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“They are my babies”: Meeting *Mycobacterium tuberculosis* and the Scientists Who Care for It

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**ABSTRACT**

Moving beyond what various scholars call the “human exceptionalism” in the social sciences, this multispecies research explored the relationships between *Mycobacterium tuberculosis* (*Mtb*) – the bacteria that is responsible for causing the disease Tuberculosis (TB) – and four molecular biologists who worked at a TB research centre in the Western Cape of South Africa. Using *fingeryeyes*, a conceptual and methodological tool derived by Eva Hayward (2010), the ethnographer participated through observation and touched through sight. In a space that was scientific there was care, in a space of risk there was nurture. In an environment of scientific lingo and hard-core jargon, parenthood emerged. Rather than *Mtb* microbes being solely subjects for experiments, they were babies that needed to be cared for. Making these babies was also making parents and scientists.

**Keywords:** multispecies, care, bacteria, *fingeryeyes*, social studies of science
1. Anthropologising the relationship between scientists and Mycobacterium tuberculosis

Medical anthropologists have long been aware of the effect of microbes on the social, political, economic and cultural worlds of human beings, specifically with regard to infectious disease (Benezra et al. 2012, 6378). Less work has been done on human relationships with the microbes that are responsible for these diseases. Moving beyond what scholars call the “human exceptionalism” in the social sciences (Tsing 2012; Lowe 2010; Haraway 2008; Kirksey and Helmreich 2010), this research approached Tuberculosis (TB) from an alternative perspective. Rather than centring the human in relation to infection and disease, it centred multispecies relationships between Mycobacterium tuberculosis (Mt) – the bacterium that is responsible for causing the disease TB (see figure 3) – and four molecular biologists who worked at a TB research centre in the Western Cape of South Africa. Mt is also referred to as the microbe, the bacterium, the bacillus or “the bug”. “The bug” was a broad discursive category used by most of my research participants and other scientists in the TB research centre where I conducted my fieldwork.

Donna Haraway, in her book When Species Meet, writes,

The personal pronoun who... has nothing to do with derivative, Western, ethnocentric, humanist personhood for either people or animals, but rather has to do with the query proper to serious relationships among significant others, or, as I called them elsewhere, companion species,
cum panis, messmates at a table together, breaking bread. The question between animals and humans here is, Who are you? and so, Who are we? (2008, 208)

I query the relationship among significant others, revealing the notion of multispecies entanglement and companionship. This article extends "who" beyond humans in order to explore social relations that would otherwise be ignored if we continue to draw impenetrable boundaries between human and animal. The research on which this article is based involved studying the bacteria’s social life in the laboratory, when it “met” – with specific reference to Haraway (2008) – the participants and the ethnographer. The “social” in this context follows Bruno Latour’s (2005) discussion of Actor-Network-Theory (ANT), which calls for an expanded definition of the social beyond humans in order to trace the full range of networks and relations of which humans are a part. Eduardo Viveiros de Castro notes that “Another important consequence of having animals and other types of nonhumans conceived of as people – as kinds of humans – is that the relations between the human species and most of what we would call ‘nature’ take on the quality of what we would term “social relations”” (2004, 465). I do indeed term the relations between my participants and Mtb “social relations” for this reason and therefore believe that they are worthy of anthropological attention.

Using participant observation, structured observation, informal conversation, interviews and “deep hanging out” (Geertz 1998), I followed the daily activities of scientists Amy, Tom, Nicole, and – less intensively, due to conferences and workshops that she had to attend overseas – Jana (all names of the scientists are pseudonyms). Each of them worked in specific areas of TB research. Amy was trying to see whether iron affected the growth of Mtb. She created a mutant strain that was missing the protein that helps incorporate iron into other proteins in the bacteria. Tom’s focus was the function of the proteins in the extracellular environment, the outermost layer of Mtb. Nicole’s research involved the study of the intracellular bacteria, the bacteria taken up by the macrophages after infection with Mtb. Macrophages are the cells of the immune system that are formed in response to infections. Jana’s work was in diagnostics and bioinformatics. At the time of my research, she was testing a machine that checked sputum samples for drug resistance.

In this article, I argue that rather than Mtb microbes being solely subjects for experiments, they were babies. Making these babies was also making parents and scientists.

2. “It’s not about curing, it’s about understanding”: The creation of a map and conveyor-belt science... a note on style

I sat on a stool and watched Tom as he began doing his experiment. He explained that he was doing molecular cloning, which he described as the copying of DNA from one organism to another. In this case, it was copying DNA from Mtb to E.coli or Escherichia coli, which are mostly non-harmful bacteria found in stomachs and intestines. I asked Tom where his project would lead and what he hoped to accomplish with this experiment or series of experiments. I expected that his end goal was to eradicate TB, and that was what everybody in the research centre was working towards. Tom told me that “It’s not about curing, it’s about understanding... we all have a small part to figure out, hopefully it will lead to something bigger, but I don’t think that far ahead.” Each research participant’s work was so focused and so different. Confused at how their work fit together, I asked Tom to explain.

“We’re building a map,” Tom told me one afternoon, “So we’ve charted a bit of South Africa and a bit of let’s say Europe, but we don’t know what’s in between. But someone has to start... otherwise we won’t have a map.” These disparate parts of research – of the “map” – will eventually fit together, resulting in better understanding of the relationship between Mtb and the immune system to inform better drugs, better vaccines, better diagnostics and the eventual eradication of TB. This is not easy, and there are many steps before the ultimate goal is reached. Tom referred to this process as “conveyor belt science.” Science works like a
The conveyor belt, he explained. There are many stages of research. It starts with the basic scientists and moves through various stages before a doctor can administer a drug to a patient. Each step builds on the work of the previous step, and so research moves along.

I use the metaphors of the map and the conveyor belt to conceptualize my research and to develop a writing style that mirrors the map-making of the scientific research that I observed. This article is written in “flashes”. I borrow this style from Susan Levine’s ethnography Children of a Bitter Harvest (2013). Commenting on her style, Levine writes, “Adapting the genre of flash fiction – which challenges writers to tell stories in 1000 words or less – to non-fiction has enabled me to give ‘snapshots’ of large themes in easily accessible and digestible forms” (Levine 2013, xxv). The flashes that chart the map of my research findings move the article along as if it were on a conveyor belt, building on each other sequentially until the reader makes meaning. Similarly, discussing the style of her article ‘Skillful Revelation: Local Healers, Rationalists, and Their ‘Trickery’ in Chhattisgarh, Central India’, Helen Macdonald writes, “If the article feels at times like a slow process of revelation then I acknowledge its intentionality... I position the reader intermittently within the aesthetics of revelation paradigm and as evidence of its resolve in guiding knowledge production of all sorts” (2015, 487). The article’s structure of flashes aims toward this kind of revelation and knowledge production.

The style of flash ethnography also mirrors the scientific experiments that I observed: each experiment is made up of multiple stages, it occurs in multiple labs or spaces and it requires movement – whether movement from one stage to the next or movement between spaces. Perhaps the flashes also mirror the process of ethnographic fieldwork, where information comes in disjointed bits and pieces which are sewn together to make meaning, to create a map if you will.

Enjoy the conveyor-belt ride!

3. Beyond the human: On multispecies ethnography

Multispecies ethnography consists of anthropologists’ research on both nonhuman species, ranging from marine microbes to popular companion species like dogs, and interspecies relationships between humans and nonhumans. Eben Kirksey and Stefan Helmreich introduce multispecies ethnography as an approach that decentralizes the human and centralizes creatures that are otherwise marginalized in anthropology (2010, 545).

Before conducting fieldwork, I imagined I would be encountering two species: the human and Mycobacterium tuberculosis. Little did I know that my project would be truly multispecies in that I would come into contact with various microbes and cells that play significant roles in TB research. E.coli is one of these. Tom told me that E.coli is called “the workhorse of the laboratory.” They do a lot of the work for the scientists and are therefore incredibly important in TB research. They reproduce very quickly and according to Tom, “do not mind being messed with” on a genetic level. They are forced to take up the DNA of Mtb and reproduce it when they reproduce. Mycobacterium smegmatis is from the same family as Mycobacterium tuberculosis and because it grows faster than Mtb (and is not pathogenic) it is used to do preparation experiments before working with Mtb. Mycobacterium smegmatis can be used to get a sense of more or less what will happen with Mtb, especially if it has been made to produce Mtb proteins. I also came into contact with Murine (mouse) macrophages. When infected, they reveal a close resemblance to what would happen when Mtb infects human macrophages. Lastly, I encountered two different fungi that were responsible for contaminating experiments. These fungi somehow managed to make their way into airtight containers and test tubes, taking over and ruining experiments.

Latour’s discussion of ANT (2005) is central to multispecies ethnography. At its most basic, ANT redefines the social in order to trace associations and connections between actors (2005, 5). Latour argues that we cannot think of “groups” since “groups” suggest discrete
entities; rather, we need to think about and work with “networks” (2005). If we start to look at the networks and connections that are brought into being around certain phenomena we can expand the definition of social. The new definition of social, Latour maintains, “has to be much wider than what is usually called by that name, yet strictly limited to the tracing of new associations and to the designing of their assemblages” (2005, 7). The social sciences, according to Latour, need to look at the full range of actors and what he calls “actants” or nonhuman agents (2005). Since humans do not exist in vacuums, but in multispecies relationships and networks, reading Latour pushed me to question why we place the human at the centre and to think about what our research could look like if we shifted positions to look at other creatures. By expanding the social I was able to conduct research with a subject that has been largely neglected in anthropological work. However, a few other scholars have considered microbes to be important anthropological subjects.

In her ethnography of a virus, Cecilia Lowe (2010) takes the H5N1 (avian influenza) epidemic in Indonesia as her starting point to explore the different networks that the virus brings into being. Lowe writes, “working to get beyond the human exceptionalism underlying much scholarship in anthropology and the humanities... I observed that H5N1 influenza brought together humans of diverse types (epidemiologists, chicken farmers, virologists, ornithologists, public health workers, government ministers) and equally diverse animals and strains of microbes” (2010, 629). In this sentence, Lowe provides an overview of the various nodes that form the network around H5N1. She also reveals how the H5N1 virus is deeply entangled not only in the local, but in the global; not only embedded in ecological and social realms, but in political and economic ones as well. Similarly, Helmreich’s (2009) ethnography Alien Oceans: Anthropological Voyages in Microbial Seas is centred on a species that cannot be seen with the naked eye: marine microbes. Helmreich conducted five years of multi-sited ethnographic research among microbial oceanographers, biologists and other scientists as they used marine microbes for a number of studies ranging from monitoring climate to understanding other possible life forms on other planets. Helmreich brings microbes into the realm of agents that have very real effects on human life by exploring the complex networks and grand assemblages of which microbes are part. Both ethnographies push past the boundaries of anthropology’s human-only approach to trace the connections and associations surrounding microbes.

To my knowledge, Erin Koch (2011) is the only other anthropologist to look at Mtb in a laboratory, though from a very different perspective to mine. Koch conducted six months of research with laboratory technicians who tested patients’ sputum for active TB cases and drug susceptibility in order to provide them with case-appropriate drugs. Koch recognizes the relationship that forms between scientists and the microbe. She writes, “In a clinical TB laboratory, work is about cultivation, and cultivation is a relational process that emerges through and expresses social relations” (2011, 84). Koch’s research looks at the paradox between the biomedical categorization of TB as a static state (either active or resistant) and the biological emphasis on its adaptability and resilience. The first understanding, which informs biomedical intervention, leads to rigid treatment regimens “which in turn could undermine the effectiveness of the very protocol designed to control the spread of disease and cure cases” (Koch 2011, 83). By using an anthropological lens to explore the molecular properties of the microbe, Koch’s paper suggests that moving away from the discourse that classifies TB according to fixed states towards understanding it as variable will improve the intervention of infectious disease. While her research is largely centred on what understandings of the disease mean for policy, my own research is on the social relationship between humans and Mtb in a laboratory setting.

4. “Fingeryeyes”: Participant observation, or how I participated through observation and touched through sight

Before I started my research in the Biosafety Level Three laboratory (BSL3) – a controlled...
environment in which my participants worked with this pathogen – I signed a form that stated I would only observe inside the lab. I could touch, and feel, the double pair of latex gloves that hugged my hands tightly. They irritated my skin and left marks on my wrists. I could feel the double elastic on the two arm-bands that covered each of my lower arms. I could feel the breathing machine attached around my waist. I could feel its weight and how it slipped against my back and pressed against my skin when I sat down. I could not move it without accidently opening the special gown that had to be worn inside BSL3 lab and I was not going to take that risk. I could feel the mask on my face and the cold air that blew into it and over my ears. I could feel the slippery floor against the scrubs that covered my shoes. I could feel the bottom of my jeans move up when I sat down and expose a slice of my skin. I could feel that spot of skin and I could feel my anxiety at its exposure. I could feel the pen between my fingers and the paper notebook that my hands grasped. These things, the things against my skin and wrapped around my body, I could feel very clearly. This was part of my embodiment, and brought me close to understanding and embodying the work that my participants did. But I could not touch experiments or participate in them. I longed to touch and to participate. In the beginning I noticed how I missed my sense of touch, how I wanted to be involved, to help and to feel what being a scientist felt like. Instead I developed another method, derived from Eva Hayward’s ethnography, which allowed me to participate and touch.

Hayward’s ethnography “Fingeryeyes: Impressions of Cup Corals” (2010) is based on her research conducted at a marine biology lab with *Balanophyllia elegans* – cup corals. Hayward’s ethnography looks at the lives of coral in the lab and the relationship that forms between her and the coral, and to a lesser extent the marine biologists and the coral. Hayward’s ethnography emphasizes the decentring of the human and the centring of the cup corals. “I found that just talking to cup coral experts... and being a participant-observer of routine laboratory tasks was not enough,” Hayward writes (2010, 584). She creates the conceptual tool, the haptic-optic lens of fingeryeyes to navigate her sensual encounters with cup corals in the lab (2010, 580). Fingeryeyes is used to describe the kind of visual touch that occurs through the use of various mediums such as the camera and microscope to access worlds that “prosthetic-free human experience” (Helmreich 2009, 15) cannot. Hayward’s work is important because through developing a means by which she can conceptualize her interactions with nonhumans, she finds a creative way to translate her fieldwork encounters into visually rich language. This conceptual tool is beneficial to analyzing human-nonhuman encounters in a way that understands the shortcomings of merely applying the theory of encounters between humans. Hayward’s fieldsite, her engagement with nonhuman organisms in a laboratory, her assertion of the organism’s agency, her reconceptualization of human-nonhuman encounters and her exploration of her relationship with the coral situate her project very close to mine.

I used fingeryeyes to come to know *Mtb*, to talk to it, to express my admiration for it, and to come to terms with my fear of it. In the beginning I did not meet the bugs through machinery, but with my eyes. Thus I extend Hayward’s concept of fingeryeyes to encounters and experiences of microscopic beings through the human eye. One day Amy and I sat at a hood – formally known as a lamina-flow cabinet – inside the BSL3 lab. She explained that it was her fifth day of work, “so they have grown quite a lot now, so I need to dilute them.” She was referring to the bugs that were floating inside the six culture flasks at the back of her hood. The flasks were lined up next to each other: three of the flasks had a beautiful pink-coloured liquid inside them and the other three were milky-coloured. Amy explained that each flask had a different strain inside it and each flask either had or did not have iron inside the culture. The milky-looking culture had iron and the pink-coloured culture had a compound that removed iron. In these flasks were millions of bacteria. The “thicker” the liquid looked, the more bacteria were inside. It was hard to believe that a deadly pathogen was swimming around in those liquids, eating, growing, reproducing, happy, warm and “having sex,” as one of the senior scientists said to me. My fingeryeyes allowed me to meet the bugs, to
touch them through my (eye)sight, but also my mind's-sight, since I had to use my imagination. They became more visible the longer I was in the field.

One morning I went with Jana into the BSL3 to see which of her cultures were growing. She took out one of the test tubes to show me and explained that inside the liquid are the bacteria. She turned the tube upside down and turned it up right again. She told me that the little things that looked like “breadcrumbs” in the liquid were the bacteria. It looked just like a snow globe, but instead of looking at a miniature scene of the Eiffel Tower I was looking at little bacteria that killed 1.4 million people in 2015 (World Health Organization 2016, 1). Through my fingeryeyes I encountered them again. Through sight I touched their snowy bodies as they floated around. I extend Hayward’s concept of fingeryeyes even further, beyond encounters of prosthetic-free human experience, to situations where humans encounter microbes, but through the fingers of other humans. Using my eyes, and fingers that were not mine, I came to participate in laboratory processes and experiments through observation and touch through sight. Through fingeryeyes I sucked up the bacteria with a pipette and carefully placed them inside tiny little wells. Through fingeryeyes I placed the bugs on petri dishes and spread them out on the plate. Through fingeryeyes I picked up plates and counted three-week-old colonies of bacteria (see figure 2). Through fingeryeyes I touched and came to know Mycobacterium tuberculosis as babies.

5. “They are my babies”

It was my first day of fieldwork when the word “babies” came up. I was with Amy in the lab watching her spread the bugs out on the plate. While she moved the spreader smoothly across one of the plates she said to me,
It may sound weird, but I love doing this. I need to take care of them. They are my babies. You have to give them their food. You have to make sure they are clean, that you put them into proper containers, that you put them properly on the plate so that they don’t overcrowd… You must have a passion for it. Some people will laugh at me and find me weird, but I don’t care.

It was the first time – and definitely not the last – that I heard *Mtb* being referred to as babies. Amy was not the only one who referred to her bacteria as babies. Nicole would call them her babies and I also heard an honours student calling her bacteria her babies. When I first heard this word I did not fully comprehend the extent to which *Mtb* had to be taken care of, but during my research I came to learn more and more about why they are considered babies. Like babies, *Mycobacterium tuberculosis* need to be conceived, fed, kept clean, warm and happy, and taken care of so that they grow. Christopher Mabeza writes, “Metaphors convey a deeper level of comprehension of meaning and significance” (2013, 131). Mabeza cites Kendall and Kendall who propose that metaphors are “cognitive lenses we use to make sense of meaning” (1993, 149 in Mabeza 2013, 131-2). The metaphor of babies helps to understand how scientists work with the bacteria. The “baby” is a lens through which my participants made sense of the demands of the bacteria for successful experiments.

There is a contradiction central to my work: deadly bacteria are considered human babies. The conceptualization of the bacteria as babies does not deny the devastation they cause. It is this devastation that has led to this scientific research in the first place. It must, however, be understood that *Mtb* is an organism that is merely trying to survive. This bug somehow manages to survive the harsh environment of the human macrophage, it does not mind being frozen, and it is “strong”, “resilient”, “brilliant” and “clever”. These words came up a lot during my research.

Kylie Marais, in her dissertation “The Ethnography of Leaks: What the Bodies and Bodily Fluids of Infants Reveal”, writes, “Infants… enter into intimate care relationships – framed in large measure around feeding, comforting and tending to leaks – with various people from an early stage” (2014, 8). Like these infants, *Mycobacterium tuberculosis* relies on these relationships of care to survive in a laboratory environment. Without care in the form of feeding, cleaning, and keeping happy and warm, they would die. The environment of the laboratory paradoxically makes this a bug that requires nourishment and care, as you will read, and it is in this context rather than the body of the human that my research exists.

6. Making babies/ making parents

From my time at the TB research centre I learnt that depending on the research that scientists are doing, the bacteria do not necessarily come from people. They may have originally come from people, but they have been cultured and re-cultured in labs so many times that their once-human host is forgotten about. There are two major categories of *Mtb* strains: reference strains and clinical strains. Reference strains refer to laboratory strains, while clinical strains refer to strains from human hosts. There is one main reference strain (H37RV) and one main clinical strain (CDC1551) that scientists work with. The reason for this, as Tom explained to me, is that these two strains have been extensively characterized based on their genome and scientists therefore know how they grow and what their genome is like. This enables them to work on it. When a strain is taken from a patient, they do not know exactly what the genome looks like or how it grows. It is easier to do more work, or better work, on strains that are known and understood. The work done on these strains can still be applied to other strains, since the functions in the bacteria remain largely the same, as Tom explained. If the function is not the same then a whole different avenue of research is opened up. Tom tells me,

It’s kind of like somebody decided this is the strain we’re working on and then everybody said alright we’ll work on this strain… It depends what you are working on. If you are looking at patient
samples and how there are changes between patient strains then you work on the patient strains because that makes sense. If you are going to work on understanding the bacteria, you choose the reference strains because everyone's worked on them and built a knowledge base for those strains specifically. But whatever is found in those strains can still be applied to the clinical strains.

To bring these babies into being, my participants were given a “freezer stock” to begin with. Amy's strain (H37RV) was brought from Johannesburg and Tom was in the process of getting his strain (CDC1551) from Europe. No matter where they come from, the bacteria need to be conceived, cultivated or cultured from these small freezer stocks. Nicole explained the recipe for this conception:

1. Make food (otherwise known as broth or media) for the bacteria. It must be fresh and it must be made accurately. (The recipe for the food is in the “Making broth” flash.) The food is used to grow the bacteria.
2. Take the -80 degree Celsius freezer stock out of the freezer. The bacteria are frozen inside an “aliquot”, which is a little test tube that contains 1000 microlitres of Mtb culture.
3. Thaw the stock at room temperature in the BSL3 or in a small incubator.
4. Once it has thawed, take the liquid inside the aliquot and put it with the food inside a small starter culture flask.
5. Put the culture flask inside a 37 degrees Celsius incubator.
6. Wait about one week for the bacteria to grow.
7. Once the bacteria have grown, put the culture into a bigger culture flask.
8. Put the culture flask into a 37 degrees Celsius incubator.
9. Wait about two weeks for the bacteria to grow.
10. You are now ready to start your experiment. Alternatively, you can make stocks from this culture.

The process goes a step further in the case of mutant making, where “mutants” of the bacteria have to be made in order to test certain aspects. Mutants are bacteria that have been manipulated or “messed with” on a genetic level. Since Amy, for example, is doing experiments to see what role iron has in growth, she made a mutant of her strain that is missing the protein involved in the incorporation of iron into other proteins in the bacteria. This requires conceiving your own baby, as Amy put it. When we were talking about her mutant, she said to me,

You have to take care of them and it's like I made the mutant, so I think it's a bit more of an emotional connection to the pathogen. I created this mutant. I don't think there's any mutant out there like this one, so it's like my baby. It's my new thing that I made, that I get to work on, but I made it myself.

