'm treating an industrial barn like it's a tire factory, and no one within that barn thought it was just a tire factory, right? They were obviously well cognisant. They were raising thousands and millions of pigs. And as I was starting writing I just started seeing it was so hard in practice to actually keep the condition of pigs and the condition of labour separately. It almost took strained effort to separate these two. I constantly just found that, like the dilapidated or the injured genetics of pigs were dramatically affecting the character of work. Conversely, the very treatment of labour and the status of wage labour in this area, in turn, was actually affecting animal genetics. And just like the living conditions of pigs and the working conditions of humans were completely conjoined together. And, you know, maybe that, just to wrap up, made me think, well, maybe from the start I wasn't really taking capital and labour seriously enough in the first place. In this context of raising hogs, of killing hogs, where automation is limited, right? We still need thousands of people working in these places because of variation in pigs bodies and other things. In this context, you know, it requires incredible amounts of work, incredible amounts of the exploitation of labour. And that in turn really presses pigs and humans together and creates strong relations of - for lack of a better word - intimacy in the workplace.

00:07:16 Jennie: I'm just going to squeeze in another really tiny question, because this is really interesting what you're saying, which is just to ask you, did you feel that you developed a personal relationship with the pigs?

00:07:28 Alex: I've thought about that question a lot, and I don't know if it's ultimately a problem with me at the time - like I was almost setting up defence mechanisms while I was working in artificial insemination. Or it's the actual setting whereby, you know, there's like 2000 hogs locked in gestation crates and you only interact with them in one way. But the long and short answer is kind of no, at that time. You know, I experienced much of the work as repetition. I like to kind of think of it, the metaphor of when I first entered hog barns, which are, you know, underneath them they pool massive amounts of manure. That first day of work, I just felt like a sensory assault. But within a day or two, I kind of became numb. And it was only really again afterwards, after talking to people, writing, teaching that I almost sort of had to ask what was wrong with me during that period.

00:08:25 Jennie: That's brilliant. Thanks, Alex. Okay, so I'm actually really interested in hearing about the meanings you see being created in these forms of production. So as an anthropologist, what statement about meaning do you think you were making in your analysis of the relationships between pigs, humans and capitalism?

00:08:43 Alex: Yeah. You know, I think when we do ethnographic work, many of us have these like, whoa moments, right? These moments where like 'huh I didn't expect that' or 'I didn't see that coming'. And mine was when I was shadowing managers, you know, going along with very senior managers across their day-to-day business, whether that's managing trucking routes or managing slaughterhouses or managing even like biodiesel facilities that take all the fat and turn it into fuel. And one thing I just kind of noticed when I was doing this was that most of my days were spent just running crisis to crisis. You know, a disease is broken out in this barn, production levels are low here, there's something wrong with the fat that's coming into the biodiesel facility, and it's creating all sorts of problems. Like the entire day was like troubleshooting and managing crises.

That kind of actually startled me a little bit and made me start to think about this place differently. Why? You know, the place I went to go to on the Great Plains? It's like the most vertically integrated pork production facility in the world, at least at the time. That means that they own, directly own, everything from genetics to like a good handful of the 1100 different products that come out of pigs afterwards. They are presenting themselves as almost like reaching a new phase in the production of life, right? And they've been doing it for 15 years. They were, by all accounts, profitable and so forth. And they looked like, you know, after all this time, they'd really managed this system where they were controlling life and death in a really powerful way. But working within these operations, I just came to see them as constantly being about, you know, trying to manage breakdowns in the process. Perhaps the scales gotten too large or perhaps, you know, they're trying to make ever more uniform pigs in order to speed up production. And that's created new problems. It felt like every moment they were trying to realise new forms of growth; it would create some sort of blockage or crisis elsewhere.