Amy's response shows that making babies also makes parents. I am thinking here of Charis Thompson's book *Making Parents: The Ontological Choreography of Reproductive Technology* (2005). Thompson explores the making of parents through the making of “test-tube babies” in assistive reproductive technologies (ARTs). “When they [reproductive technologies] work, they make babies and parents. These kinds of apparent contradictions are a signature aspect of assisted reproductive technologies. They are intensely technological, and yet they also make kinship” (2005, 4-5). In this flash in particular, what is common to both our work is the birth of organisms outside of the body and the kinship formed in a type of space that it is not usually associated with: the scientific laboratory. The making of parents means that my participants' relationship with this bacteria requires certain obligations such as care. Hayward asks, “Rather than passive surfaces reflecting human intention, might animals act upon us in surprising and nuanced ways?” (2010, 584). The making of the parent may be one answer to this question.

**7. Making broth**
Like babies, *Mtb* requires special food. It is called 7H9. This was explained to me as a “broth” that has all of the nutrients that *Mycobacterium tuberculosis* likes. “Broth” is a very interesting word for *Mtb* food, especially since it is generally (outside the lab) used to describe “thick soup made by boiling meat or fish and vegetables in water” (Wehmeier 2000, 139). “Broth” is more descriptive than merely “food” and suggests a nutrient-rich wholesome meal. This word is interesting to think about in light of the kinds of subject-making of *Mtb*.

Making the broth in the lab is quite a process. During my fieldwork I watched Nicole make it. When she started she said to me, “I'm making sure that my bacteria has nice food to grow in... we have to take care of it.” She took a big empty glass bottle from the cupboard and told me that you need to use bottles that have been sterilised to avoid contamination in the form of other bacteria or fungi, which may be inside the bottle and contaminate the food. Microbes do steal food from each other; I witnessed a fungus that had taken over Amy's plates and another fungus that had found its way into a test tube that contained *M.Smeqmatris*.

“I'm making sure that I'm going to feed it properly,” Nicole told me, “The way to make your media is very important, every component of media has a function for the bacteria to grow.” She took the broth from the shelf, measured the powder on a scale and filled the large glass jar with purified water before putting the powder inside. The water must be purified to avoid contamination or because normal water may contain a chemical that will affect the growth of *Mtb*. A sterilised lid is then put onto the bottle to seal it and tin foil is placed over the lid for extra sterility. The broth is stirred using a magnetic stirring machine and after this it is autoclaved, killing any bacteria or fungi that may be present. The process is not over yet. Nicole waited for the broth to cool down after being in the autoclave before she filter-sterilized it inside the hood using air pressure. The last step after filter-sterilisation was to add OADC – a growth enrichment – to the broth. Nicole told me that “OADC is like gold in this place.” It makes *Mtb* grow more quickly and helps prevent contamination. She then closed the lid and shook the bottle to mix the OADC with the media. Finally, the broth was ready for the babies and it was put inside culture flasks to help them grow.

8. Keeping your babies clean

Marais, in her ethnography of leaks, argues that the relationships between the carers and the infants they looked after was formed around “tending to their leaks” in the form of “mucus, tears, urine, faeces and vomit” (2014, 7). Keeping the infants clean was thus essentially what their relationship was built on. Marais, writing about her own experience of keeping the infants clean, says,

My personal experience with infants' bodies and leaks varied across the days. Changing nappies involved undressing the infant and removing the infant's nappy, wiping the infant's genitals and buttocks clean with a wet cloth, rubbing the cleaned area with lotion, putting on a clean nappy and redressing the infant. Apart from that, tears, mucus and vomit were the primary leaks that I came into direct contact with. I spent a large portion of each day wiping tears from crying infant's faces, wiping mucus from infant's noses (and faces), and also wiping up vomit from the infant's clothing or the floor (2014, 26).

*Mycobacterium tuberculosis*, just like infants, needs to be kept clean. “You have to keep them clean”, Amy and Nicole told me on multiple occasions. Keeping *Mtb* clean was also a vital process that required time and effort. Cleanliness had to do with contamination because contamination meant that experiments were ruined. In order to prevent contamination and keep the bugs “clean”, the hood needed to be cleaned with distel before my participants started working inside it. Distel is a chemical that kills bacteria, fungi or other organisms and cells. Wiping the inside of the hood with it ensured that any organisms or cells that may have been inside the hood would be killed. “It is true that the death of some is the
“life of others” writes de Castro (2014, 33). Although taken out of context, this sentence has resonance here. There is death in the lab in order for there to be life. De Castro views this condition as “the principal of the conservation of energy” (2014, 33). Life and death coexist in inseparable ways; this is the cycle of life and for microbes in the laboratory this cycle is very short.

Everything that went into the hood was sprayed and wiped down with ethanol before it entered the hood. This was to protect \( Mtb \) from other bacteria or fungi and from the human: “It’s about protecting yourself, but also protecting them [the bacteria],” Amy told me. There was a notion of mutual cleanliness that Amy stressed all the time. I also saw this when working with my other participants. They needed to keep their bacteria clean, but that also involved keeping themselves clean by ensuring they were dressed correctly and that their gloves were sprayed with ethanol each and every time they put their hands inside the hood. Furthermore, in order to keep \( Mtb \) clean, the bacteria were kept in zip-lock, air tight bags inside sealed, airtight containers and their food was constantly checked for contamination (this was done through sight). “I can see if a culture has been contaminated,” Amy said.

Amy was very worried about contamination. One day she fetched a large plastic zip-lock bag. Inside were two big glass bottles and a few smaller test tubes. The clear liquid inside the large bottles was the saline solution that was used to dilute the cultures. The small test tubes also contained this solution, but Amy insisted on making a new solution each time she wanted to dilute her cultures just in case they got contaminated. “It’s disheartening to see your culture is contaminated, you have to throw everything away,” Amy told me before she held each tube up and gently shook the saline

Figure 3: *Mycobacterium tuberculosis* bacilli under a microscope. Photo by author.
solution. She also held the large glass bottle up to the light and looked at it carefully. Staring at her bottles and test tubes, she explained that a few days ago she thought she saw “something funny” in the saline solution. Looking at it again, she said it seemed fine, but just to be safe she made a new tube of the solution. Amy was set on keeping her babies clean. In fact, she told me about an incident where she feared for her babies’ cleanliness more than her safety:

One afternoon the electricity tripped in the BSL3. If the electricity trips, the hoods, which run on electricity, stop working. This means that there is no controlled air flow that ensures that particles do not escape out of the hood or that the particles outside the hood do not get inside. Usually a replacement generator kicks in immediately, but that day it did not. Amy was drying out her plates, which is quite risky even with a working hood because it involves opening up plates that are covered in \textit{Mtb} colonies. She explained to me that she was more scared of her plates getting contaminated by other organisms moving into the hood than she was of \textit{Mtb} moving out of the hood.

After a few weeks one of her plates from this set was indeed contaminated. I was with Amy in the lab when she went to the incubator to fetch a set of plates that she needed to dry out because they were quite wet. When she brought the tupperware to the hood and opened up one of the plastic bags, we saw a furry brown fungus on each of the plates in that set. Amy had to throw out all of the contaminated plates. After seeing this she was so worried about her other plates that she wanted to come in over the weekend to check on them.

A lot of work goes into ensuring that the bacteria are kept clean. When I was with Nicole in the walk-in freezer she said to me, “you don’t want your babies to get contaminated; you don’t want your babies not to grow.”

9. Keeping them happy: “TB needs friends”

I was sitting in the lab with Tom while he was doing an experiment. We were talking about the \textit{E.coli} inside a small test tube on his bench. Tom told me that they were “competent cells”, which means “they have been made ready.” After seeing my blank expression, he added, “So they have holes in them so that the DNA will move into the cell more regularly.” He was talking about the DNA from \textit{Mycobacterium tuberculosis} and how \textit{E.coli} is “made” to reproduce that DNA when they reproduce, thus giving scientists an ample amount of \textit{Mtb} DNA to use in experiments. Tom went on to tell me that the punctured \textit{E.coli} are given SOC (Super Optical Broth with Catabolite Repression). It is a liquid that contains nutrients. Tom said to me, “I give them nutrients to keep them happy; if they are happy you get results.” Tom’s answer probed me to ask, what makes \textit{Mtb} happy? “With TB,” he replied, “TB needs friends... this is how I explain it to my honours students... If you add a small amount of \textit{Mtb} to a large volume they won't grow because \textit{Mtb} needs friends around it. They need this interaction... It’s part of their lifestyle to clump” (see figure 3).

\textit{Mtb} is a social being; it has a sticky cell wall and likes to clump. Stickiness was a problem when it came to plating the cultures. “They stick together like crazy... to get them away from each other is quite challenging,” Amy told me on my first day of doing fieldwork with her. You need to add a detergent to the bacteria to make them less sticky, she explained. If they stick together when they are plated, it interferes with counting colonies at the end of the experiment. One colony is when one bacillus has reproduced on the spot. If two or three bacilli land on one spot and reproduce then the counting of the subsequent colony as one colony is inaccurate. This clumping was made visible on some of Amy’s plates.

We were in the BSL3 counting the colonies on some of Amy’s plates. After a while of her picking up various plates and looking at them I noticed that she looked confused and upset. She showed me that there was quite a big difference in the size of the colonies (see figure 2). I looked at the plates and saw that some colonies were large while others were so small that they looked like little bubbles. Amy explained that when the bacilli were plated, they had clumped together even though she had used the detergent to split them up. “I'm a bit disappointed,” Amy said as she shook her head and looked down at her plates. She picked
them up one at a time and scrutinized each one again. “I thought they would separate nicely,” she said. Before I had time to feel sorry for her, Amy's bubbly personality picked her back up again. She looked at me and started laughing, “They have separation anxiety!”

10. “Separation anxiety”

“You get so attached to them,” Nicole told me when she was making the broth for the bacteria. I was well versed in the attachment after being in the lab with Amy. In my interview with Amy we spoke a lot about this separation anxiety, though not in these exact terms:

I've been keeping them for too long! It's very difficult for me to throw them out on the plates. I think that's because they take so long to come up and then you think, ‘I may need them again for something,’ but you don't actually need them! I'm one of those people that like storing stuff though, just with normal stuff as well I may use them again. It's like that with the plates as well... You have been working so hard on growing them, this has been so much work and then it ends up being in a bag in the autoclave... that's all my work that's in there. You have a result, but it's still all your work that's in there.

When I worked with Nicole I saw the same thing. I was sitting next to Nicole at the hood while she was sorting out her plates before she threw them away. “The one thing about scientists is that we are scared of throwing our samples away. We don't want to throw anything away... Sometimes you will go to the bin to look for a plate!” she told me, smiling. She knew that she needed to throw the plates out, but she did not want to. On my last day with Nicole she looked at her culture flasks and said to me, “I have a problem. I don't want to throw them away, but I have to. I'm working on my problem.”

Although the resistance to “throw away” bacteria reveals the “sticky attachment” (Haraway 2008) that my participants had for their bacteria, it simultaneously reveals the limitations of the kinship and human growth metaphor alluded to throughout this article. Babies would not grow into children: their life course ends before it even begins, revealing the asymmetrical power relations between human and microbe. Haraway reminds me of this asymmetry when she writes about her dog, “I know very well how much control of Cayenne's life and death I hold in my inept hands” (2008, 216). But I do remind the reader that it was not easy to throw the bacteria away. My participants would hoard the bacteria inside the incubator because they could not bring themselves to throw them away. This does complicate any simple remark that the bacteria were disposable. I argue that care was a way to redress the fact that Mtb did not consent to being involved in this relationship.

My participants’ caring formed a mutualistic relationship which allowed both the bugs and them to flourish. Indeed, these bugs were “killed” at the end of the experiments, but during their life they benefited from my participants. They were given everything that they liked: nutrient-rich food, an environment that was not trying to kill them (as the macrophage does), warm temperature, and friends. I quote Tom, “If you understand that they are living organisms you do much better science.” There is a genuine sense of care in the research that happened in the laboratory and a deep understanding that my participants were working with living organisms who (yes, “who”) deserved respect. The caring was intrinsic to what they did as scientists. More specifically, through conceptualizing the bacteria as babies, care relationships were obligatory.

11. “When they grow you dance”:

On flourishing

Just like babies, Mycobacterium tuberculosis needs to grow. This is why they were given food, kept clean – which meant keeping other bacteria or fungi out so that they did not steal the food – and kept nice and warm at thirty-seven degrees Celsius inside an incubator. Mycobacterium tuberculosis is slow growing. Inside the human body it can take months to develop into a disease. In the lab it can take weeks for it to grow to the point that my
participants required for their experiments.

Growth is vital for experiments to work. The bugs need to grow so that cultures can be made and they need to grow on plates in order for colonies to be counted. Nicole told me that sometimes she just wanted to go into the BSL3 to check on her plates, “I just need to see how my babies are doing,” she said. This checking-up made me think about the need that led to the invention of the baby monitor, so that parents would not have to constantly check up on their babies and the checking-up on growth reminded me of the monitoring of a baby’s growth whether by parents, caregivers or nurses and doctors.

Talking about the growth of Mtb, Nicole said to me, “It teaches you patience, because they take so long to grow.” This idea of being taught patience reveals a deeper connection between the bug and a baby. “When the bugs don’t grow well you cry. When they grow you dance,” Nicole said. Since Mtb take so long to grow, it is understandable that growth would mean joy and lack of growth, heartache. Nicole’s statement reveals the kind of emotional investment in the growth of the bacteria. Amy also expressed the long wait, the joy at the end of it and the emotional investment in growth:

It’s not the same thing when working with E.coli for instance because that you can see in a day. But it’s not as fascinating as waiting three weeks and then you see them! So I guess the fact that you have to nurture them and they take such a long time, and then you see something and then eventually they get so big on the plate!

What I found fascinating was that, like babies, each strain grows at a different pace. Inside the BSL3 I observed Nicole measuring the growth rate of her different strains, each in its own tube. She took one tube at a time, put it inside a little opening in a machine, closed the lid of the machine and the machine gave a reading. She wrote down each reading and then said to me, “My babies are growing very well, except that one of them is a slow grower.” Whenever Nicole spoke about the growth of the bug she compared it to the growth of a child, further enhancing the connection between babies and microbes. Nicole told me that when she and Amy were in the lab together they would ask each other if they had sung to their bacteria to help them grow, making further connections between babies and Mycobacterium tuberculosis.

In relation to multispecies ethnography, the concept of flourishing seems important here. Flourishing is an ethical starting point central to ecological feminism (Cuomo in Haraway 2008, 134). Haraway writes, “Feminists have also argued early, often, and well for caring in all its senses as a core needed practice” (2008, 332). When Haraway asks Michael Hadfield, a zoologist, how he knows his animals are not flourishing he answers, “Ah, well, that’s usually when they die” (2008, 90). Flourishing is growing, it is surviving and it is thriving. But what does flourishing mean for different species in companion (Haraway 2008, 41)? There is a very sad paradox here: inside the body, flourishing Mtb means the human’s failure to flourish. In fact, an infant’s “failure to thrive” is a signifier that they may have Tuberculosis (World Health Organization 2012).

In the lab, however, if the bacteria flourish, so do the experiments, as do the scientists.

12. Caring for them = caring for me = caring for science: Concluding thoughts

The relationship between my participants and the bugs that they work with was characterized by care. The word “care” constantly came up during my fieldwork. The theme of care reveals the nurturing that happens behind the scenes of science experiments. Caring for Mtb, however, was also about caring for my participants. There was a sense of reciprocity between my participants and Mtb: if the bacteria were taken care of correctly, they would give the required results. Caring, then, equals better science. This idea also surfaced when Nicole described the relationship between her and the bug as a “mutualistic relationship.” The mutualistic relationship allowed both the scientists and the bugs to flourish.
Kirksey and Helmreich write about Caitlin Berrigan’s performance art at the Multispecies Salon Art Exhibition, which was put up for the 2008 American Anthropological Association (AAA) Annual Meeting:

Playing with popular anxiety surrounding microbial becomings, performance artist Caitlin Berrigan created a series of sentimental objects in an attempt to “befriend a virus.” Growing tired of the rhetoric of war commonly used by health care workers to describe her illness, hepatitis C, Berrigan, who carries the virus in her blood, performed what she called a “nurturing gesture,” at the Multispecies Salon. Drawing her own blood, she offered it to a dandelion plant as a nitrogen-rich fertilizer. (2010, 560)

Moving away from the anxiety surrounding Mycobacterium tuberculosis and trying to explore the other attachment sites in which the bacteria exists, I attempted to view it in other ways and through other kinds of lenses, being aware of both its horror and its beauty, both its agency and its vulnerability, both its violence and its need for care. In befriending a virus, Berrigan turns into a friend what would otherwise be seen as an enemy and in this way reconceptualizes her relationship with the virus. This article has been about reconceptualizing the scientists’ relationship with Mtbt. In the same way that Berrigan gives her blood to the dandelion, a nurturing and nourishing gesture, I present the relationship between Mycobacterium tuberculosis and four humans to you, the reader, in the hopes that it may enrich your understanding of the multispecies relationships, entanglements and webs in which humans are involved. With this said, I hope that some readers are inspired to conceptualise research projects that expand their parameters to include the multitude of cells, organisms, critters and creatures which are so central to human worlds. This would indeed make fruitful and flourishing contributions to moving beyond the human in the humanities and extending the social in the social sciences.
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This article gives an ethnographic account of a group of Canadians who feel invested in recreational gun use, by examining their narratives and social relations created through the practice of shooting “just for fun.” This is the result of fieldwork with a group of men who practice a specialized form of marksmanship called tactical shooting in southern Saskatchewan. In this research, narrative “talk” emerges as a social glue for tactical shooters, which I analyze using Michael Herzfeld’s concepts of poetics and performance. These men’s storytelling is discussed as a means of collaboratively creating and enacting a worldview and a sense of shared identity. I argue that stories enable shooters to build a sense of togetherness in a context where they often feel misunderstood, both by more conventional shooters and by broader society. In this group, tactical shooting is not merely a leisurely pursuit – something done “just for fun” – it is a social occasion for dramatic storytelling which produces distinctive selves, relations, and comradeship.

Keywords: tactical shooting, poetics, performance, identity, masculinity
“Shooting is a practical skill, it can protect you, put food on the table,” Ray said, then gestured to Jon holding a high calibre “elephant” gun. “But that’s just for fun!”

It was an unseasonably warm October night. The three of us sat comfortably in our sweatshirts, our campsite—nestled on a section of south Saskatchewan Crown land (land owned by the Canadian state)—so dark that we could barely see one another. The trees surrounding us shook, and we waited for the burst of wind to subside before listening for coyote calls.

Ray, Jon, and I were lounging against a sturdy log as we listened to the melodic coyote howls from the hills surrounding us. Ray had just quieted his handheld animal call simulator, his most recent effort to draw the canines’ attention with the device’s startlingly realistic locator howl. We were picking burrs off our clothing from an afternoon of shooting in the tall grass (Figure 1), and were partway through a mickey of liquor when we first heard the animals’ approach. When Ray suggested we see how close we could draw them in, we turned off our lights and tried to muffle our presence. We sipped from tin camp mugs and munched on Doritos, occasionally using the animal call to coerce the two groups of coyotes into “talking” to one another. The objective, I was informed, was simply to communicate with them, as both men emphatically whispered “no” when I asked if they were going to shoot.

“No unless something goes wrong!” Jon, my boyfriend, clarified. I nodded, wondering at the ease the men displayed at the prospect of wild dogs approaching us. I gathered that the two shooters—a term my informants used to describe themselves—who both had years of outdoor experience, would alert me if something indeed “went wrong.” A rifle leaned against a tree, unloaded but within arm’s reach, ready to be stuffed with one of the multiple “mags” (magazines) of bullets hanging from pouches on the men’s belts. The other gun, a much fancier “elephant gun” on loan from another shooter, was locked safely in the car.

Drinking and communicating with coyotes was how we whiled away the evening until the wind grew too loud to hear the animals and dazzling northern lights drew our attention upwards. Although we agreed to be quiet so as not to scare the dogs away, my companions whispered frequently, as though unwilling to completely stifle the stream of talk that overlaid our time together. This talk—congenial and at first glance inconsequential—would grow in significance to me throughout my subsequent fieldwork. But, right then, it was just one part of our evening spent in conversation with the natural world, a long stretch of inactivity characterized by easy sharing of supplies and even easier sharing of stories. While Jon and Ray had been “showing me shooting” throughout the day, I later reflected that this evening was my first real introduction to their leisure world of tactical shooting.

This article is the result of two months of fieldwork conducted with recreational tactical shooters in southern Saskatchewan. From October to November 2015, I accompanied a loose group of friends who engaged in tactical shooting in their spare time, as they met with one another to shoot and “shoot the shit.” Throughout this fieldwork, I noticed a strong prevalence of specific forms of narrative talk linking these shooters’ practices. This article examines the performance of such talk and the “poetics” (Herzfeld 1985) that constitute it, through an ethnographic exploration of tactical shooting in southern Saskatchewan. Performance and poetics, which are intertwined in my informants’ collaborative narratives, are organizing concepts that can help us make sense of the social significance of discussions which, to outsiders, may not seem “sensible.” This talk, which at first might seem
inconsequential compared to their actual shooting, is an important means for understanding what is constructed around shooting, and what my respondents get out of this hobby. While terms like “community” and “comradery” are nebulous concepts that imply more social cohesion and boundaries than actually exist in the world, tactical shooters frequently used these terms to describe their experiences. As such, they can be viewed as ideals that provide insight to the social importance of tactical shooting. Comradery and a strong sense of community are a significant part of what these tactical shooters draw from their leisure group.

I begin with an overview of relevant literature and the importance of narrative talk to my informants’ constructions of comradery and collective identity. Following is a discussion of my positionality and the practice of tactical shooting as described by my informants. An outline of the primary narrative form I noted among shooters, the memory story, is then followed by an analysis of its social significance. Throughout such talk, my tactical shooter informants expressed frustration that both “non-shooters” and other members of Saskatchewan’s general shooting community do not appreciate, and are sometimes opposed to, their shooting practices. I argue that tactical shooters’ particular narrative styles form a sense of togetherness within a broader social context in which they feel doubly misunderstood. The point of shooting narratives is not shooting per se, but is rather the sense of community and comradery that shooters seek to build.

The Importance of Talk

There is a paucity of ethnographic research on shooting in Canada. Some ethnographies are concerned with social change, landscape, and class (Lorimer 2000; Mischi 2012), but these tend to focus more on hunting practices than on shooting in general. Unsurprisingly, given the proliferation of guns in the United States of
America, and perhaps due to relatively permissive regulations, most ethnographic research on shooting is carried out among American shooters. Anderson and Taylor (2010) focus on the social bonds formed in shooting communities; Michael Messner (2011) explores the male bonding rituals formed around hunting in American families; and Hoon Song (2010) offers a phenomenological analysis of a particular shooting event, highlighting the subjective experiences of participants. Yet a dominant tendency is to dwell on what are construed as the negative aspects of so-called gun culture (Patrick 2007). Perspectives associating gun ownership with neoliberalism, social conservatism, and “hegemonic masculinity” (Gahman 2015) inform much of the current scholarly research connected with “gun culture.” While my informants performed identities that fit with expressions of normative masculinity, and sometimes “conservative” ideas (like criticism of “liberal” gun laws), normative portrayals of gun culture did not neatly fit my experiences in the field.

I developed a distaste for the term “gun culture” because it suggested that a strict set of social norms, including conservatism, whiteness, and a tacit acceptance of violence accompanied gun ownership. The popular use of this term in the media suggests that gun culture is a mainstay in America, and regularly associates this culture with violence and political division (Gollom 2015). While not entirely incorrect, this perspective on gun culture obscures the diverse, regionally-specific forms such culture can take (Kohn 2004). The broad concept of gun culture is unsatisfactory to describe my informants because they do not seem to fit the stereotypes this term suggests. As Dmitra Doukas (2010, 19) argues, the popular image of the gun-toting, conservative redneck that so frequently bleeds into academic assumptions is best described as a “bogeyman,” not a realistic portrayal of behaviour. She points out that Americans rarely line up neatly along the “culture war front,” a sentiment I find also applies to tactical shooters in Saskatchewan.

Although the shooters I met could not be neatly relegated to a monolithic gun culture, working to form a sense of community or comradery was a dominant theme in their storytelling. I suggest that they worked to build a “serious leisure community” of their own. Such a group is formed around “the steady pursuit of an amateur... voluntary activity that captivates its participants with its complexity” (Anderson and Taylor 2010, 36). Serious leisure communities provide participants with a sense of identity and group membership (Rosenbaum 2013). Studying leisure groups can be a means to explore “the creation of social identities in late modern society” (Anderson and Taylor 2010, 35), as such groups give participants a wide variety of opportunities to engage in identity work and form social bonds.

Storytelling is a key component of the serious leisure community my informants construct. Herzfeld’s (1985) concept “poetics” is helpful in capturing the yearning for comradery that tactical shooters’ stories conveyed. Poetics is understood as the ways in which a story is told and communication is successfully – or un成功地 – carried out within a social context. The poetics of communication is performative. Herzfeld explains that a successful demonstration of poetics “concentrates the audience's attention on the performance itself” (1985, 10), allowing the telling of the story to convey meaning just as much as, and sometimes more than, the content of what is being told. Ergo, poetics is the story and the telling intertwined, inextricable from the social context the performers act within and help to construct. With my tactical shooter informants, poetics is the content, the tone, the technical language, the mimed actions, the allusions of inside jokes and, sometimes, the explicit highlighting of their own social values. I argue that this is what makes their stories shooters’ stories; they are crucial for constructing and performing their identities as tactical shooters and for constructing a collective identity and a powerful sense of community.

**Positionality**

I find it necessary to present my findings in a reflexive manner. Contrary to criticisms that reflexivity emphasizes subjective insights over objective knowledge (Salzman 2002), and that it
may distance the ethnographer’s perspective from the group discussed (Stewart 1996), who I am to my informants and how we interacted with one another are inextricable from the knowledge that my fieldwork produced. I am a “quasi-insider” (Angrosino 2004) of tactical shooting. I do not shoot, but having friends and a boyfriend involved in tactical shooting provided me with relatively easy entry into their leisure world. It also provided me a social identity that members of this group recognized: Jon’s girlfriend.

This both enriched and complicated my research. On the one hand, many who were strangers to me knew Jon and could place me quickly, and I suspect this helped counteract my outsider status as a non-shooter. On the other hand, as some ethnographers have noted (Shuttleworth 2004; Teaiwa 2004), it was sometimes difficult to break free from the social obligations of this identity. Although I was both a researcher and a friend, the latter was often treated as more important by my informants. This resulted in more socializing and “catching up” during fieldwork encounters than I anticipated. My status as a woman in her twenties, studying anthropology at university, may have likewise tinged my interactions in the field. This is because some of my informants seemed circumspect about the motives of social scientists who write about shooters. They said they assumed that academic works on shooting would mostly be negative, “liberal,” or “anti-gun.” Despite this, my informants seemed to take my willingness to discuss shooting as indication that my approach might not fit their assumptions. As a whole, I suspect my quasi-insider status allowed me to conduct more nuanced research during my short time in the field than if I had been a total stranger to my informants.

Method

I conducted research with five key informants: Ray, Tim, Daniel, Kevin, and Otto. They were all men in their mid-thirties to mid-forties, and though I did not meet any women who were tactical shooters, it was emphasized to me that women shoot with them as well. Most of my informants were fathers and husbands, had some form of secondary education, and held fairly well-paying working-class jobs. They lived in small cities, although their shooting took place on gun ranges and farms in rural areas. Many of the shooters I encountered were not originally from Saskatchewan, and a few, like Otto, were born outside of Canada. While at the time none of my key informants held jobs that involved shooting, two were ex-military, four had taken policing or security training at a post-secondary institution, and three had previously held positions that required carrying a handgun.

All of my informants practiced shooting “for fun” (Figure 2), but they also used it for “practical” purposes, like helping farmers with pest control. The responses I received when I asked my informants why they liked shooting varied. While all had hunted in the past, few
said they currently did, and some voiced displeasure with “killing animals when you don’t need to.” Some shooters discussed their practice as an opportunity for personal growth in addition to a site for comradesy; Daniel and Tim discussed tactical shooting as a “martial art,” a lifestyle they felt involved discipline, athleticism, and knowledge, but not necessarily violence.

I prepared for fieldwork expecting to study the material items my informants use when shooting, such as their guns and “kits” of supplies. Entering the field turned this idea on its head. I discovered that, while my informants politely answered my questions, they seemed uninterested in discussing the things they used for their hobby. Guns, I was told repeatedly, were tools: useful, interesting to a point, but hardly able to animate shooters like the stories they told of what they did with these tools. Otto colourfully explained this perspective during an evening of socializing. He placed a screwdriver, a pair of pliers, and a handgun in a line on the table we were sitting at. He picked up each item in turn, looked me in the eye, and said – calmly – “this is a tool.” Once he set the handgun down, he slapped himself on the chest and said, “I am the weapon! If I’m going to hurt someone, I could do it just as easily with any of these things. It all depends on how the person holding it acts.” Clearly, a handgun presents a greater capacity for inflicting harm than a screwdriver, but Otto illustrated a perspective many of the tactical shooters I met articulated: that it is the actions of people – not necessarily the “tools” they use – that should be central to discussions of shooting. While Otto’s statement points to the potential violence of guns, he draws a line between the “tools” being inherently violent and the danger, as Daniel later phrased it, of these tools “being in the wrong hands.” In short, despite an interest in guns, my informants articulated that they did not consider these tools as socially central as the experiences they formed with them.

While many shooters in North America pay lip service to this gun-as-tool discourse (Gahman 2015; Springwood 2014), the behaviour of my informants suggests they took this discourse seriously. While I always saw my informants ensure that their handguns or rifles were emptied of bullets before handing them – because, I was told, even when a semiautomatic gun is not loaded with a mag it is possible for a bullet to be held in the chamber of the weapon – I witnessed instances where even quite expensive guns were unceremoniously dropped by shooters when they were done using them. Unloaded guns were set on tables, leaned against trees, and left on the ground of outdoor shooting ranges when not in use. Guns were discussed in largely utilitarian terms, with the exception of shooters briefly complimenting a friend’s new or uncommon one.

This is not to say that guns were unimportant to tactical shooters, for the enjoyment of using them is a key factor in what drew these men together. A number of my informants had prior weapons training, and tactical shooting was noted by Tim and Otto to be a means of continuing to use guns in ways they enjoyed but no longer needed professionally. Additionally, my informants had all hunted in the past, a common practice in Saskatchewan that is connected to rural and Prairie regional Canadian identities, so gun use was already an acceptable hobby for these men to take up. However, I propose that tactical shooters’ use of a gun-related hobby to conduct their identity work is partially rooted in a connection between guns and masculinity. It can be said that my informants use guns as tools not only for their hobby, but also as a means to facilitate close relationships without detracting from their normatively masculine identities.

My previous idea of focusing on materiality having fizzled out, I was at a loss for what to actually study with tactical shooters. Accordingly, I employed a grounded approach. I began my research without a working thesis to guide it, but instead with the intent to pull my key points and research questions from what I encountered in the field. Prospective informants were told that I was an anthropology student who wanted to “write about shooting,” but I let them decide where we would meet and what we would do. As a result, my field grew to encompass a large portion of southern Saskatchewan – stretching from Mortlach to Regina and past Avonlea – as I met with informants in fields, on ranges, and
around kitchen tables. I witnessed informal shoots, and thanks to the generosity of the International Defensive Pistol Association (IDPA) of Sask Tactical, a tactical shooting club, I attended a formal Close Quarters Battle competition (a military style shooting drill that involves both handguns and rifles, and requires participants to shoot at targets from various “short” distances and positions). The bulk of my research, however, was simply “hanging out.” It was through this informal approach to research that I picked up on common aspects of the social world of these tactical shooters, and began to notice the significance of storytelling.

During my research I conducted informal group interviews and often followed these up with emails or text messages to clarify my impressions. Sometimes, due to explicit refusals, I was not able to record any audio, so I had to rely on my memory and notes. I recorded data in a notebook and on a word document on my mobile phone. Shooters sometimes allowed me to take videos and photos, and I would occasionally send them my recordings of their adventures which proved to be a means of reciprocating them for their help.

“Sighting in” Shooting

Since all of the shooters I had known before beginning this research seemed to engage in similar practices, I assumed that my fieldwork would be representative of shooting in general. However, I was surprised to learn that my informants practice a very particular style of shooting: tactical shooting. At first glance, shooting in Saskatchewan may not seem highly segmented, but my informants explained that it can be roughly split into three types. Long-gun shooting is the most common, involving shotguns and rifles being used for hunting, pest control, and “straight-shooting” target practice. Handgun shooting, I am told, is sometimes frowned upon by non-handgun users, who may say that these guns are too “dangerous” for civilians to possess. This can lead to “range policing,” wherein other users of a gun range challenge unconventional shooting practices, sometimes even lobbying for these types of shooting to be banned. And finally, there is tactical shooting, which my informants describe as the most specialized and misunderstood shooting style. Tactical shooting involves the use of both long-guns and handguns, and it was described to me as “dynamic,” meaning that shooters and sometimes targets move instead of staying still. Many tactical shooting practices are derived from military and law enforcement exercises, although they are not confined to these styles. My research subjects feel that tactical shooters receive the highest level of mistreatment from other shooters and the most mistrust from the non-shooter population. Some characterized themselves as the “black sheep of the shooting world,” and Tim emphasized that other shooters “make us out to be some kind of evil baby killers just for what we like to do!”

This sense of alienation may be rooted in a struggle over how gun use is portrayed. My informants claim that some non-tactical shooters fear the pseudo-military practices of tactical shooting, and believe that their gun use is the only style that is legitimate. In response, some of my informants described gun users who opposed tactical shooting as “fuddy-duds” stuck in old ways of thinking. Daniel and Tim explained that fuddy-duds “buy into media hype” that paints handguns, “black” guns—a term my informants used to describe weapons that “looked scary” from an outsider’s perspective—and otherwise unconventional shooting practices as dangerous and unnecessary, hence tactical shooters’ black sheep status. This may be related to a struggle over who maintains the image of legitimate gun use in mainstream society. In response to media and social criticism of gun use, some shooters may work to distance themselves from practices that they consider too “violent” or unnecessary, while my tactical shooting informants criticize these shooters for not supporting one another and presenting a “united front.” In sum, as Otto told me, my informants felt that the shooters of Saskatchewan could stand to be more of a “community.”

“Shooting the Shit”

The strong connection between shooting activities and leisurely talk, or as some of my informants called it, “shooting the shit,” was striking. Regardless of whether they were
shooting at a range, camping outdoors, or clustered around a table, when these tactical shooters met up their conversation frequently drifted towards storytelling. These narratives almost always had a strong collaborative feel, and I frequently found myself in the midst of a story being told by multiple shooters. The telling of these stories was often dramatic and gregarious, even more so than my informants’ stories about other topics. I noted that especially among those I knew well, like Jon, shooters seemed to become much more animated when in groups of mostly other shooters. In short, it seemed like my informants’ storytelling was amplified when talking about their hobby with other enthusiasts.

As mentioned earlier, the types of narratives I noticed tactical shooters engaging in tended to take the form of what I call “memory stories.” Shooters’ stories frequently pertained to past events involving their group. The following anecdote, told by Tim and Ray, is representative of some common aspects of memory stories.

We had just returned to our cars from shooting at rocks in a nearby field. Ray asked me what I’d thought of our venture. “I wasn’t sure what to expect,” I replied, “I thought there might have been more running.”

Ray and Tim laughed, shaking their heads. “We only run when we have to!” Tim said. Then, his eyes lit up and he whipped his head around to face Ray. I learned to note that this type of pause and movement often marked the beginning of a story. “Speaking of which, remember that time with Daniel when we did have to?”

Ray adopted a similarly excited look, and turned his body towards Tim. The two men stood facing one another, with me roughly in the middle, forming a triangle. As they spoke, they directed comments both to one another and to me, although it felt almost as if they were telling a rehearsed story to each other.

“Oh yeah!” Ray looked over his shoulder to me. “The last time when we were out camping, we were walking out of the bush in the morning, heading back to our cars.” He mimed a downward motion with his hand, as if showing how they had moved. “Then, all of a sudden, Daniel drops his pack and shoots off running in another direction!” Ray mimed with his index finger the quick running away of Daniel.

“We stopped,” Tim continued, miming a “stop” with his hands up near his shoulders, moving his eyes from side to side as if checking his surroundings, “but he was just a goin’! We turned to look at where he was running to, and saw, waayy off in the distance, a lone coyote on the next hill.”

“So, since he was going, we had to follow!” Ray added. “But we had so much stuff! So, trying to be as quick as him, I slid off my pack,” he motioned slipping the straps of a backpack off his shoulders, then pivoted his body in the direction he had earlier pointed Daniel running towards, “and made to run after him.” Ray pumped his arms from side to side, as if running.

“But,” Ray looked to Tim, grinning; Tim grinned knowingly back, “I’d forgotten that my backpack was also clipped around my waist! So here I am, trying my hardest to run after this tall, athletic fucker, and my heavy backpack was hanging upside down from my waist, bumping against the back of my legs and nearly pulling down my pants!”

Ray added. “But we had so much stuff! So, trying to be as quick as him, I slid off my pack,” he motioned slipping the straps of a backpack off his shoulders, then pivoted his body in the direction he had earlier pointed Daniel running towards, “and made to run after him.” Ray pumped his arms from side to side, as if running.

“Then,” Ray continued, miming the same backpack removal as Ray, “at the same time, I dropped my pack, but forgot about my CamelBak! And that straw is strong! So, my pack is off my back, but the CamelBak’s still attached to my chest rig.” A chest rig looks a bit like a vest covered with storage pouches on the front and sides, and is used by tactical shooters to store equipment, and in some cases bullet-proof inserts, on their bodies. Tim continues, “So now I’m trying to run after them too, but I’m being pulled to the side by my CamelBak.” He mimed running in the same direction Ray had, but as if he is being pulled down to one side. Both men laugh.

“Well, by the time we finally got our shit off and got there,” Ray continues, “Daniel had already reached the top of the hill and was getting ready to take a shot at the dog.” He mimed Daniel’s movement of swinging a rifle upwards into a shooting position. Fluidly, Ray also mimes pulling a mag from a belt-pouch, by
grabbing an invisible item with one hand from near his belt, then moving that item towards the invisible rifle, sliding it “in” the gun’s slot with his palm. I recognized these movements from having seen them repeatedly while watching Tim and Ray shoot earlier on.

“And we’re all out of breath and busted up, gasping...” Tim adds, doubling over and putting his hands on his knees, as if exhausted, and looking at me, “While Daniel is perfectly calm, looking at us like, ‘what’s wrong with you guys?!’”

Both men laugh and shake their heads at one another. Then, they moved to continue packing away our afternoon’s gear. The story was apparently over. I asked if anyone had “gotten” the coyote, and Ray paused as if thinking back to the event. He then shrugged, indicating that he did not remember or, possibly, that he did not care. “If anyone did, it would have been Daniel!”

* * *

The “running” memory story told by Ray and Tim, about the absent Daniel, highlights many key aspects of shooters’ narratives. The form of this story is similar to others I heard. Stories often bubbled from points in a conversation, places in the surrounding landscape, or particular actions. These seemed to spark shooters’ memories to begin a tale.

As outlined above, the telling of the event switched back and forth between speakers. This seemed a given to shooters, for they very infrequently interrupted one another; more often, a shooter would tell a part of the story, then pause or look to another shooter for him to continue the tale. Sometimes shooters made it seem as though these stories were for my benefit – by turning to see my reactions, or beginning a tale with “let’s tell her...” – but I found that storytellers rarely directed their speech solely to me. It is perhaps more accurate to say that the audience for these tales was everyone present, including the storytellers.

Bringing to mind Herzfeld’s (1985) experiences with his Glendiot informants in Greece, there was a certain poetics to telling these tales. Inflection became exaggerated, voices became louder, and gestures turned theatrical when stories were recounted. Certain words would be shouted, enunciated at different speeds, or even said in an altered voice for emphasis. Notably, the body was a key component of this storytelling. Not only did shooters move their bodies to reflect general movements in a story, they also mimed the actions and reactions of the characters they were discussing. Some of the gestures, like imitating running, were easily recognizable. Many others, however, were bodily movements specific to their practices that took non-shooters like me significant effort to follow. Doing mag changes, pulling items from an invisible vest, and loading guns were some of the movements I became familiar with through observation. When I asked informants to clarify my interpretation of an action, they responded, but I do not think it occurred to them to explain these movements otherwise. Such actions seemed to be easily understood by them, and most importantly appeared to enrich their narrative experience. In other words, particular shooting practices were enacted through shooters’ storytelling and by using bodily performance, which increased the entertainment value of the narrated story and helped to situate it within the constructed world of “tactical shooting.”

It is important to remember that storytellers within a particular social setting are, through their actions, speaking within this setting and continually working to construct, comment on, and reconstruct it (Herzfeld 1985). The content of Ray and Tim’s memory story reflects themes I picked up on in the field, forming both commentary on a social event and underscoring certain values – like skilfulness, comradery, and humour – that emerged as components of the shooters’ perceived group identity. The emphasis on “comradery,” as some of my informants termed it, is particularly prevalent in shooters’ tales. As I have highlighted, stories were often about the past adventures of the tactical shooters they knew; however, even when the stories they told involved themselves, shooters rarely made themselves the heroes of the event being discussed. Instead, the heroic figure of memory stories was almost always another shooter. This continual focus on someone else in the group
may be a discursive means of constructing sociality, of creating a companionable rather than an antagonistic or competitive narrative context. In cases where someone was not present for the storytelling, as with my “running” example, the hero may be that absent person. In cases where everyone mentioned in the story was present, the emphasis instead shifted from person to person, as the shooter currently speaking downplayed their own actions and highlighted the skills of someone else. This was frequently tinged with self-deprecation on the part of the speaker. Shooters would make jokes about themselves and exaggerate their shortcomings, while simultaneously speaking highly of other shooters and emphasizing their skills.

This tactic did not come across as self-pitying, but rather seemed geared towards complimenting one another. The favour appeared to be returned sooner or later, even if not within the confines of the story being told. At a later date, without knowing about the story told to me, Daniel and others regaled me with tales about Ray's long distance shooting, and Tim's skills with a handgun. I somewhat expected that a hobby so frequently connected with “hegemonic masculinity” (Gahman 2015) might lead to antagonistic, competitive interactions, but tactical shooters' tendency to “talk one another up” surprised me. Three explanations offered by my informants may be illustrative of why competitiveness did not figure strongly in their narratives. Tim explained “it's taboo to talk yourself up; it wouldn't go over well with the others.” Daniel said, “it's admirable to know the limits to your own skills.” Finally, Kevin emphasized the sociality of talking about shooting, saying “there is a certain comradery that is brought out.” Ergo, talking about shooting is not so much about emphasizing oneself, but is about “talking one another up” and creating a sense of comradery.

Storytelling, especially when poetic strategies are employed, is rarely so much about the content of the message as it is about the performance of the message itself (Herzfeld 1985). It is notable that the point of memory stories was not the linear conclusion of them, for as I experienced with Ray and Tim, the outcomes of these narratives – like who shot the coyote – were often not articulated. Rather, the experiences and actions of shooters in the moment being discussed and the skills and values that these stories tended to highlight were key. More generally, memory stories emphasized humorous aspects of shooters' experiences. My informants' tendency to wait for laughter before continuing to talk, to tell parts of stories like punchlines, and to laugh and joke in response to others' statements suggested that what they considered to be entertaining was a significant component of their storytelling.

Analysis: Tactical Talking, or Shooting the Shit

Analyzing narrative is a productive means for understanding culture from the perspectives of those who experience it (Stewart 1996). The act of storytelling can be a way of constructing a sense of togetherness, of performing and creating a narrative that fits within or represents a social worldview. I argue that my tactical shooting informants' talk is important because it helps them create a sense of togetherness that counteracts the lack of community they perceive among Saskatchewan's recreational shooters.

My informants voice feelings of being doubly misunderstood, both by non-shooters and by shooters who oppose their particular practices. As such, having a group of like-minded people encouraging their valued hobby can foster a powerful sense of fellowship. It is within this context that tactical shooters' poetic emphasis on teamwork and group membership takes on significance. In contrast to normative masculine ideals like competition and individualism, shooters' narratives work discursively to “build each other up,” to emphasize their skills, and to foster a sense of emotional closeness. That the ideal of comradery contributes to emotional bonding is at least somewhat acknowledged by my informants. For example, at the end of one night of drinking Tim said to me “I know it's not the right word for your project, but all of this – it's really about brotherhood.” I propose that this sense of belonging is a significant benefit that these tactical shooters draw from their narrative practices, perhaps as important to the group as the shooting itself.
While there is no formal definition of who could be part of this loose shooting group, there seemed to be some implicit sense of what exactly being part of tactical shooting meant to my informants. Teamwork, resourcefulness, humility, enjoyment of the practice, and humour were present in shooters' explanations of their group and these values figured prominently in their storytelling practices. Herzfeld's (1985) insight that cultural poetics depends on how well the message is delivered is particularly relevant here. Poetic conventions like theatrical speech, collaborative telling, and “talking others up” were so consistent in my informants' storytelling that I would be greatly interested to see what might happen should a shooter fail to meet these standards. Tim's comment that showing ego would be “taboo” suggests that a violation of these norms within this group might undermine a speaker's status as a real tactical shooter. In short, I found that tactical shooters' performative poetics helped them construct a sense of community and comradery that fit within the cultural “common sense” of tactical shooting (Herzfeld 1985) as well as within broader parameters of acceptably masculine interests.