That became like a constant theme of my research and really a focus of the book. I once heard the CEO of the company say "We've vertically integrated the process. We own everything. Now we need to integrate our people" that's to say. And he was getting at something that I think is very true. Whether one is working or managing artificial insemination or the slaughterhouse or biodiesel production, these are entirely different material processes. And what I always found is people located in each of these segments had really different sensibilities about what the factory farm was in the first place, and in turn, different sensibilities as to what it would mean to realise further and additional growth and profit and other kinds of like, you know, capitalist dictates. To me, that kind of set me on a path of thinking about, you know, the very different meanings and orientations people have to this project in the factory farm in the first place. You know from almost outside factory farm seem like almost banal, hyper rational, brutal, but a sober manner of business. Right? Very calculated from inside. They really do feel like almost experiments in the mass production of life. And that's tricky because, you know, we have these operations that are pulling 7 million animals, a potentially risky operation in one place without yet, I'd argue, a clear sense of where this is going or even how to fully do it.

00:11:44 Jennie: Oh, that's really fascinating. So, it's like this fine balance between, you know, you tweak one side of this massive operation and it has impacts on the other side.

00:11:52 Alex: Absolutely. Yeah. When you're talking about 1100 different product codes coming out of a pig, that's a massive amount of demands, and projects, and forms of labour pulsing throughout this creature or carcass, and they're always in a fine balance.

00:12:08 Jennie: Yeah. So, as you know, our research project is actually really interested in the embodiment of inequalities, which speaks a lot to the questions of race, that you were talking about earlier, and class. So, the embodiment of inequalities generated in this Anthropocene. So, can you talk to us about the human embodiment of their relationship with hogs, both directly and indirectly? And would you consider this to be something of a symbiotic relationship?

00:12:31 Alex: Yeah. I think it's a relationship of radical entanglement, as I'll talk about in a second. Like pigs and humans - or I should say industrial pigs and wage labourers - are entirely co-entangled and co-dependent within these operations. If we take symbiotic to mean a mutually beneficial relationship, then absolutely not. I like to think of it this way: to me, one of the striking things of working in these operations was the division of labour. You know, a large corporation that might generate 7 million pigs in a year probably employs about 5000 people. Which sounds like a lot, but it's actually a fraction of the people that would have been employed or working as farmers or whatnot in a less concentrated integrated system. So, there's less total paid labour. But one thing I found is - and I think I would argue is fundamental to the process of industrialising life - is that there's more labouring positions. It's almost like Adam Smith's old pin factory, right? Like if you divide forms of labour ever more finely, you can produce more things.

To me, one thing I would argue is that the industrialisation of pigs' life and death is actually really about taking on more and more of their vital functions as wage labour, mediating more of their life through work. Sometimes that's banal, right? Like obviously farming. You feed the animals, right? Or you provide them with some form of shelter, right? That's one example. But I started witnessing in the workplace, just like really radical interventions into animals' lives. Artificial insemination is obviously one example, right? Mediating sexual reproduction. But even more so, you know, in one barn I was working in, the company was experimenting with what in Europe is called 'hyper prolific genes', it means lots of pigs come out in a single litter. And what that can entail is that many pigs develop in utero with, you know, limited access to nutrients, and they emerge fronted or fragile or in need of kind of assistance for muscular development. And so, all of a sudden, when I was working in piglet delivery and farrowing, I was watching all my co-workers like constructing body cast for pigs, just spending their days trying to help these runts survive. Another person I worked with worked almost entirely on the pig's epidermis, on its skin. You know, these thousand gestation crates were lying around all day, can't move, developing body sores. And this guy would go around for hours with an iodine bottle spraying on where he thought he saw a sore developing, so it doesn't become like an infection or an abscess or something more serious, right? To the point where, you know, if we extrapolate that out, the conditions of life that they've generated in these barns necessitate someone to act as a skin worker, right, to actually maintain the epidermis of the pig. That's one example.

But to me, it's just like I could throw out tons of those at you of more and more of pigs' existence being kind of mediated and conditioned by wage labour. And I think that this has profound consequences in terms of the conjunction of human and animal. You know, one of the things I found in my research was that managers had become concerned that pig diseases - not zoonotic diseases, not ones that harm you or I - but pig diseases that slow down their growth might be transferring across workers' bodies outside of work, and potentially infecting new barns of swine.

So, they would put in a policy that someone who works, say in a boar stud, cannot live with someone who works in a growing barn or a slaughterhouse, right? All of a sudden, the frailty of these picks, their weakness, their homogenisation and frailty led to managers feeling that they have to step outside of the barns and actually monitor workers payroll forms, to see who's living with whom, and who is socialising with whom outside of the barns.