If the effect of tactical shooters' narratives is that a sense of group togetherness is created, that still does not explain why “community” is sought in the first place. My informants' tactical shooting identities were not the only ones they possessed. However, many of these men considered this identity to be their “most authentic” one (Anderson and Taylor 2010). Shooting and being around other shooters was when my informants said they could truly “be themselves.” This makes the affirmation of such leisure identities, which may be commonly frowned upon by mainstream society, especially important for their self-worth. If we look at the fuzzy concept of community as a “system of symbols that individuals use to find a sense of belonging in a highly differentiated society” (Rosenbaum 2013, 643), then it is not such a stretch to say that tactical shooters might locate some of their most emotionally satisfying relationships within their leisure group. Community is an ideal, but it is also a process, and I argue that tactical shooters' narratives are a key part of how they attempt to construct a sense of togetherness.

My informants stressed feelings of fellowship in relation to tactical shooting, a hobby that – from an outsider's perspective – is potentially competitive. Part of what attracts these men to use tactical shooting for their identity work is the enjoyment they profess in shooting guns, especially where a high level of skill is required. My informants describe tactical shooting as a more difficult and mentally stimulating practice than conventional straight-shooting, due to the training, dynamic drills, and variety of shooting styles required. That this explanation sets them apart from other shooters in a positive light may help them reframe their “black sheep” status as one of exclusivity, rather than alienation.

The draw of guns themselves may also come into play, especially when society's masculine ideals are considered. Guns have become “a cultural symbol of masculinity” in Canada and the United States (Cox 2007, 147). They are “totemic symbols” (Arjet 2007, 126) that popular culture depicts as objects of masculine desire. Notably, gun use is intertwined with male relationships (Arjet 2007; Messner 2011). Toughness, individuality, and heroism are masculine ideals and are often associated with gun symbolism (Cox 2007), yet the rituals men construct around gun use – like family hunting trips or narrating a day's shooting events around a campfire – often minimize these ideals (Messner 2011). As such, using guns to facilitate male bonding allows men to construct emotional closeness within a context – shooting – that does not detract from a normatively masculine identity. Even when discussing competitions or comparing skills, tactical shooters' narratives prioritize self-deprecation, emphasize one another's skills, and value working as a team of “comrades.” My informants practice tactical shooting for many reasons, but the opportunity to construct a sense of togetherness – that may challenge some normatively masculine ideals – within an acceptably macho context may be why they are drawn to shooting as a site for their community and identity work.

My emphasis on the poetics of tactical shooters' narratives, and the ways they used such tactics to construct a particular social world around their shooting practices, is not to
say that my informants would not find value in spending time with one another if tactical shooting were removed from the equation. Many of them share relationships that predate or extend past their hobby. However, as they continually stressed, tactical shooting remains an extremely important pastime to them, to the point that it can be considered a “social glue” (Mischi 2012) binding them together. I am hesitant to suggest that a sense of togetherness or identity constructed by their narrative performances would be the same if they could no longer engage in their shooting practices. Through analyzing narrative, we can appreciate that tactical shooting is not always about shooting; among other things, it is also about forming a sense of togetherness through narrative and poetics.

**Conclusion**

This article has provided an introduction to one group’s view of tactical shooting in southern Saskatchewan. Through an analysis of particular forms of narrative, I have shown that members of this “serious leisure community” work to construct a sense of togetherness in a broader social context in which they feel both other shooters and non-shooters misunderstand them. Such togetherness overlaps with values of teamwork, comradery, and shooting skill, which my informants articulated both explicitly and through their poetics of narrative. Although my time in the field was brief, I propose that attention to such poetics, to follow Herzfeld (1985), may be a highly productive means for gaining further insights into this social world.

There is a particular tension that ethnographers, even fledgling ones like me, encounter when faced with how to represent their informants’ worldviews in an academic context that may not find such worldviews agreeable. For many, so-called gun culture fits this category. This is why I have focused not necessarily on taking a side in the debates surrounding this topic, but rather on the social actions of the individuals I have encountered who engage in the shooting practices that are, as they see it, misunderstood by outsiders. For my informants, being open about their leisure identities as tactical shooters can be a political act, and I am aware that any effort on my part to write about these identities may also be taken as such. Accordingly, rather than write about the tension surrounding gun use and ownership, I choose instead to highlight that gun users are not a faceless, homogenous mass but are a multitude of individuals with geographical, ideological, and social idiosyncrasies. Additionally, my discussion about tactical shooters highlights the connection between language and community. While tactical shooters’ talk features conventions specific to their practices, many close-knit groups use storytelling to establish social cohesiveness and strengthen group membership. Especially where leisure is a primary purpose, the content of the language may be inconsequential compared to the sense of togetherness its use reinforces. This research serves as a case study for how talking constructs community, and specifically how poetics and performance can create cohesion within a somewhat marginalized group. It has been my intention to both enrich ethnographic knowledge about shooting, and to provide a more humanistic and holistic perspective on gun use in the Canadian Prairies.
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Endnotes

Shooting is relatively common in Saskatchewan. According to Royal Canadian Mounted Police statistics for 2014, 9,463 firearms licences were held per 100,000 people (RCMP 2014: fig.3). There were 4,518 registered restricted and prohibited firearms per 100,000 people (RCMP 2014: fig.8), although only handguns and semiautomatic rifles are in this category, as Canada does not require average long guns to be registered. These numbers place Saskatchewan in the higher figures of shooting and gun ownership in Canada, but not above places like the Yukon or Alberta. These statistics do not show that many more people than those with gun licences periodically shoot, such as those who sometimes shoot as a guest at a range or pick up a rifle at a farm. Therefore, shooting is not particularly “exotic” in Saskatchewan, even if tactical shooting is somewhat niche.
References


The politics of space in the neoliberal university: The University of Warwick and the Free University, Berlin

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ABSTRACT

This article provides an auto-ethnographic analysis of my spatial experiences as an undergraduate student at two different universities with contrasting systems of higher education. I compare my experiences at the University of Warwick (Coventry) and the Free University (Berlin) to unpack the effects of current changes to higher education in the United Kingdom. This provides a necessary student voice in the academic literature on the neoliberalization of higher education. It helps unpack how the introduction of tuition fees and related changes has affected the lived experience of the university in the United Kingdom, and especially the idea of learning that underpins the university. In calling for a focus on our own stories of the university, instead of the elusive ‘neoliberal university’, this article argues that it is our real student experiences that will allow us to situate ourselves and protest the changes taking place in higher education.

Keywords: Student experience, narrative, space, higher education, neoliberalism, universities, spatialization
Introduction

My experience of university has been spatial. This is perhaps boringly obvious, yet it is only after three years that I have realized this. The relationship and ramifications of an economic system, higher education and space are, however, far from boring. Marc Augé wrote that “We live in a world that we have not yet learned to look at. We have to relearn to think about space” (1995, 36). My year abroad spent studying at the Free University in Berlin showed me what learning can be within higher education. This relearning of ‘learning’ itself made me turn my eyes on my own world and follow Augé to think about space.

I had previously understood the introduction of higher education fees in the UK as political only to the extent that it was a decision made by the government. I had not seen how this political decision drained through to every nook and cranny of the university. However, for my third year at the University of Warwick (Coventry, United Kingdom) studying Politics, Philosophy, and Economics (PPE), I spent the year 2014-2015 at the Free University in Berlin, Germany, thanks to the ERASMUS European Union student mobility program. Most strikingly, I couldn’t understand how I experienced such a different concept of learning underpinning the two universities. I had taken my experience of the University of Warwick as the definition of a university, as a neutral, set and stable concept. Yet the spatial displacement of being on a new campus broke up my internalized notion of the university, opening up my imagination to the potential of higher education. I began to rethink all facets of what we mean by ‘university’ and I recognized that if I wanted to undo my experiences of university, I had to do so through the lens of space, since my experiences were unavoidably spatial: from our everyday routine at university to our definitions of the university; from the relation we feel as students to the buildings of the university, to the social relationships we are afforded through the university. What follows is a spatialization of my experiences of these two different universities through auto-ethnography.

The ‘neoliberal university’ in my title is the University of Warwick (or Warwick University Ltd., as made famous by E.P. Thompson [1971]), which I contrast with the system of higher education of the Free University in Germany, a publicly funded university with no tuition fees. This sets my story within recent critical scholarship on higher education in the UK, which focuses on processes of neoliberalization (see for instance Canaan 2011, Shattock 2012, or Radice 2013). In such scholarship, the neoliberalization of the university is seen to have been set in motion by the introduction of tuition fees for international students in 1979, and enshrined by the 2010-2011 government reforms that restructured universities’ funding and fees, which most notably cut state funding for universities so that student fees rose to up to £9000 a year (Brown 2013). However, processes of neoliberalization are understood to have much wider ramifications than students having to pay tuition fees. Formal changes that are seen as the key elements of the ‘neoliberal university’ include a reliance on metric-based consumer information such as the Teaching Excellence Framework (TEF), National Students Survey (NSS), and surveys of graduate earnings as embodying universities’ quality assurance (contra quality enhancement); the casualization of staff in higher education with an increase of zero-hour, hourly-paid and teaching or research only contracts; and the replacement of maintenance grants (bursaries) with further student loans for the poorest students in the UK (which adds to student debt and the normalization of debt in general among young people).

Whilst academic research on the neoliberalization of the university provides a starting point for elucidating what has changed in our system of higher education, I argue that it does not allow us to fully understand the university today. Reciting definitions of
neoliberalism, space, higher education, and their relationship to one another may be useful, but the real range of human experience cannot be diluted into these three terms. Over and above the words on this page, I have not experienced neoliberalism, higher education and space separately and I do not think it is possible to do so. Here, I have analyzed my experiences to bring to life my story of the formal changes that amount to the ‘neoliberal university’. Researching and writing through auto-ethnography, I found the means to explore my terrain.

The ‘relationship’ between neoliberalism, higher education and space, can be better understood, in my view, through Tim Ingold’s interpretation of the term ‘meshwork’, taken from Henri Lefebvre (Ingold 2010, 11). Instead of writing interconnected points, I am writing interwoven lines like Ingold’s explanation of the spider web. To quote at length;

The lines of a spider’s web, for example, unlike those of the communications network, do not connect points or join things up. They are rather spun from materials exuded from the spider’s body and are laid down as it moves about. In that sense they are extensions of the spider’s very being as it trails into the environment. (Ingold 2008, 210-11)

Comparing my experiences of the University of Warwick and the Free University, this writing is unavoidably an extension of me. It is a continual process consisting of both my past and present experiences of both universities. This follows the work of postcolonial, postmodern and feminist scholarship, which has engaged with narrative techniques and analysis for a long time (see Inayatullah 2011), and narrative approaches specifically used to unpack imaginations of space such as Gaston Bachelard’s auto-ethnographic work (1992). Through this work, I have come to understand that using my own narrative recognizes openly and loudly that I am negotiating the position of ‘knower’ of the world, and my position as part of the world. This means I cannot spell out neoliberalism, higher education, and space to start with; instead, they will un-weave themselves through the telling of my account. I started analyzing my spatial experience of university and writing up this research whilst in my final year at the University of Warwick (2015-2016). My method of enquiry thus consists of my past and present experiences of Warwick and memories of the Free University. For this, I used the literature on understandings of neoliberalism, higher education, and space, to frame and prompt what experiences I chose to include and how I chose to analyze them. I did this alongside distilling what I saw as the central tenets of space, and what I felt to be the most important elements of being a student at the University of Warwick and the Free University. Finally, my auto-ethnographic method also included taking photographs during this time, analyzing both universities’ websites and conducting interviews, for which I returned to the Free University in spring 2016.

One might expect that a spatial account of the university would be limited to looking at the physical campus. However, this would not truly confer what space is, nor what it means to spatialize my story. Henri Lefebvre (1991) clarifies our experiences of space in his triad for thinking about space: as material space, representations of space and spaces of representation. Firstly, the physical campuses of the universities are the material spaces we experience such as the accommodation, faculty buildings and sports facilities. Secondly, the space of a university is also conceptualized in different ways to create representations of space. For instance, this can be seen in how the campus is mapped, or how the university represents its position in the local area, country, or the world. Finally, Lefebvre shows how we build up spaces of representations for ourselves, which constitute the lived space of the everyday. This encompasses our fears, imaginations, dreams and emotions such as feelings of anxiety around the library or senses of frustration waiting for the bus. Lefebvre has helped show me that to spatialize my story I must think beyond the physical campuses of the universities. Instead, I must first attend to the term ‘student experience,’ due to its dominance in the discourse surrounding universities in the United Kingdom today. As the
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University of Warwick states itself in the University Strategy (University of Warwick 2016b): 

**Objective 1: Outstanding student experience**

When I look back at my time at university, I judge it through the ‘student experience’ I have had. Only by being able to compare the University of Warwick to the Free University have I been able to look outside of a specific reading of these two words – student experience – which have come to narrow my criteria for assessing my time at university.

Changes in the structure of higher education in the UK have been accompanied by a focus on ‘student experience’ in how universities are ranked and marketed. At Warwick as a PPE student, my ‘experience’ is managed by a Director and a Deputy Director for Student Experience and Progression in Political and International Studies (PAIS), a Director for Student Experience and Progression in Philosophy, and a Leader of Student Experience in Economics. Clearly, valuing and recognizing students’ experiences is positive. But why is it important that ‘student experience’ – from making new friends to trying new sports – is given such attention now? After all, surely students had these experiences before we had directors to manage them. This cannot be taken out of the context of broader changes to higher education, and the motivations for and ramifications of these changes. Moving from Warwick to the Free University, I often felt that I was left to fend for myself by the University, as there was no expectation that the University would cover or organize all aspects of my life. In turn, I missed the readymade societies and social life that comprised much of the two years I had already spent at university at Warwick. However, I also felt that students had lives outside of the Free University covering their interests, jobs, or friends. And this left a specific role and focus for the University, for why we were attending and what was expected. At the Free University, I felt I was treated as an adult, in the same way as if I were moving from high school to a job. I had been assigned a specific role – to study and learn – and the rest of my life was my responsibility. Returning then to Warwick, I saw how the insistence on ‘student experience’ dilutes this focus on the quality of learning. This is in line with Walter Benjamin's writings on students. In his words, “The entirely irrational period of waiting for marriage and a profession had to be given some value or other, and it had to be a playful, pseudo-romantic one that would help pass the time” (Benjamin 2011). This can be read as a warning against reducing the idea of youth to a merely frivolous, meaningless time in life.

To understand how student experience came to be something that needed to be managed, I interviewed a Director of Student Experience and Progression and winner of a Staff Award for Student Experience within the University (who wishes to remain anonymous). In the interview, this person rooted the creation of their job in the “realization that there were higher expectations – students would be paying £9,000 fees and they needed to do something about it to meet those higher student expectations.” When I asked how one does a good job in managing student experience, they replied that the National Students Survey (NSS) was the overriding factor. The interviewee stated that “if you've got buy-in and loyalty from your students, then students probably will want to perhaps be even nicer in the NSS.” Buy-in and loyalty, however, were not discussed as stemming from the content or quality of learning. Instead, they come from such things as branded water bottles: “it is only a water bottle but it's branded with the department and that gives them that sense of identity” (Anonymous 2016a). This reaffirmed for me the need to view the use and definition of ‘student experience’ within the changes to higher education in the UK, including the rise of surveys like the NSS. Such surveys are framed as allowing students the opportunity to provide feedback. But this only allows me the chance to critically view my experiences as a student through quantifiable, circumscribed expectations. As such, many aspects of my experiences as a student are silenced, by defining which experiences are relevant and curtailing what criteria I should use to classify them. Why was my feedback during tutor hours, seminars, module feedback forms or the staff awards not enough? The difference for me was a clear demarcation in the purpose of such
feedback channels. My ‘student experience’ was to be the deciding factor in how Warwick would be perceived in league tables comparatively to other universities.

What I had not expected was the interviewee's questioning of me once we had formally finished the interview. It was important for them to find out whether their department offered a better student experience than others (since I am part of not just one department but three: Politics, Philosophy, and Economics). This gave me an insight into the competitive regime of student experience, not limited to between universities but between departments within universities too. At the Free University, however, I was able to take modules from the other public universities in Berlin – the Humboldt University or the Technical University – which could count as part of my studies. In contrast to the open policy of public universities in Berlin, Warwick explicitly references the competition between universities. During my exam briefing for politics (an informational presentation given each year before exam period begins), the lecturer (who wishes to remain anonymous) took the opportunity to promote the NSS survey. We were shown a photo of Coventry University (the nearest university to Warwick) with the punchline that the NSS could sometimes “throw up some interesting results” since they somehow managed to score 97% on overall satisfaction (Anonymous 2016b). This is perhaps ironic given that the University of Warwick was initially planned to be the University of Coventry, to serve the local community. Initial designs were for “a close association between ‘town and gown’, open door facilities in library services and playing fields” (Thompson 2014, 18). Some Warwick students have themselves challenged this by creating the Instagram account ‘coventryisbeautiful’ to visually resist the expression of disdain for the city of Coventry. However, this incident in the lecture strikes me as showing that Warwick does not see other universities as partners in learning for its students but as competitors to be managed.

Unfortunately, such reductive categorization seems to be being managed well. Even as a student opposed to the NSS, I found it hard to avoid filling it in. Students are not just asked to fill it in. We were given shout-outs before lectures, sent an email a day and offered prizes from both the PPE department and the Politics department to fill it in. Posters also cover the walls of all areas of the PAIS building, from academics' corridors to the Politics common room. One such poster promotes the department as having the highest library spend across the University. Since the posters cover the walls outside academics' offices, I had assumed that all academics agreed with these, until one critical academic (who wishes to remain anonymous) pointed out to me what really lay behind this statistic: the extremely high cost of academic books and the ‘open access agenda’, in which academics have to pay very high fees to make their published work available to a broader public. They suggested that this silences certain questions; why, for instance, do we pay so much for access to knowledge? Before this, however, I had already experienced the ‘politics of posters’ as a student. During my second year at Warwick,
are prevented from certain affordances of interacting with one another. I see the outlines of Warwick's understanding of learning.

Judith Condon, a student at Warwick in the 1970’s, wrote; “the new universities of the 60’s created breathing space” (Thompson 2014, xii). However, working on Warwick campus today, and comparing it to the Free University, a feeling of inescapability strikes me. In his topoanalysis of the house, Gaston Bachelard writes that the “calendars of our lives can only be established in its imagery” (1994, 44). If asked to picture my learning experience at Warwick, I would picture either my seminar rooms, lecture halls, or the library, among which places my time is carved up. The in-between time can be a rush from one destination to the next to find a seat at the library. As such, I have developed the ability to map out in my head the quickest time between all my main buildings and I have set paths through the campus that I can easily map (Figure 3). I leave campus often feeling heavy from the air conditioning, artificial lighting, and window reflections.

In comparison, the way I remember the Free University is through walking. It was sometimes a time to digest, alone in the world, and at other times, a chance to carry on discussions with my fellow students. Frédéric Gros’s work on the philosophy of walking helps frame the importance of this for me within the university. He writes; “The freedom in walking lies in not being anyone” (Gros 2014, 7). Walking across campus and thinking about what I was learning, I felt I did not posit myself outside of the ideas, arguments or histories, but truly engaged with them whilst walking. This would be in line with Thoreau’s principle of spending no more time writing than walking, “to avoid the pitfalls of culture and library” (Gros 2014, 95). Walking rendered my presence accessible and necessary in my learning. I was situated in it. This is akin to Paolo Freire’s definition of learning, by which “people develop their power to perceive critically the way they exist in the world with which and in which they find themselves; they come to see the world not as a static reality but as a reality in process, in transformation” (Freire 1996, 83).

This may be explained away by the observable differences at play. The Free University has a sprawling campus with fifteen minutes timetabled into student’s schedules to account for the journey between classes. As I was also studying in a new country, there was a feeling of holiday which must have affected my

Figure 2: Politics of Posters on Warwick Campus (Source: personal collection February 1, 2016.)

Figure 3: Map of University with my daily itineraries (Source: University of Warwick Main Campus Masterplan 1 2007, 1.)
framing of time and my approach to the everyday. However, what I find striking about this comparison is the different focus: one on the end product and the other on the process of learning. The mantra in my head when on Warwick campus is that if I don’t produce anything at the end of the day, I have not learnt anything. Within this, I define productivity as the time spent inside and either the number of pages I have read or the number of words I have written. I link this to a change in the focus of the university in the minds of students in the United Kingdom. Since we graduate with such levels of student debt, what is valued is the degree certificate at the end of the degree, which shifts emphasis to assessments and examinations to get us there. When a student movement, Warwick For Free Education, protested over the cuts to maintenance grants, they chose to block the road through campus with posters of ‘No Grants= No Road’. The outrage from fellow students (Pickard 2016) about the disruption of their day shows how strongly they felt about this need for efficiency in their learning.

However, I can now also sense how the time cycles of the different universities play an active role in accentuating this. My time at the Free University was split into a winter and summer semester from October-March and April-September, with two months written into each semester for assessments. The prolonged duration of the semesters and assessment period gave me the feeling of having the need and luxury of time to focus on understanding rather than consuming what we were learning. I could view my semesters as learning curves with both ups and downs, in which my assessments were a means and not an end to my learning. At Warwick, the academic year is split into three ten-week terms, with the autumn and spring terms mostly dedicated to teaching and learning, which is then assessed in the summer term. Learning more easily becomes an efficient practice, with a quick turnover of terms focused on the summer term’s assessments and examinations.

Concurrently, I have experienced a knock-on effect of perceived competition between students. Since I understood learning as being embodied in my final grades at Warwick, I assumed that students could compare one another’s learning by means of this shallow differentiator. I think this could also be explained by the pressure of thinking that the value of my degree is relative, only as a comparison to my competitors as I enter the job market after university. An alternative view would be that “when people work together for a common cause, one man [sic] does not deprive the other of space; rather he increases it for his colleague by giving him support” (Tuan 1977, 64). At the Free University, all the students with whom I had seminars were at different points in their degrees, since students could choose which semester to start their studies. As such, I did not feel that I could compare my progress to that of my fellow students in a competitive sense. Learning was given extended time and we were explicitly at different points in the process. For instance, for every essay, we had to present research proposals to be critiqued by our fellow students. Instead of comparing my final grades with other students, I was comparing ideas, understandings and the arguments that went into them as we went through the modules. Situating myself in my learning has now led me to question my position at Warwick:

**where am I?**

Entitled ‘Looking Forward,’ the University of Warwick Strategy furthers my understanding of my experience of time at Warwick. The strategy tells me that at Warwick “we’re forward looking, fast-moving” and “pursuing ever greater forward momentum,” that “Warwick has made outstanding progress in a very short time,” and that “we’ll explore all appropriate opportunities for increasing the pace of growth” (University of Warwick 2016b, n.p.). As a student of the university, I find myself asking what direction is forward.

Warwick has also recently introduced a ‘Keep Campus Moving’ initiative. This includes roadworks to keep people moving in the everyday sense of the university, but also building work such as the Warwick Business School (WBS) and Law School Extension, New Conference facility, National Automotive Initiative Centre (NAIC), and the Advanced Steel Research Centre (University of Warwick 2016a). Here, I found an answer to which way is
forward: the improvements in the University’s research, training and commercial activities that propel the pace and momentum of the university. As the University’s Masterplan states, “The Government’s vision for the higher education sector requires it to meet the needs of the economy in terms of trained people, research, and technology transfer. The University of Warwick shares this vision” (University of Warwick 2007a, 15).

It is not just the idea of the university that has been propelled into the market, but also the physical campus of the university. Quite literally then, as ex Vice-Chancellor Nigel Thrift states, “Universities are no longer on the outside looking in... Universities have become a fundamental part of the dynamics of contemporary capitalism” (Thrift 2014, 134). Warwick now has a WBS campus in the Shard building (one of London’s newest skyscrapers in central London), where Executive Education and Postgraduate programs are taught. I found out that this is a trend within universities in the UK: universities with campuses in London include Anglia Ruskin, Bangor, Coventry, Glasgow Caledonian, Liverpool, Sunderland and the University of Wales (Parr 2014). Writing on the commodification of time and space, David Harvey has linked capitalism to a time-space compression. As Eric Sheppard explains, Harvey detected one of capitalism’s spatial ‘fixes’ as “eliminating any spatial transactions costs associated with transportation and communications, in order to minimize temporal barriers to the turnover of capital” (Sheppard 2006, 128). Perhaps Warwick’s move to the Shard can be seen as achieving this goal.

To try to understand, I interviewed a Vice Chancellor from the University of Warwick (who wishes to remain unnamed). In the interview, they said that the Arts Centre used to define the University when it was founded in establishing “what type of institution Warwick was supposed to be – public engagement not just to the student body but to the region” (Anonymous 2016c). They believed the equivalent today was the NAIC which they described as an “absolutely enormous building, the largest investment in a UK university at the moment from outside of public investment resources –50 or so million quid – it’s a huge statement” (Anonymous 2016c).

Here, I identified how a change in the role of the university and the material development of it intertwine. Evaluation of the University is equated to its continual, material development and thus in part to how good the University looks to the outside world. There is a need to show that the university is always expanding, with more students and more buildings. The temporal focus on speed is coupled with a spatial focus on growth. The very idea of having a ‘Masterplan’ highlights a need for vast spatial scale (Jeinic 2013). As Vice Chancellor Stuart Croft stated, “New buildings are and will continue to be a part of our everyday existence. We need to open one new academic building a year from now until at least 2023” (Croft 2016b). The University then is being marketed as a safe and profitable investment, akin to a corporation. Indeed, the creation of the Strategy Committee can be traced back to the creation in 2003 of the ‘University Strategic and Corporate Plan’ (Strategy Committee 2003 emphasis added). However, this is being done by focusing on specific functions of a university – here, its research and training.
As a student, the effect of these changes in their abstract and physical manifestation means I cannot envisage myself in this projected university. There is an inevitability built into such fast-paced developments that makes me feel co-opted into them. If the plans run until 2023, how can any current student locate themselves if they are only at university for three years? Conversely, how can the University be genuinely responsive to the student body? After all, the first question of the Masterplan is “How much Development is needed?” not whether or what development is needed (University of Warwick 2007a).

I see a vital aspect of this in the development of the University of Warwick as a brand. As described in a report by the Institute for Public Policy Research, universities now “create brands which are among the most powerful in the world,” which “instantly provoke images of academic excellence” (IPPR 2013, emphasis added). As students, we are all part of the image. When I started at Warwick, students on sports teams could design aspects of their team’s kits. Now, however, all teams must have the same kit in keeping with the Warwick brand. This is used to advertise to both current students and visitors to the campus. As shown in Figures 5 and 6, ‘Team Warwick’ cut-outs and banners span the campus, using the branded uniforms to reinforce our brand identity. Beyond the campus, the Warwick brand can also be exported to “badge” activities and campuses abroad in future ventures from Singapore to California (University of Warwick 2007b, 44). This stands in stark contrast to architectural critic Alan Temko’s comment that most importantly campuses provide “freedom from the automobile and from advertising” (Temko 1993,137). When I last went to the University of Warwick shop, I saw that it now sells ‘I heart Warwick’ memorabilia. Funnily, the ‘I heart NY’ symbol is now commonly recognized as the beginning of urban place marketing and the commodification of the city, to make New York City a commonly recognized symbol and a more widely appreciated place. It’s not hard to imagine Miriam Greenberg’s book, Branding New York: How a city in crisis was sold to the world retitled as Branding Warwick: How a University in crisis was sold to the world. Within this, if the University’s vision is based on material growth and perception, then the student’s tuition fees are also seen to improve the perception of the University. The student is part of the tale of inevitability. Potential students must judge the University on what the value of the University will be when they enter the job market with a Warwick degree in hand. Even if I don’t agree with the changes to the University, my fees help enact them, and it feels as though this is all set in inevitable motion. These forward-looking emphases deny me the option of reacting to the changes that are affecting the university in the present.

Indeed, the University of Warwick has a rich history of protesting similar changes. In Warwick University Ltd, E.P. Thompson (2014) describes the protests at Warwick in the 1970s, which began as demands for a social building for the academic community. Those involved soon realized that the social building itself was
not the real issue, but a symptom of the bigger issue: the whole concept and structure of the University. However, the disjuncture that they were protesting against feels very distant to me. The university that I have experienced is so far away from the definition of the university that E. P. Thompson and his comrades were fighting against, that I feel guilty for wanting simply to learn. Sometimes, my objection to the neglect of actual learning in my university changes from ‘I am paying for an education’ to ‘I am not even paying for an education – £9,000 should buy me more’. I move away from the notion that education should never be commodified.

Thompson’s portrayal of the role of the social building in protests mirrors Lefebvre’s understanding of the importance of the architecture of university campuses. Lefebvre argued that the events of May 1968 were in part generated by the design of the campus of the University of Nanterre, in which students experienced many forms of segregation (Kaminer 2013). Harvey’s work on Lefebvre reminds me that “While it is always open to reconceptualize the meaning of that material form so people can learn to live it differently, the sheer materiality of construction in absolute space and time carries its own weight and authority” (Harvey 2005, 114). Spatializing my story, I must still address

**the physical University.**

By day, a lifted study-storehouse; night
Converts it to a flattened cube of light.
Whichever’s shown, the symbol is the same:
Knowledge; a University; a name.

Philip Larkin, 1983, on the University of Hull’s Brynmor Jones Library, from Collected Poems (Larkin 1988, 220)

Larkin’s quatrain helps shed light on the role of the University in its physical manifestation.
As Campus Planner, Perry Chapman, accepted, “the institutional story is told through the campus... The campus is an unalloyed account of what the institution is about” (Chapman 2006, xxiii). For Larkin, the library was a symbol of the university, enough on its own to stand for and understand the university. I would question whether, were he a student there today, Larkin would have written about the library as the perfect symbol of the University of Warwick. Instead, I imagine the buildings and facilities of the Keep Campus Moving Initiative such as Warwick Business School (WBS) would take its place.

As Paul Temple writes, “the ordering of space in buildings is really about the ordering of relations between people” (2014, 4). My understanding of the ordering of relations at play on the campus has come from looking more widely and comparatively at the ordering of space in buildings. One way I understand this is through the use of Warwick as a brand name. The selection of disciplines that Warwick brands does not feel like mere coincidence. The Free University consists of a huge variety of buildings; each one, however, normally has the name the ‘Freie Universität’ on the building itself. At Warwick, the Social Sciences and Humanities buildings do not have ‘Warwick’ branded on the outside, yet academic units such as Law and Business have been distinguished through awarding them the Warwick brand such as the 'Warwick Law School', 'Warwick Medical School' and 'Warwick Business School'. The value of the discipline in the eyes of the institution seems clear seen comparatively in Figures 7 and 8.

My reaction to this selective naming may originate from the sentiment I felt reading Warwick’s Masterplan for development. When reading it, I could have easily been persuaded that the Arts and Humanities were not taught at Warwick, since it is hard to see how they fit with the focus on research, training and commercial activities. On this subject, Terry Eagleton has forecast the death of universities as centres of critique if we are to lose the humanities. “Neither can there be a university in the full sense of the word when the humanities exist in isolation from other disciplines. The quickest way of devaluing these subjects – short of disposing them altogether – is to reduce them to an agreeable bonus” (Eagleton 2010, n.p.). It is interesting to compare this critique against a statement made by Sir Richard Lambert, Chancellor of Warwick and former director general of the Confederation of British Industry, who stated that “At an early stage of this institution, it was things like having a business school, things like having Warwick Manufacturing Group (WMG) which have enabled the university not only to be confident overall, but which have created the environment in which other disciplines have been able to thrive” (Morgan 2014). I also see this demonstrated implicitly when I walk through the campus every day. The new layout of the buses due to the ‘Keep Campus Moving’ initiative means that the Social Sciences building has become a thoroughfare that
students walk through to get to the main campus.

The runway style layout of the Keep Campus Moving Initiative is complemented by airport-style security elsewhere. Arriving at the Free University, I was surprised how relaxed the security was. My student card was a piece of A5 paper, which I used just to get books out of the library. I did not have to scan a student card to get into any building, unlike at Warwick where a card is required to access any study space, which restricts students from different departments from entering and sharing certain facilities. This stops students from being able to see the inequities between disciplines and demarcates learning in definitive ways. Only after three years was I allowed into the WMG Building for an interdisciplinary module, during which we had to be scanned through every door and weren't allowed to take photos. This sense of exclusion seems strong even when it is not evidenced through building plans. Two rumours I have repeatedly heard are that the University House, the administration building at Warwick, is reminiscent of Michel Foucault’s Panopticon and that the Social Sciences and Humanities Buildings were designed to prohibit congregation of students.

I have also read this into the new ‘shared space’ design of the Warwick piazza (the University’s main square), which is part of the Keep Campus Moving Initiative. ‘Shared Space’ refers to the urban design technique of using a single surface for both cars and pedestrians. After the design was deemed dangerous, Warwick responded by hiring security guards to patrol the side of the road. As fellow undergraduate student Luke Dukinfield has explained, “A zebra crossing would disrupt the flow of that metropolis on a sustained basis – this cannot be tolerated.” (Dukinfield 2016, n.p.). This management of the freedom to roam
is seen in Figure 11. But the increased role of security and control on Warwick campus is symptomatic of a much more encompassing trend, epitomized by the webcam placed in the Big Screen overlooking the piazza, or, more worryingly, by the injunction the University placed on December 3, which physically prevented certain students from protesting or spending time on campus, and did so indefinitely (Warwick for Free Education 2016).

In comparison, it feels like the freedom to roam was built into the Free University. Figure 9 shows the use of free space at the University of Warwick. The equivalent is shown in Figure 10, in which rooftops, balconies, and cracks between buildings were social places and were intermixed with the café culture of the Free University campus. Hidden throughout the departments and buildings were many cafés, bringing together students and academics. They were used in different ways, from reading to listening to music, and not just for eating or drinking as there were already two official subsidized canteens. Warwick’s cafés are run very differently; the Costa Coffee branches on campus are part of a nationwide corporate chain, not the Students Union’s catering system (in UK universities, student unions typically run a good number of the cafés and bars on campus.) A Facebook group that I am part of, ‘4th Years Milk Da System’ reflects my views on this matter (4th Years Milk Da System Facebook Group 2016). It encourages students to post about where there is free food on campus left over from conferences or companies promoting their businesses. The name of the group points to students’ feeling that the system is not designed for them: instead of feeling part of a community, they perceive a barrier between the students and the University system, and the resulting feeling of injustice warrants wanting to milk the system. This can be seen more potently if I compare this to the ‘Frei Raum’ (free room) initiative at the Free University. This includes places like Café Tricky, which is run by students at the Free University and consists in a room, a kitchen and outside seating. The kitchen is stocked with fair trade coffee, drinks and snacks which are sold not-for-profit, through an honesty box (Freie Universität Berlin date unknown). There is also the Rotes Café (Red Café) shown in Figure 12, which is a pay-as-you-feel student café. This is a visible sign that the University is not scared of having political students, and that space is explicitly accepted as being political. This leads me to ask; is it time to protest?

In a lecture entitled ‘Occupy and Assemble’ in 2011, Judith Butler spoke of the importance of spatiality in protests within universities: students are “insisting on gaining literal access to the buildings of public education precisely at the moment, historically, when that access is being shut down” (Butler 2011, n.p.). The Student Audimax protests in Vienna, for instance, were named after one of the main lecture halls that they occupied. Occupations and direct action have also played an important role historically in the University of Warwick, and continue to do so (see Warwick For Free Education). However, this year it seems that protests across campus have been motivated by explicitly spatial demands. Warwick Fossil Free, a divestment group at Warwick, is campaigning to get BP (British Petroleum) off campus, asking specifically for the BP Archives in the University’s Modern Records Centre to be made open to the public and put under University control. At Warwick Anti-Racism Society’s Decolonise Our University Conference, I attended a workshop in which a popular call was made to rename a building on campus the Fanon building. What I identify here is students’ need to physically reclaim space on campuses and to do so visually in resistance to the
advertising of the Warwick brand. Butler defines protest as “bringing attention to the way that politics is already in the home” (2011, n.p.); it seems that students are now questioning whose home their university is. Reading Gaston Bachelard’s topoanalysis of the house in The Poetics of Space showed me the importance of unpacking our learned modes of coping with space.

As a child, I never felt able to question the practices of space within my house. Moving to the University of Warwick, I felt the same. It was only changing universities that threw open the “enormous reality of space” (Massey 2005, 8), both in the extent to which we can affect space and the extent to which space can affect us. Curtailing my exploration of space to the university specifically has been important because of the crucial role university has played in my life so far. As for many students, the campus was a temporary home for me in my first year of university, and it was my first experience of living outside of my family home, throwing open the everyday life that I had normalized and internalized for eighteen years. Lefebvre’s understanding of the spatiality of our social lives emphasizes the significance of this. “Social relations… have no real existence save in and through space. Their underpinning is spatial” (Lefebvre 1991, 404). Naomi Klein agrees: “University campuses in particular—with their residences, libraries, green spaces and common standards for open and respectful discourse—play a crucial, if now largely symbolic role: they are the one place left where young people can see a genuine public life being lived” (Klein 2000, 105). As Bachelard wrote, “All great, simple images reveal a psychic state” (Bachelard 1994, 72). To Bachelard’s discussion of “great, simple images” such as the house or landscape, I hope to have added the case for the university.

But how do we bring to life such “great, simple images”? Radical pedagogue Paolo Freire regarded neoliberalization as the “demon of the world today”, seeing the focus on merely training students as insinuating “the dream is dead, the utopia is finished, and history has ended” (Canaan 2011, 105). As Bachelard wrote, “All great, simple images reveal a psychic state” (Bachelard 1994, 72). To Bachelard’s discussion of “great, simple images” such as the house or landscape, I hope to have added the case for the university.

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But I have found that each of our lived experiences shows that the dream can be resuscitated, utopia is not finished and history has not ended. Valuing my own experience of university has allowed me to situate myself in the university and the changes taking place there. The personal narrative of auto-ethnography has carved out a space of learning for me, recapturing the all-encompassing ‘student experience’ within the ‘neoliberal university’. This is in line with Owed Löwenheim (2010), who writes that incorporating individual stories in our work deconstructs the process of becoming the governable person. Following the advice of Ernesto Laclau that “only if we conceive of the future as open can we seriously accept or engage in any genuine notion of politics” (Massey 2005, 11), I hope my narrative conveys an open future, not fixing the facts or telling a timeless tale of the world. This is not the end of my story, but shows the importance of understanding our own stories and the role we play in them. This allows for an open conversation from my research, open to the future potential of higher education.

The importance the University has played in my life must also be framed within the wider picture that the university as an institution plays. Whilst space has been an intrinsic element of critical pedagogy scholarship, research on the neoliberalization of higher
education in the UK largely seems to have missed the “spatial turn” in answering these questions. However, it should not be overlooked. After all, when addressing the university, we are unavoidably addressing relations of knowledge and power, since the university defines itself as a site of knowledge production. For example, postcolonial thought has shown the need for a focus on the university as “itself a site of inequity that emerged from the very systems of oppression... such as white supremacy and colonialism” (Debane 2015, 1263). And as Michael Foucault accepted, we need to understand space to call into question the links between knowledge and power (1980, 177). Space can help tease out the university as a site of knowledge production, rigged with hierarchies of power that lie within and stretch far beyond the physical campus.

Exploring and situating our own stories of the university is even more urgent today, given the current limited response to changes in UK higher education. The lack of critique is perhaps not surprising. Re-imagining the university from within Warwick is hard. It has called into question my everyday practice, from my spatial practices to my social interactions and how I represent myself. However, the absence of critical thinking or resistance among students is worrying. It is this cohort of students who I would expect to be most angry. The government hiked tuition fees to £9000 a year just before we applied to university, and has continued to cut student grants during our years at university. Before moving to Berlin, I had expected the Free University to be second class and disorganized, since it is a public university. My inability to imagine the potential of free education in Berlin as compared to Warwick may more gloomily be seen as an aspect of Terry Eagleton’s diagnosis of “the death of universities as centres of critique” (Eagleton 2010). Conjuring up the dead is never easy. I myself could not fathom how a university could be good if I wasn’t ‘investing’ in it. I now squirm at the extent to which the ideal of the marketized university had impregnated my brain, such that I saw only economic values whereby the more you pay, the more you get. It wasn’t comfortable for me to recognize in myself the effects of a system that sees me as a consumer, buying a service from academics. Painfully, I had to recognize my passive acceptance of this mentality and own up to the feeling of incapacity to resist.

**Conclusion**

My auto-ethnographic account openly positions myself in the world, by accepting that I myself am still part of space and time, and that I am contributing to this “innate multiplicity of spaces” (Rustin 2013, 59). This in turn leaves room for others’ experiences. Other stories of the university can be found that frame, overlap, and contradict my experience; however, it is not for me to tell their stories. Within this, I should also make clear that I not only recognize that space contains multiplicity, but that the ‘I’ from whom I write is interrelated with other people. My story contributes to and is constituted by many others’ stories. And it is these stories that will re-open the conversations that the discourse of neoliberalism often shuts down, breathing life into the relationship between higher education, neoliberalism, and space. I have contributed to this by unpacking the relationship between these three words, making a case for why this is needed and how this may be done. Finally, by recognizing multiplicity and the relational construction of my subjectivity I want to underline the unavoidable interdependence of the ‘I’ from which I have written. As succinctly stated by Naeem Inayatullah (2012, 2), “my tale is thoroughly embedded within a collective story”. Edward Soja writes that “there is too much that lies beneath the surface, unknown and perhaps unknowable, for a complete story to be told” (Soja 2000, 12). To move nearer to the complete story of the relationship and ramifications of an economic system, higher education, and space, we must each write our own stories.
Acknowledgements

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This case study of the electronic dance music (EDM) festival, Shambhala, in British Columbia, examines contemporary sociality. Both popular perception and academic discussion suggest that contemporary, neoliberal society is individualizing. In contrast, Michel Maffesoli (1996) argues that sociality is continuing but in a different form – what he refers to as a contemporary form of “neo-tribes,” temporary and episodic emotional communities formed through collective interest that counteract the alienating effect of neoliberal society. This research explores those two theories, using the 2015 Shambhala Music Festival, a single location of sociality, as the case study. The results of a rapid ethnographic study conducted throughout the festival's duration in August 2015 indicate that most attendees enthusiastically confirm neo-tribalism, describing the festival as a powerful emotional “vibe” experienced collectively; sharing with and caring for each other; and a family-like “Shambhalove” among festival attendees; however, participant observation and close examination of the evidence also shows a few specific instances of neoliberal individualism. This paper explores how a community with strong neo-tribe characteristics can exist in a neoliberal capitalist context and with some attendees whose main reason for being at Shambhala is their own individual consumer gratification.

Keywords: sociality, individualism, music festivals, neo-tribe, neoliberalism
Introduction

Some researchers argue that with the rise of neoliberalism within capitalist society, people have become more individualized and rational (Gledhill 2004; Hayek 1944; Weber 2013). Others argue that there is increased collective sociality, which combats feelings of alienation from the general society (Maffesoli 1996). Music festivals provide a rich backdrop in which to study these theories, along with contemporary sociality in general, since many take place over several days and thereby create their own communities. I chose an electronic dance music (EDM) festival as the focus of this study because it has become an increasingly popular subculture throughout the world and, in the last few decades, a more mainstream genre of music.

The EDM subculture is particularly popular among youth populations, which for the purposes of this article include anyone under the age of thirty. While the category of “youth” is not integral to my analysis, the majority of my interviews were with participants under the age of thirty. It is interesting to note that youth exist in a liminal state. They are not children, but not quite adults either, and because of this social tension, are often prone to feelings of alienation or anomie. As Troy Glover (2003) discusses, this feeling of alienation often leads to the contemplation of personal existence and identity, which is commonly expressed through sub-cultural events and activities. Youth in particular are viewed in this way; however, some researchers posit that everyone in contemporary capitalist society is individualized and alienated (Bauman 1992; Binkley 2007).

The Shambhala Music Festival was picked as the location of my research for a variety of reasons: it takes place over four days, it is geographically accessible, and I have first-hand experience with the festival. I have attended the festival twice prior to this research, in 2013 and 2014, and my insider knowledge has given me an understanding of the festival which was useful in designing the research and proved valuable in my analysis of the data. I was aware that there is a commonly expressed notion that festival-goers find their festival experiences to affect their sense of self and I wanted to understand how that manifested itself at Shambhala. For example, the phrase “Shambhala changed my life” is frequently heard at the festival as well as on various social media forums. The language used both by the festival organizers and the festival goers evoke metaphors of community. Common words and phrases that are used to create this sense of shared community include “Shambhalove,” being part of a “farm-ily” and references to Shambhala as “home.” I was also aware that, besides being a mass gathering of people with a common interest, Shambhala is firmly rooted in capitalism as a commercial tourist venue that sells tickets, hires performers and sells merchandise.