Conversely, one could flip it around. I talked earlier about these genetics that led to a lot of runting. Well, those genetics require incredible amounts of labour, right? It's not like it's automated at all. You have to really, really care for these pigs to keep them alive. It needs a lot of people, and a lot of kind of caring people. That to me would not be possible if it wasn't for the relatively low wages in the rural United States today, which is inseparably tied to like border policies and migration and so forth. And in turn, we can always say like, I don't think you could put in those specific kinds of pig genetics without kind of racial hierarchies of work in the rural United States.

00:17:21 Jennie: That takes us absolutely, perfectly into my next question, which is, what does this say about human societies in the Anthropocene and our relationship with animals? You know, because there's multiple ways of understanding this sort of highly intermingled, even sort of co-dependent relationship.

00:17:38 Alex: You know my answer - and I hope you'll forgive the kind of abstractness - I think there's tons of different things it probably says about the sheer demands that are being placed on animals and human beings to keep growing these kinds of systems. But to me, I think it says a lot about our society's addiction to work, for lack of a better word. Its incapacity to just leave something unworked or not find a way to work things more and faster.

You know, I said earlier that there are 1100 commodities coming out of these pigs, right? Like 1100 different product codes, many of which are different cuts of meat, but many of which are things we would never recognise as a pig at all, whether it's biodiesel or various forms of asphalt additive or what have you. From certain perspectives that would be like treated 'Oh, this is so efficient. You know, they're using all of the pig, they're not wasting anything' and so forth. And I was like, no, we have to understand this structurally in terms of capital. This is about transforming this living and dying being into a site or a terrain for the exploitation of labour. It's about trying to find more and more and more ways to work and labour these animals. To me, this isn't efficiency at all. It's about an attempt to convert a living species into a quasi-jobs program. And in a society like, I would argue, mine and yours, that is so tethered around having everyone work and constantly getting more and more people to serve capital or society. This kind of pig, whereby there's 2000 different jobs positions within its biological form, is one result. And perhaps that's to the question that I'm always asking myself, which is whether a work-centred society itself is sustainable, right? Like a society where we're all expected to go out and work 40, 50, 60 hours a week, whether that in itself is sustainable, and it seems to me, from energy needs to consumerism, a large part of the very things that are transforming the planet are inseparable from the drive to get people to work.

00:20:03 Jennie: But what's really interesting about what you've just said is that, of course, in the middle of that, you've also got people who are really sort of caring for these animals. So, in order to do their work and as part of their work they're taking on, they are allowing themselves to develop some sort of intimacy by caring for the well-being of these pigs. So, it's sort of... you've got all these different things going on at the same time, whereas, you know, reading your book, I

could really see this sort of structure of capitalism in there and this sort of wanting to increase economic profit and whatever. But then within that, there's this side of real care for the animal.

00:20:43 Alex: Yeah. And I don't think it's actually a contradiction to say that if you are going to try to produce 7 million pigs in a year, right, in 100-mile radius region, if you're going to try to produce pigs at this scale, you actually need forms of care. You actually need workers to take on this kind of ethics of trying to save each and every runt. That's to say, if you push pigs to this level of fragility, you need workers to take on what I would call the burden of trying to save these animals. And, you know, typically, I think people maybe think of factory farms and imagine everyday workers as treating pigs like widgets. I didn't find that at all. I found some workers working almost to the point of exhaustion, to try to care for pigs in some way, despite these brutal conditions, you know, or perhaps just trying to realise some kind of personal ethics for themselves while working in the space that many workers themselves would say was brutal. But the challenge was precisely, you know, how do you think about that in this context where workers are trying really hard to give animals some sort of decent, however short, existence at the same time as they're running up against a system that's constantly demanding more and more and more from pigs.

00:21:58 Jennie: Yeah. So, you know, it says a lot about humans that they have that calling. I mean, just as a small, you know, really completely side anecdote. I grew up on a farm, and my mum was one of the people that took responsibility for the pigs, and we very often had them in the kitchen, the runts in a box in the kitchen until they were up and running and were a bit, you know, impossible to have in the kitchen anymore. Okay, so just my final question. So in the book, you're really cautious to emphasise that there's very little waste and hence minimal pollution in the production of the hogs. But in what ways are these factory farms changing the environment at a local and even a global level?