The social interactions at this festival proved to be much more complex and contradictory than they appeared on the surface. Due to the self-professed connection between Shambhala and community, the evidence for collective sociality is readily apparent. The neoliberal elements are not as obvious and are not flaunted by the festival community, but they are still quite noticeable. I wanted to find out if and how collective sociality and neoliberal individualism coexist within the Shambhala Music Festival – which is why I use both neoliberal individualism and collective sociality in wider society in my study of the festival. I use Michel Maffesoli’s (1996) post-modernist neo-tribe theory as the basis for collective sociality, which contends that neo-tribalism is pervasive throughout postmodern neoliberal society. This paper explores how a community with strong neo-tribal characteristics can exist in a neoliberal capitalist context and with some attendees whose main reason for being at Shambhala is their own individual consumer gratification. I argue that collective sociality and neoliberal individualism co-exist within the Shambhala Music Festival because there is evidence of a collective mentality, including
acceptance of individuality, love and community, and sharing and caring, despite evidence of self-interest.

**Shambhala: A Festival on a Farm**

The Shambhala Music Festival is a four-day annual electronic music event that takes place every August on a working farm in the Rocky Mountains, near Salmo, British Columbia, close to the American border. The festival and the farm called the Salmo River Ranch are owned by the Bundschuh family. Shambhala began in 1998 with 500 people and local artists performing on three stages. It has grown significantly since then, with interest spreading predominantly by word of mouth. In 2015, 11,000 people attended with both local talent and internationally acclaimed DJs and producers performing on six stages along with the support of about 1,000 workers and volunteers. For the duration of the festival, Shambhala becomes the largest city in the West Kootenay region (Shambhala Music Festival 2015). Despite how popular it has become, the festival organizers’ mission is to stay true to its grassroots beginning and not to accept corporate sponsorship. The organizers state that, “This mission is important to hold down as electronic dance music culture moves into the mainstream where threatened large corporations and production budgets threaten to water it down” (Shambhala Music Festival 2015).

EDM began during the late 1980s and early 1990s as a small, underground, and even deviant, subgroup of society with only a few musical subgenres. Since then it has become a mainstream music and culture conglomerate, with a multitude of different categories, styles and subgenres. As EDM has become more popular, DJs and music producers have increasingly added their own interpretations to the genre, diversifying it to the point where it has as much variety as all non-electronic music genres combined since any non-electronic genre can be remixed. For example, a remix of disco music or a song that draws heavily on disco influences is often called “nu disco” (Miller 2014). The major difference between a DJ and a music producer is that a producer creates new music while a DJ plays and remixes existing music (The DJ Podcast 2010).

In the early days of the EDM genre, there were a small number of events (typically referred to as “raves”) predominantly held in major cities. Today, there are numerous multi-day events around the globe devoted entirely to electronic music, some of which have become further focused on a specific EDM genre. Some of the most prominent electronic music festivals include: Tomorrowland in Belgium, Sunburn Festival in India, Rainbow Serpent Festival in Australia, Big Mountain Music Festival in Thailand, and Afrikaburn in South Africa (Fest 300 2016). There are also countless minor events like raves, DJ sets, and concerts, which have become mainstream.

**Fieldwork Methods at the Festival**

The research design of this project was rapid ethnography due to the short timeframe of the music festival. I arrived at the venue early in the morning on Friday, August 7, 2015 and left the following Monday afternoon. The four research methods used to collect the data are: participant observation, informal interviews, social media analysis, and photography. The informal interviews were conducted one-on-one or in small groups. Most of the participants were strangers to me, but a few were people I already knew. To ensure anonymity for those I did not know, and confidentiality for those I did, I asked each participant to create a pseudonym. In total, I interviewed thirty-five people over eighteen interview sessions, both during and after the festival (see Appendix A for a full list of participants). All of the interviews were recorded and later transcribed. Rather than using letters of consent in such an informal setting and risk changing the mood, I obtained verbal consent after providing an explanation of my project, which I then documented in my field notes. The participants also received a card with my contact information in case they had any concerns after the fact. Social media analysis of the official Shambhala Facebook page, and the festival’s website was used to supplement the data collected in the field. Photography, both my own and that posted on public websites, was also used to illustrate what I observed.

I chose Shambhala for my case study
knowing I would be an insider researcher. To better understand my subjectivity, I read an article by Paul Hodkinson (2005) that looks at the pros and cons of “insider research” specifically in the study of youth cultures. In his article, Hodkinson discusses the usefulness of personal experience but stresses that it should be used selectively and with purpose. I was mindful of the cautions Hodkinson raised and felt that in my case, insider knowledge of the culture would help me gain rapport with my participants due to my knowledge of and fluency in the language used in the EDM subculture. That knowledge helped me interpret my findings more easily and analyze them in situ at the time of my observations and documentation of my field notes.

Theoretical Framework: Neo-tribes and Individualism

The theoretical framework for this ethnography is two-fold, collective sociality using Maffesoli’s (1996) neo-tribal theory, and neoliberal individualism. Maffesoli developed his theory to posit that despite the trend towards individualism, sociality still thrives within the postmodern, neoliberal society but it has taken on a new, neo-tribal form. While he acknowledges that neo-tribes form within a larger neoliberal capitalist society, that consideration is not the focus of his work. Within a neo-tribe the shared interests and commonalities of the community are integral. Even though these communities are temporary or cyclical, there is a strong sense of solidarity and belonging that is evoked through membership in these emotional communities (Riley et al. 2010a:355). Maffesoli argues that face-to-face interactions, what he refers to as sociality and proxemics, are an important component of neo-tribes. It is his belief that they set the foundation for the collective “we” which is the crux of sociality, and that this combination of concepts leads to “a feeling of belonging” (1996, 139) with a particular (emotional) community.

A neo-tribe as a type of social grouping is not a political organization with constant membership, typically based on things like language, geographical location, and lineage, which is what “tribal” refers to in the traditional anthropological sense of the word (Miller 2011, 162). Rather, the emphasis is on “neo” and the ephemeral nature of the community and the multiplicity of memberships. Membership in a neo-tribe is voluntary Maffesoli’s neo-tribe is also similar to what Michael Warner (2002) refers to as a “public.” At Shambhala the public acts as a private space for festival attendees to publicly be themselves.

Maffesoli argues that we are in a period of postmodernism with a “re-enchanted ‘de-individualized’ sociality” (St John 2012, 439). People are able to express their individualism safely – whatever that may mean for them – while surrounded by those who are like-minded and unlikely to pass judgment. Maffesoli considers many theories of individualism invalid, as “each social actor is less acting than acted upon” (1996, 145). According to him, individualism within a neo-tribe only occurs as part of the collective community (1996, 10). Individualism is facilitated by the community, and likewise the community is comprised of a voluntary group of like-minded individuals.

Andy Bennett (1999) argues that Maffesoli’s theory and concept of neo-tribe sociality provides an alternative framework for subcultural studies. What sets neo-tribes apart from previous subcultures like the disenfranchised hippie movement of the 1960s, or backpacker culture is that in the latter, “meaningfulness was bestowed on those who most closely approximated permanent alternative lifestyles” (Riley et al. 2010a, 357), rather than the temporary nature of a neo-tribal membership. Subcultural theory also tends to place the participants of any particular subgroup within a fixed demographic. In contrast, advocates for neo-tribalism emphasize the temporary, or even arbitrary, nature of neo-tribe sociality which allows for a more fluid demographic (Riley et al. 2010a, 351).

Maffesoli’s (1996) book, The Time of Tribes, is an English translation of the French original with some terms deliberately not translated. Maffesoli uses the term “puissance” in his discussion on what connects people within an emotional community, as separate from the institutions of “power” (pouvoir). Maffesoli was heavily influenced by Durkheim, and
puissance is an interpretation of “Durkheim’s conceptualization of collective consciousness” (1996, x). Maffesoli’s puissance refers to the “inherent energy and vital force of the people” (1996, 7). Puissance is a motivation for these ephemeral meetings of neo-tribes, as well as the common mentality among participants. The most common term my participants used to describe this same feeling of puissance is the “vibe.”

Dance cultures exemplify the desire to be bound together. This is what Maffesoli refers to as “en reliance” and it is a central component of the neo-tribe (St John 2006, 12). People within a neo-tribe look out for one another as part of this en reliance. The notion of being bound together has been interpreted by Riley et al. as a “duty of care” among their participants (2010b, 43), a feeling of obligation to look after each other. In this sense, “bound” is different from being bound by law. Rather, it is being bound by choice since neo-tribe membership is voluntary. Therefore, the obligation is likely not done grudgingly. I use the terms ‘sharing’ and ‘caring’ to represent the en reliance concept at Shambhala because they effectively reflect the close ties that are present within this community. Sharing is largely encompassed by the gift economy that is present at this festival— as well as in the larger EDM community— including instances of both gifting and trading. The caring concept more resembles the duty of care used by Riley et al. where people actively make sure others are okay.

Several academics critique Maffesoli’s theories. David Evans (1997) argues that Maffesoli’s grand theorizing is too simplistic and fails to understand modernity as contradictory, with both uniting and individualizing tendencies (1997, 239). Where Maffesoli argues for a fundamentally de-individualized society, Evans states that neo-tribalism and individualism are not distinct. Neo-tribes depend on an individualized society where, unlike in traditional societies, people can choose (however deliberately) “between the ‘lifestyle’ alternatives offered up to them by consumer capitalism” (1997, 239). He argues that there is more rational individualism occurring in the formation of these neo-tribe communities than Maffesoli acknowledges. Despite Evans’s critique, he still agrees that Maffesoli’s concepts can be useful for studying different pockets of society (1997, 239-240), which is what I did at Shambhala. Zygmunt Bauman (1992) also critiques Maffesoli, arguing that neo-tribes are fundamentally individualistic. He states that the sociality discussed by Maffesoli does not erode individualism, but perpetuates it, and argues for a more combined approach to the topic than the dichotomy used by Maffesoli (1992, 25).

These critiques lead me, and others, to the conclusion that neo-tribe theory alone is not enough to analyze effectively my case study. Following the example of Riley et al. (2010a; 2010b), I add individualism to address this need. In this article, neoliberal individualism as distinct from neo-tribal individualism is best understood as acts of self-interest, particularly evident in this case study as defiance towards or disregard for the rules and regulations at Shambhala. Within neoliberalism, self-interest takes greatest priority rather than the neo-tribal emphasis on the group or collective; it is an everyone-for-themselves way of thinking. Bauman (2000) argues in his book, Liquid Modernity, that the individualization of society is inevitable, in contrast to Maffesoli’s argument. The participants in the research done by Riley et al. (2010b), which also used a music festival as the location, demonstrate individualized self-interest, what Riley et al. call “sovereignty.” This self-interest is most apparent when participants discussed the limits to which they would help others at the festival. Riley et al. note that there was a “... contradiction between ‘duty of care’ and ‘individual choice’ discourses [which] impacted on people's ability to provide support for [others]” (Riley et al. 2010b:50).

Evidence of Collective Mentality: Acceptance and Individuality

Now I use my ethnographic evidence to demonstrate the collective and neo-tribal elements of the music festival. A common sentiment about Shambhala is that the community allows everyone to be entirely themselves, at least for the duration of the festival. Uninhibited individualism is possible and even encouraged at this festival because of the acceptance of the individual and the lack of
judgment demonstrated by the community. This expectation reinforces Maffesoli’s seemingly paradoxical argument that a neo-tribe is a collectivity made of individuals. One of my participants, a woman with the pseudonym Candy Cane, discussed this aspect of the festival in some detail, describing the level of acceptance she has witnessed.

There’s so much love here, and so much acceptance and people don’t, well people judge everywhere, but I mean, for the most part, it’s community. And it's where you can express yourself, and people don’t judge you, you know. It doesn't matter what you believe, or where your boundaries and personal opinions are, people seem to have a little more respect and common decency here. I don't know, it's just beautiful. It's all community and love and friends. So many friends. (Candy Cane)

While Candy Cane is careful not to say there is no judgement at Shambhala, it is definitely less prominent at this festival than in everyday life.

This component of individuality is often manifested at Shambhala through decreased inhibitions, evidenced by costume choices, creativity, and behaviours. For some, Shambhala brings out an increased tolerance towards other people’s expressions of individuality. This acceptance coincides with a distinct lack of individual inhibitions, the most visibly noticeable example being what people wear. Festival goers largely wear what they want – be it everyday clothing, extravagant costumes, or nothing at all. This expression of freedom connected to clothing is one of the common themes that Britz Robins, a Shambhala representative, writes about: “...you can express who you really are in a judgment-free environment. Wearing whatever you want in public, regardless of how strange. Lying naked in the grass all weekend if you want to” (Robins 2015). There are no prescribed norms about what to wear like there are at other music events, such as cowboy boots, hats, denim and plaid at a country music festival, or all black at a gothic event. At Shambhala, it would not be unusual to see a cowboy, a Goth, and a nudist all sitting on the same blanket somewhere on the festival grounds.

Individuality within the context of Shambhala, at least for roughly a third of my participants, can be called neo-tribal because the self-expressions and self-discovery that occurs here is dependent on the community of like-minded individuals. As Maffesoli argues, this form of individualism occurs as part of the collective because it is the accepting community that enables the self-expression. Shambhala is a judgment-free community where festival goers can perform their individuality through self-discovery, creativity, costumes, and behaviours. Anything goes at Shambhala as long as no one else is being harmed. Ge-ma, a woman in her early sixties who has been coming to Shambhala for four years with her daughter Me-ma, describes the festival as “A society of non-judgmental, real energy people that just want to help and be kind” (Ge-ma).

Some of my participants discuss that Shambhala allows them to be who they want to be and others mention that Shambhala makes them more accepting of other people’s individual expressions. Laniakea, who is 25, said that she would be less comfortable with some of the behaviours and self-expressions she has witnessed at Shambhala if they occurred outside of the context of the music festival.

Last night this guy comes in my face with this like, megaphone, and he's just reciting the alphabet to me like, while I'm dancing. And I'm just like, feeling it! [laughing] Like, weird shit that in real life you would never be cool with, like “No fuck off,” but here you're like “Yeah!” [laughing] It's just so funny (Laniakea).

The example above shows how the Shambhala sociality is created by both the atmosphere felt by the people who have shed their inhibitions from everyday society to be themselves and the people who acknowledge that at Shambhala they are less judgmental than in everyday life. A collective tolerance permits individuality.
Evidence of Collective Mentality: Love and Community

Part of the collective nature at Shambhala that enables the expression of individuality is the notion of emotional energy. Puissance, Maffesoli’s take on Durkheim’s collective consciousness, is the inherent energy, or “vibe” of the community. Within EDM, the vibe (which is created by the crowd, the DJ/producer, and the setting) is integral to the experience. Anything that feels “off” will impact that vibe. Roughly a third of my participants talk about the collective consciousness at Shambhala in their interviews, using words like energy, vibe, and general positivity. The vibe at Shambhala is two-fold. There is the vibe of the festival in general, created by the community of festival-goers, and there is the vibe that comes from the way in which the organizers have set the festival up. Robins describes this vibe of the festival with the concept Shambhalove: “One thing that you’ll hear many Shambhala-goers talk about is a sense of connection, a certain energy, a vibe, or Shambhalove” (Robins 2015).

One of my participants, Oak Leaf, a woman in her late twenties, links the vibe and the positivity at Shambhala with a feeling of safety. “Yeah, I fell in love. Just the vibe here, it feels really safe to me... at other festivals you don’t really feel like you can be alone a lot of the time... but here, I mean I hang out by myself a lot here actually. And I don’t know, something about it just feels totally safe” (Oak Leaf). Along with this sentiment of safety is also a feeling of acceptance, and the ability to talk with strangers at the festival: “You can chime in on somebody else’s conversation, and everybody accepts you” (Me-ma). Perhaps these feelings of safety and acceptance stream from the way that “strangers” are discussed at this festival. Rather than the ambiguous and sometimes frightening “other” that comes to mind with the word stranger, the common mentality at Shambhala is that everyone there is simply a friend you have not met yet. Robins thinks that this sentiment, that everyone at Shambhala is a friend regardless of whether you ever actually meet them or know their name, is because “most people are in an open-hearted mindset, which makes it a lot easier to meet and connect with people” (Robins 2015).

Another participant, Ursula, a 22-year-old woman, discusses a group of people that are essentially Shambhala-only friends, telling me she likely would not have been friends with them outside the context of Shambhala.

There’s the people I’ve met at camp, like friends of friends. I never would have sought them out like, they’re not the kind of people I would have befriended on my own. But, because I got to meet them in the context of Shambhala, I can see their Shambhala-selves and I haven’t really seen them outside of that context. So yeah, I guess I have friends that I only see basically at Shambhala. (Ursula)

Ursula describes the “Shambhala-selves” as an important component of why she is friends with these people at Shambhala but likely would not be if this connection did not exist. Similarly, Laniakea used the words “spirit animal” and “radical” self-expression to describe how people act differently at the festival than they do in everyday life. It appears that the festival context is integral to these friendships because these people’s behaviours, and Ursula’s perceptions, are influenced by Shambhala. However, actually meeting at the festival is not necessarily integral to a friendship. For example, Ursula also discusses making instant friends with people in her day-to-day life after discovering they had both attended Shambhala. “Shambhala has this weird power of connection sort of. I’ve met a lot of people, like as soon as you find out they’ve been to Shambhala, they’re your friend immediately. And like, obviously you’re a sweet dude or sweet person” (Ursula). Another of my participants, Zenith, mentioned that he has connected with a few random strangers outside of the festival simply because Shambhala arose in conversation.

Most people attend Shambhala in small groups, but because everyone is there for the same purpose – to enjoy music – there is a connection created across the festival attendees as a whole. The following conversation between House House House and Kandi Raver2 centres on how everyone at the
festival acts like a collective doing the exact same thing at the same time. This moment of realization has had a profound effect on them, solidifying it as a favourite memory of Shambhala.

House House House: It was this moment of, you know, the cry that goes out across the valley that travels. And there were waves of that happening and I just thought, you know, it’s so amazing, there’s like ten thousand people here and we’re all getting ready to go dance. And that’s what we’re all here to do.

Kandi Raver: The realization that everyone is doing the same thing I am.

House House House: I know I know! It was amazing, so it felt, yeah, it made me feel a part of something, which was cool.

Kandi Raver: I would have to say that that night was the most magical night for me too. That first year... I just fully realized how magical this place was that night, and it’s stuck with me since, it was so cool. It really was a life-changing moment.

Like Kandi Raver and House House House, many of my participants describe moments from their first Shambhala as their favourites.

The intensity of these first-time experiences at the festival plays into creating the neotribalism that exists at Shambhala. For example, the shared experience of their first “cry” – the screaming or whooping of excitement that grows and crosses the festival grounds like a wave – is part of the magical, life-changing, and collective experience that House House House spoke about. Tim Kusnierek, a blogger, calls the often heard cry the “Shambha-wave” and describes the first time he heard it.

It’s Wednesday night, and a pair of long-lost friends find each other in the mass of bodies. They scream in ecstasy and embrace one another as onlookers begin to yell and hoot along with excitement. Within seconds, hundreds of passersby add on to the joyous cacophony, and before long, thousands of people are joining in as the wave of happiness flows from the festival’s downtown area all the way to the campground and back again (Kusnierek 2015).

The wave exemplifies the intense and spontaneous puissance that occurs at Shambhala. As well as hearing about it from a number of my participants, I have seen it in action. I know first-hand how infectious the wave is. It is hard not to get caught up in the excitement.

**Evidence of Collective Mentality: Sharing and Caring**

As discussed in the theoretical framework, Maffesoli’s concept, “en reliance,” describes how members of a neo-tribe are voluntarily bound together. I use the aforementioned terms, ‘sharing’ and ‘caring’– as in sharing with, and caring for the community – to analyze what happens at Shambhala. The primary examples of sharing are indicative of the gift economy at the festival and instances of both gifting and trading occur frequently. Sharing and caring are largely intertwined because if community members did not care about each other, this type of free exchange would likely be less common. These instances of exchange occur outside of the official Shambhala market place and payment or reciprocity is not expected. On the dance floor, it is common for small items like glow sticks, stickers, or handmade items to be gifted around in return for a high-five, a hug, or even just a smile. Around the festival grounds, there are exchange posts, either tree stumps or blankets, with several small items on them and signs saying things like: “take something, leave something.”

The most striking and extensive example of sharing I witnessed at the festival occurred on Sunday afternoon, the last day of the festival. A group of regular festival attendees set up a table with free fixings for peanut butter and jam
sandwiches including dozens of bags of bread, jars of peanut butter and strawberry jam. The extent of this preparation demonstrates the forethought that went into this act. The table was set up outside the entrance to the Fractal Forest Stage located in the main area when the “Fractal Funk Jam” was playing its annual four-hour DJ collaboration. The timing and location of this act of sharing with the community makes it not only an act of sharing, but also of caring. The popularity of the Fractal Funk Jam meant the area was packed with people who had been dancing for hours and in need of nourishment. There was a steady stream of people lined up to get to the sandwich table and everywhere I went throughout the festival grounds that afternoon I saw people eating the sandwiches. This thoughtful and selfless act of feeding hundreds of strangers underscores the strength of caring that the festival-goers have for each other despite it being an episodic emotional community.

For Maffesoli, physical proximity is a key component of neo-tribes. Since a neo-tribe is an ephemeral gathering, face-to-face interactions are integral to the sociality. However, the capacity for socialization and connection via the internet has increased exponentially since Maffesoli published his theory. There are numerous social media outlets where Shambhala attendees interact with each other year-round. In these interactions, attendees reminisce about past years or share their excitement about the upcoming festival. It keeps the Shambhala vibe going. The most obvious physical interactions at Shambhala involve what I call “hug culture,” as consensual hugging occurs between virtually anyone and everyone. These physical interactions occur between friends and strangers alike. Saturday night of the festival, my group ran into a couple who told us they had just gotten engaged and all nine of us fell into a spontaneous group hug of congratulations.

Caring is another important component of neo-tribal interactions and it is demonstrated in a variety of ways at Shambhala. First, caring is shown through the notion of family, or farm-ily, with Shambhala being like home. Five of my participants directly referred to Shambhala as home, or homey, during my interviews. Panther called it home when I asked her if she came every year: “I don’t miss a year, it’s hard not to come back home!” (Panther). Me-ma also refers to Shambhala as home after describing her first time at the festival: “We just went, with nothing. I didn’t know what to expect and I’ve been addicted ever since. This is my home, this is where I like to be, this is my vacation time. Once a year, and I love it... I try and explain it to friends, but you don’t understand until you come” (Me-ma). The festival is also called home on social media. On November 2, the same day that tickets for 2016 went on sale, the first two tiers of tickets (the Extra Early Birds and the Early Birds) sold out in a record-breaking six hours. Shambhala posted that information on their Facebook page, and one comment on it the next day was: “I’m going home!!!!! Now gotta play the waiting game for 274 days.” (Shambhala Music Festival Facebook Page, 3 November 2015, 00:43). Another commenter on that post refers to other attendees as their family: “Only goes to show you how incredible Sham is, when so many people are committing practically a year ahead of time. Can’t wait to see you my family♥” (Shambhala Music Festival Page, 2 November 2015, 22:58). This feeling of home and family, as well as the mind set that strangers are just friends you have not met yet, is reiterated by Robins in her article on common themes and sentiments about Shambhala.