00:22:38 Alex: Yeah. So, I think this is like a question about so-called efficiency or what we actually make of that term in the first place. And this is not recent. This goes back to the 1890s. The Chicago meatpackers that infamously said, you know, we use everything but the squeal. There's long been an industrial meat production, an effort to almost kind of break even on meat and find profit in all of the non-meat stuff in the bones and the blood and the organs and so forth. And that's only increased over the last 120-130 years. These companies don't waste hardly any portion of the pig. They try to realise profit through every kind of microgram of the species. And in that sense, we could say, well, they're efficient, or there's very little pollution in this specific sense that they're not throwing out bones, right? They're not throwing out hundreds of thousands of pounds of bones every single day.

On the other hand, if we look at it from a different resolution, the entire process is itself wildly inefficient, right? Meat - and this is true of other forms of animal agriculture beyond factory farming - meat is an incredibly inefficient use, if we will, of crops, right? Of converting feed crops, calories and so forth to meat, you know. Arguably, meat production itself has shaped the surface of the world more than almost anything else. So, within these corporations, within these barns, yeah, they look pretty efficient. Step outside and see how the entire US Midwest has been reshaped, like every single agricultural field has been reshaped to feed these pigs or cows or whatnot. Then all of a sudden this looks a good deal less efficient. But certainly, even within this system where they try not to waste any saleable piece of the pig, we still see tons of leakage, even in a slaughterhouse where, you know, they're trying to use every single piece of the pig. There's still going to be, you know, traces of grease and blood pooled to the point where it overwhelms

local wastewater treatment facilities all throughout the area, through trying to manage, like, millions upon millions of gallons of hog manure, we see leakage off the field and the pollution of waterways.

There are many things that's not even on these companies' radars at all, right? Most zoonotic diseases come from farmed animals and perhaps factory farmed animals. There's a massive problem which I've written about of antibiotic resistance genes, especially in manure. These are all forms of leakage that are transforming both local and global environments. We could get into methane and so forth, right? That are just not being addressed within an orientation that just purely treats factory farming as the production of saleable commodities. But to me also, and here there's also the broader question of like, what do we mean by waste in the first place? Right? There's no one clamouring in demanding that we take all of the fat from pigs and turn it into biodiesel and discretely blend it with diesel engines at the gas tank. Right? This only exists because companies are trying to realise more and more marginal profits, right? In turn, when you take like, you know, tons of university PhDs, workers and so forth, and plug them into trying to mine pig fat to find 1101 commodities - as uncomfortable as it may sound, I like to ask, is this a waste? Is this not a waste? Like, how much of this work is actually necessary to anything? And how much of it is just purely in service of ongoing capitalist growth? Right? That, to me is like the tension that underlies these operations and indeed perhaps the tension of actually trying to realise a system that doesn't discard anything at all.

00:26:38 Jennie: It's super interesting. I mean, I find it fascinating about the quantities of hog manure because of course, sort of thinking, you know, anthropocenectly, how is that quantity of hog manure... What is that doing to the surface of the soil, to the crops that are generated there? Because it has no place in the normal ecology of a region. So how is that recycling or reuse of all these products having a knock-on effect on changing the environment? And again, what we're eating, because that's being grown in the soil, that's being served with this hog manure.

00:27:11 Alex: Yeah. You know, for of course years, manure was an agriculturally priced thing, right? It operates as a fertiliser, but it becomes a problem when you pool it in the millions upon millions of gallons in a very small region. All of a sudden there's not enough places, not enough fields to actually dispose of this manure. And I spent a long amount of time working with various kind of - they call themselves environmental resource managers - where they were just trying to come up with some kind of system, some sort of rotation that would allow them to dispose of manure on fields without creating conditions of runoff, because there's too much manure in them, and the nutrients and so forth flow into waterways. Manure had shifted from something that, you know, had a place within a system to something that needs to be carefully managed and disposed of in some way.