Whether you’re a ticket-holder or a world-class DJ, the community vibe of Shambhala stands out among festivals. On the farm, we’re all “Farmily”, and strangers are just friends you haven’t met yet. It’s a joyful reunion where you can reconnect with old friends, connect with new ones, and experience the joy and sense of belonging that goes along with being surrounded by thousands of like-minded individuals. For many, coming to Shambhala is coming Home. (Robins 2015)

The blogger Kusnierek mentions how welcomed he felt at Shambhala given that he had attended alone. He describes several different groups either helping him or “adopting” him
throughout the weekend.

Every interaction breathed a sense of family. Since it was my first time attending, the lovely folks at will-call excitedly explained everything to me, and I was then directed to another volunteer to check in who offered to put my bags in her car, even helping me find a place to camp. I walked over to grab a meal from the delectable Curry Corner, and as I made it to the cafeteria style overhang, a group called me over to sit with them. We ended up frolicking about for the rest of the evening... On Thursday... I found a group of Canadians who adopted me into their ‘Shambhafamily’ for the entire weekend. Encounters like this happened on and on, each one different, yet all of them sincere and genuine (Kusnierek 2015).

Besides caring for one another in a familial way, care also has an important role in mitigating harm. The most common dangers at Shambhala are dehydration or heat stroke, as it is typically very hot during the day and festival attendees dance a lot and sleep little. Ge-ma refers to the Sanctuary, an area for psychedelic harm reduction located beside the first-aid building in the downtown area. Over-dose and drug-related harm is not common at Shambhala, but it is a real danger at all music festivals and thus important for festival-goers to look out for one another. This sentiment contrasts with the opinions of people interviewed by Riley et al. (2010b) at a different festival where the festival attendees did not exhibit the same intensity of “duty of care” that is typically exhibited at Shambhala. According to their research, the participants cared for one another only if it did not interfere with their own self-interest. My research was not on drug use, but I do look at the acts of caring that result from it. However, the bonding effect of mind altering substances would make for an interesting future study on this type of emotional community.

At Shambhala, music plays into the morning hours often until 5 a.m. or 7 a.m. depending on the stage. The later it gets, the more common it is to see people lying down on the forest floor or various seats and platforms towards the back or sides of the stages. Most often it is simply tired people taking a break from dancing, but sometimes it is a sign of a more serious problem.

The Shambhala crowd is really amazing at taking care of each other. Ask anyone who’s fallen asleep near the edges of a dance floor – chances are, someone checked in on them every few minutes to make sure they were ok. This is really influenced by the culture of community, and it’s heart-warming how much Shambhala attendees look out for each other. (Robins 2015)

Robins connects this act of caring with the community at Shambhala as a whole. Kit, a woman in her mid-twenties and a newbie to the festival, also talks about how heartwarming it is that everyone looks out for one another. She is a paramedic and wants to volunteer as a festival medic next year: “I want to be able to help people out if they need it... And it infiltrates all the like, guests here too. Everyone here looks out for one another. You see someone lying down and people are over there like ‘Hey are you okay?!’” (Kit). I have experienced this type of caring firsthand at Shambhala. On the Saturday night of the festival, I was at one of the stages with a friend at 3:30 a.m. listening to the DJ duo Birds of Paradise. My friend was dancing, but I was getting tired so I went towards the back of the stage to lie down on a platform where I could still hear the music. Less than 30 seconds later, another festival-goer came and touched my shoulder asking me if I was okay; I just smiled and gave a thumbs up because it was loud. She smiled and went back to dancing.

Trixie, one of my participants in her late twenties, also talks about caring in our interview: “I also like how friendly everyone is, like if you’re in trouble, you’re not going to be in...
trouble for long cause everyone's looking out for everybody... and it's not even just the security people, it's everybody, it's festival goers, it's volunteers, it's security” (Trixie). While everyone typically looks out for one another at Shambhala, it is part of the security team's job to help people and make sure everyone is safe. Shambhala's security manager, Shaun Wilson, says he looks for people who “embody the Shambhala spirit” when hiring security workers for the festival, rather than intimidating bouncer types. Wilson looks for what he calls “the caregiver types” (Podsadzki 2014).

Evidence of Neoliberal Individualism: Self-Interest

Neoliberal individualism places self-interest above that of the group rather than being an individual as part of and because of the collective, like in neo-tribalism. Bauman argues that this neoliberalism leads to the creation of autonomous people in an individualizing society (2000, 31-32). In this section – which illustrates some of the ways festival attendees resist the collective, Shambhala community, thereby expressing their neoliberal individualism – I rely more on observation of the event and of media than on interviews. Most commonly, self-interest shows up as rule-breaking or frustration when there are delays or changes to the performances.

Organizers take the festival rules seriously and actively enforce them. Most notably, they do not allow glass, alcohol, or weapons on the festival grounds (Shambhala 2016a). The full list of banned items is on the festival’s website and the key points are reiterated in the fine print on the back of the festival tickets. Before entry to Shambhala, tickets get verified and cars are searched thoroughly by security personnel. Security's main job is to make sure that everyone has tickets, that everyone is at least 19 years old, and that there are no banned items in the vehicle. Glass is banned at Shambhala because many people walk around the festival in bare feet and for the simple reason that for most of the year the Salmo River Ranch is a working farm: “Glass is banned to protect you, and our beloved cows, horses, ponies, donkeys and dogs” (Shambhala Music Festival 2016a). However, a lot of people sneak mirrors into the festival. According to the banned items list, only “large mirrors” are banned from the festival. Despite the rules, I know people who have had small compact mirrors confiscated in the security line after voluntarily showing them to the volunteers when asked if there are any mirrors in the vehicle. The mirrors are tagged and available for pick up after the festival.

Despite the rigour, attendees still try to sneak alcohol and glass items into the festival. As stated on their website, Shambhala is a dry event because organizers do not want this festival to be marred by the aggression that can go hand-in-hand with intoxicated people: “Over the years, we noticed something. Compared to many festivals of similar size that allow alcohol, our festival's incident rate is way lower. Not only does that make the festival safer – it creates a better vibe” (Shambhala Music Festival 2016a). Despite the fact that this festival rule is explicitly stated in multiple places, alcohol remains the most confiscated item from the security vehicle searches. Even with a thorough the security process, there are always some people who manage to sneak in alcohol.

Another example of rebellion against the rules are unauthorized sales. In the fine print on the back of the festival ticket it says, “Unauthorized commercial vending prohibited” (Shambhala Music Festival Ticket 2015) and it is clearly understood that selling anything without written consent from Shambhala Music Festival could result in being removed from the festival grounds. All the official vendors set up their wares in an area in downtown Shambhala called the Artisan Market and it fills up with food trucks, merchandise stalls (clothing, jewellery, hula hoops, etc.), and hair and make-up stylists. Anyone who wants to sell anything at the festival is required to apply for a vendor stall and meet all the requirements set by the festival. These requirements include things like minimum working hours and items allowed to be sold. Despite the threat of removal from the festival grounds, many people engage in unauthorized vending by going from campsite to campsite and walking among the tents with their merchandise like a traveling salesman.

At Shambhala 2015, a variety of people came...
by my campsite, selling things like homemade jewellery, stickers, temporary tattoos, and glow sticks. When taken at face value, these interactions can be seen as simple capitalistic opportunities. However, in the Shambhala context, they go against the regulations of the society these people have chosen to join. By deliberately engaging in these illicit activities, they are placing their own individual gain ahead of the cultural norms and ethos of the festival. The most egregious of these rogue vendors that I observed was selling gloves with lasers coming out of the fingertips. Not only was this type of sale unauthorized, handheld lasers are a prohibited item at Shambhala. The festival’s website states that: “Laser pointers can very seriously damage someone’s vision. We’re sure that you’re super careful, but we just can’t take the chance of having them out there on the dance floor at eye level” (Shambhala Music Festival 2016a). This particular individual told me at my campsite that he had a stand in the Artisan Market and was selling these gloves “on the sly” because he could not sell them at his official stall. While these actions may seem benign, this person was not only deliberately breaking multiple rules of the community he has chosen to be a part of for his own monetary gain, he was also flouting a safety rule.

Besides sneaking in contraband goods and unauthorized buying and selling, frustration and dissatisfaction in general can reflect neoliberal individualism. The following conversation amongst a group of my participants exudes negativity, which is uncommon at Shambhala. This group, dissatisfied with a part of their festival experience, emphasized their personal feelings above the collective Shambhala mentality that nothing is bad or upsetting because of where you are. Jim, Party Penguin and Trixie ended up missing some of the DJs and producers that they wanted to see because of delays, which Jim refers to as “ridiculous.”

Jim: On Sunday, we caught all the shows at the start and there were like, huge delays... We didn't listen to music for like, three hours. Which was ridiculous.

Party Penguin: Ugh, yeah!

This section of this interview stood out for me because it is the only example of negativity from over sixty pages of transcriptions from my eighteen interviews. In addition, it is the sole instance of personal disappointment triumphing over the collective Shambhala experience. The rest of the interviews were overwhelmingly positive, with the overall consensus being that nothing bad could happen, or if it did it would not matter because you are at Shambhala. Despite hundreds of festival-goers being affected by the delays, this was the one and only time personal, negative feelings were mentioned. In my role as a participant observer, I witnessed some of the technical difficulties, but did not see or hear any overtly disgruntled people in the crowds. The participants in this interview had a bad experience where their individualistic wants and expectations of the music festival were not met. Ultimately, this group paid to attend a music festival, which, at least partly, failed to deliver on the last night. While I have no data to explain the reaction, I posit that the breaks in the music brought these participants back to reality before the festival ended, resulting in their obvious disappointment. As this occurred on Sunday night after I had completed most of
my interviews, I am unaware if other people expressed similar feelings about the delays since I only conducted two interviews after the festival was over.

Discussion and Conclusion

Based on my research and my own experience, it is clear that Shambhala displays many elements of neo-tribalism. In addition to being an ephemeral, temporary mass gathering, a key aspect of neo-tribes, it is an EDM-specific music festival that has engendered strong shared interest and commonalities from its community. It has also created a strong sense of solidarity and belonging as evidenced in the language used: attendees and organizers alike describing it as “home” and people referring to themselves as part of a family or “farm-ily.” Overwhelmingly, individuals are free to be themselves, surrounded by an accepting, non-judgmental, emotional community of like-minded people. The mentality, puissance, or collective consciousness at this festival is one of positivity, inclusivity, and “Shambhalove.”

Instances of en reliance, voluntarily sharing with and caring for each other (friends and friends-you-have-not-met-yet alike), constitute another of the dominant characteristics of this festival. However, despite the convincing evidence supporting Shambhala as a neo-tribe, as I show in the final section of this paper, neoliberal individualism is also explicitly present at this festival. There are instances of individuals attempting, and occasionally succeeding, to get contraband items past the rigorous security measures and into the festival. This disregard for the rules and regulations determined by Shambhala, the society that these individuals have chosen to be a part of however temporaril, is an example of neoliberal individualism because it places value on personal desires and self-gratification over the values of the collective. Given the emphasis that the festival itself, and the majority of people who attend it, place on community, these examples of self-interest are more obvious than they might appear under different circumstances.

Evans (1997) suggests that neo-tribes are inherently contradictory. This contradiction was also evident in my research. While my participants may not have stressed the neoliberal characteristics of Shambhala, focusing instead on the aspects that set the festival apart from everyday life, it is still true that the relatively few instances of neoliberalism and self-serving behaviour were not enough to outweigh the emotional strength and compelling evidence of neo-tribe sociality at the 2015 festival. While these contradictions exist, it does not negate the importance of either theory. This neo-tribe does not just coexist with but thrives in a neoliberal capitalist context because of the strong shared interest in EDM and the emotional connections that are exhibited by all the participants. Shambhala is essentially a commodified leisure event while simultaneously providing a deeply significant social experience for people. Tension exists between the individual and the collective because part of the neo-tribal “vibe” is the ability to be oneself – that is, to be who you “really” are outside of the societal rules of the real world all the while being surrounded by an accepting community of like-minded people. Attendance is voluntary. People choose to spend their time and money at this festival and to experience its emphasis on community. Evans’s understanding of neo-tribalism allows for a greater involvement of neoliberal individualism, so while Shambhala is not a perfect example of neo-tribe sociality as defined by Maffesoli, it still fits within a wider and more flexible neo-tribe context.

Further research is necessary to explore the contradictory nature of Shambhala, and potentially other EDM festivals, in order to understand to what degree neo-tribal and neoliberal characteristics either co-exist or dominate. Such research will identify the extent to which the predominantly youth demographic factors into the findings. It is important to note that some of my participants attend numerous EDM festivals throughout the year, while others only attend Shambhala; this is a potentially significant distinction. Further, the fact that evidence of festival attendees’ responsibility to care for one another in my research at Shambhala was so drastically different from Riley et. al.’s study of a different festival requires more study to identify why and to establish which experience is more typical,
especially since harm reduction at music festivals has become so important. It is also interesting to note that commodification is typically understood as alienating and individualizing, rather than fulfilling, like the commodification at Shambhala.
Acknowledgements

I need to thank my Thesis Advisor, Dr. Susan Vincent, whose encouragement and guidance has been invaluable throughout the entire research process. Thank you for always pushing me, and for dedicating so much time and energy into my work. A big thank you also goes to Dr. Clare Fawcett, my second reader and the first sounding board for this research topic. To the rest of the Anthropology Department at St. FX, thank you for always providing me with advice and the motivation to work hard.

Endnotes

1 Shambhala takes place on a farm.

2 “House” is a genre of electronic music known for its repetitive characteristic, and is House House House’s favourite type of EDM. “Kandi” refers to the brightly coloured Pony Beads that are made into bracelets, masks, and other forms of apparel that are characteristic of the classic raver from the later 1990s and early 2000s.
References


## Appendix A: List of Participants

<table>
<thead>
<tr>
<th>Pseudonym and interview number</th>
<th>Number of years at Shambhala</th>
<th>Type of festival participation</th>
<th>Age</th>
<th>Profession</th>
<th>Hometown</th>
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This ethnographic study explores how the discovery of lead contamination in urban chicken flocks in the Boston area unsettles postindustrial optimism and neo-agrarian romanticism, producing new openings for multispecies relationships. Within rising popular and political attention to food systems, urban chicken keeping stands as a uniquely positioned subset of urban agriculture. Through ethnography with chicken keepers, policy makers and businesses in Boston and Somerville, Massachusetts in the summer of 2016, my research investigated how urban chicken keeping might transform keepers’ thinking about food systems and animal relationships. The unexpected discovery of lead in chickens’ blood and eggs revealed keepers’ increasingly entangled relationships with the history of the soil they and their birds live upon, exposing what Marx (1981) termed the “metabolic rift” at the heart of industrial capitalist approaches to subsistence. With lead breaking the imagined simplicity of urban agriculture and the linear progression of modern cities, responses in urban chicken keeping reveal space for new ways of thinking about collective metabolism, multispecies living, food politics, and the bodies wrapped up in these material legacies.

Keywords: chickens, urban agriculture, food, multispecies
Introduction

Over the past decade in the Boston area, a rise in residential chicken keeping and discourse around “green,” “postindustrial” cities has prompted the growth of businesses, community networks, and city policies focusing on urban agriculture. The practice of urban chicken keeping complicates many of the binaries on which modern industrial society has been constructed: the separation of the human from animal, city from country, industry from nature, and pets from livestock. Both cities and keepers have entered this scene by constructing imaginaries—conceptions imbued with ideals and assumptions—of what modern urban chicken keeping entails and what I term “urban neo-agrarianism.” Through ethnographic observation and interviews with chicken keepers, policy makers, and business owners in the cities of Somerville and Boston during the summer of 2016, I examine the recent construction and already visible breakdown of this urban neo-agrarian imaginary as keepers’ experiences necessitate responses and reconceptions of what urban animal agriculture may entail for keepers, animals, and larger civic participation.

My research aims to understand the responses of keepers in these supposedly postindustrial cities to the recent revelation that the historically lead-contaminated soil in their yards is contaminating their eggs and birds’ bodies. In effect, lead has broken through the supposedly neat, linear progression of these cities’ past and present ecologies – from dirty to clean, industrial to post-industrial – that is presented by urban agricultural advocates. With this material evidence of the city’s industrial history cycling through its many species of inhabitants, what is our willingness to know and truly act upon the history of the cities we live in, and the food and animals we live with? This paper will examine the resulting responses as a way to think about the potential for urban animal agriculture to generate a truly transformative politics around food, urban ecology, multispecies relationships, and the task of remediating embodied legacies of industrial capitalism.

Methodology: Scratching Around in the Chicken Yard

To conduct this research, I used ethnographic observation, in-person interviews, online surveys, and photography of Boston and Somerville chicken keepers, urban agriculture business owners, and city officials involved in each city’s recent policy process. I recruited chicken keepers by posting on Facebook groups for Somerville and Boston urban agriculture communities. I also recruited participants through the networks of keepers I interviewed who wanted to connect me with their chicken keeping friends. This snowball sampling worked well and quickly in such a highly networked community. However, because my initial contacts belonged to the largely white, middle-class portion of the cities’ total chicken keeping population, as well as because of language barriers, I was unable to access other groups of chicken keepers such as the immigrant keeping community in both cities. (The limits of this divided network and resulting lack of access to immigrant chicken keepers are discussed further in the article.)

In total, I gathered data from 15 keepers, three business owners with companies directly serving keepers, and two city officials (one in each of the two cities). For the chicken keepers, seven interviews were conducted in person and eight interviews were conducted through an online Google Doc survey. Both the in-person interviews and the online survey included closed and open-ended questions. Interviews with keepers focused on their reasons for getting chickens, experiences since having chickens, personal relationships and daily routines with their chickens, political participation in their city’s activism around chicken keeping, and personal politics around food systems participation. For city officials and business owners (most of whom did not own...
chickens), interviews focused on the creation of policy or business models to serve the urban chicken keeping scene, political participation in the chicken keeping debates in their city, reasons for being a part of this scene, and experiences interacting with keepers. Additionally, I took photographs and detailed fieldnotes during and after each interview site visit to participants' houses and businesses (see Figure 1).

During analysis of my interview transcriptions and fieldnotes, I coded excerpts based on key themes and organized emerging findings through this method. Due to the complex legal issues of this practice, along with the potentially controversial opinions expressed, I chose to assign all participants pseudonyms in final products of my research. A methodological note is necessary regarding the controversy around the issue of lead. While I was conducting my research, the Cummings School of Veterinary Medicine at Tufts University was at the same time conducting a study on lead in chickens and eggs (discussed below). I was not involved with the Tufts study, but it included many of my research participants. Thus, I positioned myself as an ethical researcher within this scene by providing my participants with information about the Tufts study and encouraging them to participate in both studies in order to assess any health risks they may have been facing. In the following sections, I trace the background of my research scene and my overarching findings before focusing in on my participants' responses to the issue of lead within their urban chicken keeping practice.

**Relocating Urban Animals in Somerville and Boston**

The Boston area provides an important case study for the growth of urban agriculture, particularly the city of Somerville, which lies on the north side of Boston's metropolitan region. The densest city in New England, Somerville has a population of just under 80,000 people in four square miles. In the nineteenth and twentieth centuries, both Somerville and Boston were centers of financial, educational, and material production characteristic of the industrial era. In the later part of the century, these cities experienced deindustrialization, shifting from industrial-driven economies to spaces of industrial and capital flight, and then to what many scholars describe today as postindustrial life (Bluestone and Stevenson 2000). Boston has been described as “the exemplary postindustrial city” in its revived economic vitality and its redevelopment founded on knowledge production at the turn of the twenty-first century (Ward 1998 cited in Stanton 2017, 251). In cities that underwent this shift, contemporary policies can be seen to promote a “postindustrial” urban mindset, encouraging images such as the “green” or “smart” city. This mindset assumes that the industrial is part of a city's past, and that the past has already been dealt with by the city remediating the worst evidences of brownfields and abandoned factories.

With the twenty-first century’s rising trend of local food production and consumption, the latest in a historic, cyclical pattern of “back to the land” food movements in the United States, many cities have embraced urban agriculture as part of this urban postindustrial vision. Nationally, urban municipalities are making
strides in their planning and public health departments to promote the creation of community gardens, local farmers’ markets, and school growing programs (Voigt 2011). These projects aim to promote healthy eating and local economic development while bolstering an image of their cities as “green”, innovative, and clean spaces that have moved past their histories as industrial centers.

Urban life and agriculture have shared a close partnership since the emergence of the city. It was only through agriculture and the food trade it enabled that cities became possible, with early cities developing along the geography of fertile land. Through the nineteenth century, daily markets selling food within the city were commonplace and often included the sale and slaughter of live animals that were brought to the city from rural and peri-urban places (Steinberg 2002; Moore 2006). This normalcy of animals in urban space faded in the early twentieth century as a result of zoning restrictions and changing cultural norms regarding urban human-animal proximity, marking a cultural and legal shift away from productive animals within most modern cities of the Global North (Steinberg 2002; 161). While urban livestock keeping has continued quietly in some communities, including among formerly-rural immigrant populations, most city residents and their governments have come over the past century to consider productive animals and the broader cultivation of food out of place in urban contexts.

Recently, municipalities across the country have increased the scope of their urban agricultural promotion by creating or revising land use ordinances to allow for keeping productive animals, such as chickens and bees, within city limits (Voigt 2011). Somerville and Boston are two such municipalities, and Barth’s article in the popular online journal Modern Farmer asserted that “combined, Boston and Somerville may be the most urban agriculture-friendly metro area in the country” (2015, n.p.). Striving to market themselves as centers of progressive urban agriculture, both cities have developed policy mechanisms to structure urban agriculture within their bounds by providing regulatory policies or recommendations. Without explicitly encouraging residents to get chickens or grow gardens, both cities’ policies are quite favorable to urban agriculture, letting residents do as they desire in accordance with these policies and providing assistance through workshops and online guides.

The City of Somerville legalized chicken and bee keeping in 2012 through an Urban Agriculture Ordinance that provides regulations on the number of birds and coop size and requires a $50 permit. The city’s ordinance was the first of its kind in New England, an impressive feat for the region’s densest city and one that reflected the politically progressive character of much of its population. Along with the ordinance, the Mayor’s Urban Agriculture Initiative created an “ABC’s of Urban Agriculture” book to make the policies accessible to residents. A city official who had helped write the ordinance cited overall interest in local food, the mayor’s community health initiative Shape Up Somerville, and the fact that city residents were already engaging in animal agriculture as motivations for the ordinance and its inclusion of bee and chicken keeping. This official noted that while large-scale impacts of urban agriculture such as urban food security are not likely to be addressed by the scale of urban farming in Somerville, she sees motivation for the city’s urban agriculture in:

[a] lot of intangibles, and those are community-building and people getting to know their neighbors and all of the benefits that come around food and local food and sharing food. So the vision really is about creating a network of local food sources and then [the] community-building [that] comes from that is a bonus.