We're seeing all sorts of efforts right now to, quote unquote, "solve" the problem by creating yet another commodity, taking all this manure and now turning it into biogas through anaerobic digesters. So far, it's not fully put into place. And it seems to me that we still have this perennial issue. You know, North Carolina, which is hurricane prone, rainy, humid and home to a heck of a lot of industrial pigs. You know, it seems like every 6 or 7 years, a massive hurricane comes through and there's an environmental disaster of flooding, and manure just going everywhere throughout waterways. And perhaps to me, that's the biggest point here. At the end of the day, I think we need to step back and be like trying to manage 7 million hogs, beings that generate, you know, four times as much manure as the human population in the state of California, and you're

doing it with like, open air cesspools. Or even imagining that it can be managed, right? In this tightly confined area. And whether we're talking about these massive quantities of manure or all of the antibiotic resistance genes in the manure itself, I think we have to recognise we're not dealing with the same old substance from 1880 or something like that. We're actually dealing with a highly complex, technical, risky substance and, you know, still treating it like it's, well, the pig poop of 200 years ago.

00:29:32 Jennie: Yeah. And I'm sure it's got some, you know, traces of all sorts of chemicals and antibiotics and everything in it as well. Yeah. Anyway, that's a brilliant point to finish on. Thanks so much, Alex. Your participation in this has been absolutely brilliant. Before we sign off, did you want to add anything else?

00:29:48 Alex: Well, the only thing I'd add is that there's a risk when we're talking about things like factory farming, and especially the growth of factory farming over the last 30 or 40 years, that we just end up telling a story that makes it seem like things can't change, that they're just going to keep getting worse and worse, that this is a process that has been going since, let's say, the 1890s, and just getting more intense over time. And that's a risk. But I don't actually think it's true.

If we actually consider the ways that humans and hogs are newly conjoined and entangled through labour, I think it actually opens up possibilities for things being different. Lately in my new research, I've been trying to go back and think about this period from the 1940s to the 1970s, when unions were actually really strong in American slaughterhouses. And like the unions or many unions today, they advocated for better wages, better working conditions more generally. But what they really tried to do was limit the speed of the slaughterhouse, kill floor. They tried to limit, say, that only, quote unquote, "only" 6 or 7000 pigs could be killed in a day, as opposed to a large plant today that might kill 20,000-21,000 pigs. They essentially tried to limit work. And I've been doing some research on this, and I really think it's stunning. In practice, workers were doing this to try to make work less gruelling, less brutal, to try to limit injuries through repetitive motion. But I've been starting to ask myself how much would something like a limitation in line speeds, or worker-centred limitation and line speeds, actually change the bodily and living conditions of pigs? I'm still working on this and thinking it through, but I'm pretty sure a lot of the things associated with factory farming: indoor confinement, radically uniform genetics, maybe even antimicrobials antibiotics, would be at least less necessary than they are today. If you're not trying to kill a pig every three seconds, like trying to kill 18,000, 19,000, 20,000 pigs a day, you need a lot less uniformity in animals. And to me, that's just one little sign. And I'm trying to develop some more of the ways that attention to working conditions, actually attention to the treatment of human workers actually, perhaps has sometimes dramatic effects on animal lives, animal biology, animal genetics. And to me, it sorts of points to this, this sense that we have to stop treating conditions of human workers and the well-being of animals as entirely separate issues. Changes to one affects the other and vice versa. And that is perhaps a space for new openings or new imaginaries of how we might be able to assist in transforming and ultimately improving these institutions.

00:32:56 Jennie: So, I'd just like to say thanks to everybody for listening and invite you to continue reflecting with us on these things in other episodes. So, these other disciplines and themes will bring us new perspectives on the different challenges posed by the Anthropocene and inequalities in the health of human and non-human populations.

00:33:19 Nehla: This episode was recorded virtually between the USA and the UK. Jenny Gamlin wrote the script and conducted the interview. Nehla Djellouli lent her voice for the jingles.

Gabrielle Martinez managed the general production and script writing, and Juan Mayorga took care of the audio edition and post-production. This podcast is an international collaboration between University College London in the United Kingdom, the Universidade Federal do Rio Grande do Sul in Porto Alegre, Brazil and the Centro de Investigaciones y Estudios Superiores en Antropología Social in Oaxaca, Mexico.