While the city government considers these permits a way to guarantee protection of keepers’ rights if neighbor disputes occur, my research shows that many Somerville keepers feel the permits are unnecessary and choose to keep their chickens without acquiring a permit.

Boston’s 2013 Article 89 which revised the city’s zoning code to allow for urban agriculture was a more complicated process. Boston is not zoned as one individual city but rather as
Figure 2: Joanna, a keeper in Roslindale, stands with one of her seven chickens, Midnight. Joanna is a founding member of the policy advocacy group “Legalize Chickens in Boston”. Photo by author.
several independently linked neighborhoods with somewhat autonomous senses of identity within the larger metro area. As such, some of the changes Article 89 made to the city's urban agriculture policies came as recommendations rather than definitive rulings for all parts of the city. In the case of bees and chickens, Article 89 provides recommended practices but defers to neighborhoods' individual policies on the legality of urban livestock, which most neighborhoods have labeled as a “forbidden” and therefore illegal land use since the 1930s. Several participants in my research were involved in Article 89’s community input process during the summer of 2013, and they expressed disappointment at the rezoning’s silence on what they see as antiquated neighborhood policies forbidding productive animals. Joanna, a keeper living in the neighborhood of Roslindale (see Figure 2), contextualized the difficulties associated with Boston’s process as part of the historic break between animals and urban space:

It was the old zoning [that] had something about no livestock, and that was put in place back in the 1930s when there was livestock everywhere and it was a problem. It was a problem with disease and you know. So they said “We need to put the farms out in the country. We'll bring the food into the city....We're not going to be raising our own, we're not going to be slaughtering our own animals in the city,” you know. So they tried to clean up the city by getting rid of all the animals, and the horses... It's like cars come in and no more horses; they clean everything up. And so that was on the books.

As such, most chicken keepers in Boston are not practicing their particular form of urban agriculture in accordance with the law. However, Boston keepers and city officials involved in the rezoning recognize a de facto agreement between the city and its residents: keepers are told both directly and indirectly to go about their practice in a responsible manner to avoid neighbor or sanitation conflicts, and the city allows the practice to continue and even grow. Some keepers referenced notable exceptions of keepers they knew who were forced to get rid of their chickens after neighbors' complaints or sanitation violations, though these instances were not thought to be common. Several participants in this research were or still are part of a group known as “Legalize Chickens in Boston,” though most describe the legalization efforts of this group as having “fizzled out” in favor of continuing the current de facto system.

The New Urban Chicken Keepers and Their Practices

The demographic profile of keepers reflects the demographic findings of other recent research on this New Urban Chicken Keeper or “NUCK” population (Blecha 2007, 39). The majority of the keepers I interacted with were middle- to upper-middle-class white women between the ages of 30 and 60. These demographics reflect the ways the broader “food movement” around local and sustainable food is currently raced, gendered, and classed, as well as how non-white and low-income participants in modern alternative food production are often made invisible (Alkon and Agyeman 2011). Many keepers and advocates made remarks that showed a conceptualization of themselves as the “others” of their city’s immigrant chicken keepers. Often this group of keepers was imagined as within a nonspecific “immigrant” category, though individuals referenced particular communities in the city such as Haitian, Portuguese, Brazilian, Chinese, and Vietnamese residents. They spoke of immigrant chicken keepers as living closer to the land and being more “authentic” and agrarian, more likely to be male, but potentially less humane and hygienic. One Somerville keeper referenced an immigrant friend who knew how to kill a chicken and was “happy to...do the deed” when the keeper did not want her birds after laying age. Another keeper expressed worry that immigrant families who had kept chickens in other countries may keep their birds here “improperly housed” and not spend the time or money the keeper felt was needed to keep chickens “responsibly” in Boston. Likewise, city officials and other proponents of chicken keeping spoke of immigrant populations...
involved in this practice both as positively “closer to agriculture” while also questioning their assumed motivation of eating the birds, in contrast to what these proponents characterized as the “white,” “fresh food movement,” and “socially, environmentally conscious type” of keepers. Implicitly, the construction of the urban chicken keeping demographic conveyed by many in this scene draws from norms of whiteness, American agrarian nostalgia, and privileged economic positionality, forgoing or invisibilizing the multicultural reality of urban chicken keepers.

Several additional patterns emerged through this research that combine to reveal the urban neo-agrarian imaginary constructed by these New Urban Chicken Keepers and their proponents. First is the common conceptualization of the practice within contemporary food discourse. In addition to positioning themselves in conceptual opposition to immigrant keepers, the keepers and advocates I interviewed also located themselves as the “others” of industrial agriculture which they see as globally dominant, inhumane, and disconnected from consumers and food itself. All the keepers I interviewed cited a desire to produce local eggs to eat and reduce their reliance on conventionally-produced food as a primary or partial motivation. Linda, a Somerville resident in her early fifties, who teaches English to area immigrants, began keeping chickens in 2012 in order to be true to her values of ethical vegetarianism and “trying to be low impact on the planet.” She sees her practice as the only way to truly know she is consuming eggs “humanely” compared to “an industry that treats animals cruelly” or even a local farm where she feels conditions are still not transparent enough. For Mary, another Somerville resident in her fifties, keeping chickens as pet-like companions was more of an initial motivation than producing local eggs as an alternative to conventional sources. However, Mary states that keeping her birds the past three years has made her more conscious of the benefits of raising seasonal, unprocessed foods while also living what she sees as a modern urban lifestyle. “I like having the [egg] source be very local. I like the fact that I’m not contributing to factory farming in one tiny little way... I really love the fact that I’m able to do that and still live in the city, which has a lot of other benefits.”

Local food system participation, environmental consciousness, and a political stance against factory farming all while living a modern urban life are thus three facets of what constitutes urban neo-agrarianism for these participants. In addition, a pattern emerged when considering the practice within broader terms of community development and social health. Those involved in chicken keeping in Boston and Somerville have a strong network: many referred in their interviews to others I had met as key players in this growing community. Nearly all keepers I spoke to had attended one if not several educational or social events arranged by these key players, where they were able to meet other keepers and discuss current legislation or research on chicken keeping in the cities. Joanna, a keeper in the neighborhood of Roslindale, referred to the spread of the practice as a “community builder” both internally among those who kept chickens and externally with those who interacted with the practice as intrigued neighbors. Chicken keeping is also spurring connections between residents and city officials, as many keepers referenced developing personal relationships with officials in planning, sanitation, and health departments because of their experiences dealing with regulations associated with the practice. Keepers had diverging views on where promoting urban agriculture fell on their communities’ agendas, with some feeling that the practice was vital to strengthening their community while others thought that it fell below more pressing concerns of gentrification and violence. However, participants agreed that community development was an aspect of chicken keeping that was having more significant and positive impacts in their lives than they had expected.

The primary area where keepers diverged rather than agreed on their practices was in characterizing their personal relationship with their chickens. The fifteen keepers involved in this study span the spectrum from considering their birds to be livestock to seeing them as pets. This was assessed both by direct
questioning and by looking at indicators of their care and investment in birds, such as naming them, showing attachment to their personalities, and investing time and money in their health (see Figure 3). Rather than situating the relationship at one extreme or the other, the majority of keepers chose a specific spot along the continuum based on their initial motivations and subsequent experiences. Debra, a Roslindale keeper in her sixties, considers her birds closer to the livestock side of the scale, though she notes, “[t]hey definitely have personalities, but they’re not like the cat. You know, they’re kind of...chicken. They’re fun and they’re entertaining, but I wouldn’t say they’re like pets really.” Mary first considered her birds in the middle of the spectrum, but her investment in their health over the past year has caused the birds to move “a little further along on the pet scale” because their care at the veterinarian feels like “more of a pet model than a livestock model” to her. Linda exists on the far livestock side and contrasts herself with keepers who treat their birds emotionally and medically as pets. “That’s not the case for me. I have them to give them a good life so they live a decent life in good surroundings and they produce eggs and that’s the deal.”

Some participants made statements that showed a budding linkage in their minds among these various aspects of urban chicken keeping: the environmental, food-focused side; the community development side; and the individual bird-to-human relationship side. John, a Boston resident in his forties, opened a store several years ago to cater to the area’s growing need for urban agriculture supplies and knowledge exchange. John sees the crux of practices like urban chicken keeping as not totally about food itself: “I think the idea that I like about urban agriculture is that it connects people and makes people more aware of the earth, what sustains them.” Here, John hones in

Figure 3: Andrew and Amy, Boston keepers in Dorchester, consider their chickens to be entirely pets and often spend evenings socializing with them in their yard. Photo by author.
on a common theme that I identified in many keepers’ experiences: the practice of keeping chickens never involves just keepers and their chickens. Keepers became more aware of hawks, raccoons, and neighbors’ dogs in the constant battle they waged as defenders of their chickens, as well as becoming more aware of the other species of birds that called their yards home. Even within the supposedly controlled ecology of the city, keepers could not invite chickens into their spheres without also inviting sparrows and cardinals, a fact keepers like Mary begrudgingly accepted when the norm in her coop became her four hens plus dozens of sparrows. Through their practice, keepers came to realize that their relationship with their birds was not simply a chicken-to-human singular relationship but rather that they were cultivating relationships of care, mutual acceptance, or animosity with many species in their yard’s ecology.

**Conceptual Framework: Multispecies Response to the Metabolic Rift**

To understand interactions like these among many different kinds of bodies, recent scholarly approaches strive to decenter the human in exchange for a more multispecies perspective. A primary aim of a multispecies approach is to recognize and let flourish our interconnectivity and mutual becoming with the many species around us—our “knots of species coshaping” (Haraway 2007, 42). Haraway describes this goal as “becoming worldly with others” or “autre-mondialisation” (2007, 3). Nading describes this using the concept of entanglement, a process of “the unfolding, often incidental attachments and affinities, antagonisms, and animosities that bring people, nonhuman animals, and things into each other’s worlds” (2014, 11).

Within this scholarship, there is considerable debate over whether the domestic sphere is a solution or a curse for multispecies flourishing. Some perspectives point to multispecies relations within the home as the most productive relationships to cultivate new types of flourishing (Haraway 2007; Rudy 2011). Others urge us to move outside the domestic sphere’s problematic confinement of care where “our species being is realigned to stop Others at home’s door” (Tsing 2012, 150-151). It is here that urban chicken keeping within yard ecologies pushes this debate to question conceptions of the domestic itself. Urban chicken keeping shows that seams of species cohabitation and co-place-making exist within and around the walls of the supposedly human-only (plus perhaps a dog or cat) domestic sphere, breaking down the very definition of the “home” to include the complete multispecies ecology in and around the home. Home is where we are, where we flourish, and where we can enact embodied care and place-making with others more accessibly and particularly than anywhere else. Keepers show that a multispecies understanding of the home means this place is not defined by lines of domesticity but by the fluid knots of entanglement that make up the places that ground us. Coming to an understanding of the fluidity of species within our “home”—realizing the seams that exist not in far-off margins but right here at home, making domesticity itself an illusion—changes the definition of the “home” to a post-domestic ecosystem of worlding between species.

Given this multispecies approach towards decentering the human and recognizing that our becoming is interconnected with others’ becoming, it is also necessary to ask what those interconnections are made of, for which the theory of metabolic rift proves useful. Metabolic rift is a Marxian (1981) environmental theory used by scholars to explore the material and conceptual breakage points in our global food system and industrial capitalism more broadly. Geographer McClintock summarizes Marx’s argument in saying that the development of capitalism (and the urbanization that followed) alienated humans from the natural environment and disrupted our traditional forms of ‘social metabolism’, the material transformation of our biophysical environment for the purpose of social reproduction. (2010, 1-2)

McClintock traces out how the industrialization and globalization of the food system, occurring
in conjunction with the rise of the industrial city, caused metabolic rifts—breakage points—all along the food system. Ecologically, industrial agriculture practices cleaved “a biophysical rift in natural systems (such as nutrient cycles) leading to resource degradation at points of production and pollution at points of consumption” (McClintock 2010, 2). These ecological rifts specifically rely on “spatial and temporal ‘subsidies’ to the food web”, the term “subsidies” referring to the unpaid, unacknowledged, or unjustly-distributed costs created through these large scale industrial processes (McClintock 2010, 4). These patterns were set in motion with the late-eighteenth-century rise of market-based agriculture, land enclosures, and increasing mechanization of food production, and have only expanded over time. Now-global practices such as monocropping, intensive use of fossil fuels and chemical fertilizers, and movements of nutrients from Global South stores to the depleted Global North all constitute the dominant food system that New Urban Chicken Keepers seek to escape or transform.

The lens of metabolic rift provides a way of thinking about this total scene as one interconnected set of material, social, and economic processes of transformation, ruptured by the kinds of efficiencies and distances that industrial production enables. The bodies of humans, animals, plants, land, and water, and the nutrients and energy that circulate through each are all part of the same metabolism. What if the city was looked at as itself a body, a combination of all of the nutrient and energy flows both within it that have been imported from elsewhere to help create it? This requires a significant decentering of the human to consider ourselves as not the authorities over clean urban cycles but rather one cog in a larger urban-natural metabolic wheel. Applying this multidimensional lens of metabolic rift to scenes of urban agriculture today, it becomes clear how historical processes are materialized in the water, soil, and bodies of those attempting to heal the material, social, and economic legacies of industrial capitalism.

The remainder of this paper will focus on what I found to be the most controversial evidence of these legacies: the lead found in many of these chickens in an unpublished 2015 pilot study conducted by the Cummings School of Veterinary Medicine at Tufts University. Though keepers and researchers may consider the discovery of lead in their chickens and eggs to be a potential breakdown of their practice, the idea of metabolic rift and a larger urban metabolism shows that the lead discovery is less a breakdown itself than an index of the breakdown that has already been happening within the fuller timeline of urbanization, industrialization, spatial displacement of this industrialization, and massive displacements of nutrient and fossil fuel energy cycles along the way. This breakdown has been and still is an ongoing, slow crisis precipitated by industrial capitalism. It is embodied conceptually in our dominant food system and the alternatives proposed to reform it, as well as physically in the bodies and soil such as those in the stories told here. The costs of this crisis are still being accumulated and subsidized even while they are being recognized, a recognition growing popular in current sustainable food discourse, to which many of us respond to by trying to alter our relationship with food. The chickens here are taking into their bodies, and then into human bodies, a part of the city’s—and the modern world’s—history through the soil. The resulting responses of chicken keepers to the identification of lead in urban birds, which I discuss below, are in some ways crippling the wildly-held urban neo-agrarian ideal and requiring the research participants to realize that food system participation and change cannot build up from the ground while ignoring what is in the ground.

**Discussion: Lead as a Catalyst for Response**

Although I did not know about lead in chickens when I began my fieldwork, the theme arose quickly in interviews, pointing to this developing situation as an area worth further inquiry. Many of my participants had been involved in or heard about the 2015 Cummings pilot study and told me about their experiences grappling with the study’s results. During the summer of 2016, as I conducted my interviews, a larger version of the Cummings study began and I was able to connect keepers who had not had
testing done during the pilot study to the new study if they desired to participate. As such, the lead situation and resulting responses became a central avenue for analysis in my study in the fall and winter of 2016.

As a disruption in the expected relationship between keeper and chicken, lead provides a catalyst for multispecies response. Haraway (2007, 36) states that the first step in opening oneself up to becoming worldly with and accountable to other species is simply curiosity, an “unsettling obligation...which requires knowing more at the end of the day than at the beginning.” From curiosity stems touch, which “ramifies and shapes accountability...it peppers its partners with attachments sites for world making” (Haraway 2007, 35-36). Finally, from accountability stems responsibility: “[o]nce we know, we cannot not know. If we know well, searching with fingery eyes, we care. That is how responsibility grows” (Haraway 2007, 287). This is where possibility for truly new forms of multispecies relationships lies: taking seriously the knots entangling all those implicated in urban chicken keeping demands a response. The keepers, policy makers, business owners, chickens, and every other animal that moves and lives through these yards are “looking back at each other, sticky with all their muddled histories” (Haraway 2007, 42). The question becomes: how do these different groups respond?

Some respond with disconcerting ambivalence. Linda was forced to grapple with this question when she participated in the pilot study three years after getting her chickens. When her birds' blood tests came back as testing moderately high for lead—lower than some of her friends' birds' results, higher than others—she asked the researcher to also test her birds' eggs. The results indicated that Linda's eggs had the highest levels in this area, a particular issue of safety for Linda who lives with a health condition that makes ingesting lead more dangerous than for the average adult. She hypothesized that her high egg lead levels were due to her coop's proximity to three different houses and the chipping of past lead paint, though she noted that her soil tests came back as only moderately contaminated compared to others' highly contaminated soil.

Linda responded by taking “action to get rid of my chickens at that point,” giving the contaminated birds away to a family friend who had a farm, replacing the soil under their run, and getting four new birds who are confined to this patch of remediated run rather than let out in the yard as the previous birds were (see Figure 4). This response appears to stem most directly from Linda's consideration of the birds as livestock animals for the production of eggs; once the birds were unable to produce eggs that were safe for Linda and her husband to consume, the birds were not considered worth the financial and energy investment for veterinary treatment or the emotional investment of keeping the birds simply as pets. She said of the newly confined birds: “I may let them out from time to time, but that soil’s lead contaminated...So I'm not sure it's a great idea.” While Linda states that her original and continued motivation for keeping chickens is ethical animal treatment and vegetarian consumption, “to provide them a decent life in good surroundings,” the true weighing of her birds’ worth in this arrangement is called into
question. Linda exemplifies the side of urban chicken keeping that wants to respond to breaks in the conventional food system but is unable to consider what a deeper response to this multispecies metabolic relationship might mean: a centering of herself in favor of a more serious sense of responsibility for the birds that she brought into this yard as a participant in industrial capitalism, which began a series of multispecies codependencies in which she no longer wants to fully engage (Nading 2014, 11).

At a meeting last year of the pilot study’s researcher with its participants, Linda gave suggestions for the next phase of the study (still in progress as of early 2017). She has been recruiting keepers for the study, saying, “I just feel like people should know what’s going on.” She feels that the responses she has received have been less than satisfactory, as she stated “I was actually surprised; I thought I would get more people [interested in getting lead tests], but some people didn’t want to know, some people’s chickens weren’t laying right then, and various reasons.” Linda’s surprise at what she has observed as ambivalence or non-response from others is intriguing when contrasted to her own ambivalent statement on the Somerville community’s knowledge about overall lead-contamination in the soil—“we know soil is bad in Somerville generally”—and an ambivalent remark during our interview when she commented that she was feeding her birds clover that she believed could be contaminated with lead. I saw similar ambivalence in other keepers when I told them of the Tufts study and encouraged them to get these free lead and salmonella tests. Some pursued participation and others did not, with one interviewee enthusiastically telling me they wanted to get testing done but not following through in the months after our meeting despite frequent following up on my part.

Others responded with a greater sense of interspecies responsibility and solidarity. Mary had participated in the same pilot study in 2015. Two of her four birds, all asymptomatic, were given blood tests for lead, both coming back as significantly high. This was consistent with the overall results of the study: many hens tested had higher blood lead levels than expected, but variation within and between flocks was high and no birds were symptomatic at the time of testing. Three weeks after these tests, Mary noticed one of the chickens with an enlarged crop and watery stool. “And then one morning—and this was the event—she was staggering.”

Mary responded by investing substantial resources of money and time in treating her chickens for lead poisoning through a vet outside the city. As she felt “it doesn’t really make sense to treat them unless you’re going to fix the soil,” Mary and her husband also remediated a majority of their yard’s area with new soil (see Figure 5). To Mary’s dismay, several of her hens have exhibited reoccurring lead poisoning symptoms over the past year due to lead from the initial contaminated soil still releasing slowly from their bones, requiring subsequent treatments. I asked Mary how she weighed the decision to treat her chickens rather than “re-home them,” as she mentioned Linda (whom she had met during the pilot study) had done.

I think if I had known what a big drama it was, maybe it would have given me pause. But it really…it’s one of those things that’s like your pets are sick and so you will pay what you would kinda pay to fix them...And you know, in part their lead poisoning is because of me, right? It wasn’t intentional, but it’s because they’re in this environment.

Mary exemplifies the cyclical nature of care and multispecies response that Haraway (2008), Tsing (2012), and Nading (2014) envision: incidental attachments in the form of pet-love bring Mary and her chickens into each other’s worlds. Once the birds’ space of living overlaps with Mary’s, she feels an interspecies responsibility to maintain that shared home’s ecosystem. For Mary, taking seriously the chickens’ existence in this space and what brought them here “engenders forms of identification and companionship that contrast to hyper-domestication and private property as we know it” (Tsing 2012, 142). Her indexes of care and investment in these birds’ bodies—
lives themselves worthy of response outside their worth as providers of food or affection—have clearly grown because of this lead situation. Mary’s response seems to reflect a budding awareness of her life and environment being part of the same urban-natural metabolism as her chickens. She faces their lead poisoning with a sense of responsibility for their introduction into this historied urban environment through investments of interspecies solidarity in the yard’s soil and the chickens’ bodies which have ingested its legacies.

Like Linda, Mary acknowledges that it is a known fact that there is leaded soil in Northeast cities, but says she has not heard it discussed as something to consider when keeping chickens as opposed to its common discussion in urban gardening. Animal agriculture seems to have pushed this conversation into more nuanced, though uneasy, territory in a way that vegetable agriculture did not when public discourse characterized lead in urban gardening as a predictable but manageable factor to be put to rest through raised beds. Mary has thought of ways to spread her story, but she worries about the possible effects of this message.

I guess I don’t want there to be kind of a weird hysteria about chickens and lead. But maybe people are a little less worried about it since lead in the environment is kind of something that they know about already...I certainly wouldn’t want other people to have their birds suffer and possibly die because of something like that. So I guess that’s more important to think about than whatever negative things could come of it. Cause it kinda just is, it’s not a judgement,
it’s just…There is lead in the soil.

Even with this internal dilemma, Mary feels complications come with the territory of urban agriculture. In discussing how her chickens have affected her thinking about food, she stated:

I think [keeping chickens] has changed [my relationship with food] and has made me more aware of it, but also, you know, it's complicated right? Like it's fun to have chickens, but it's certainly not without expense, and, you know, the whole lead drama has really... You know, it was a lot of work. And I feel like anybody who goes through the undertaking of getting some kind of livestock is going to have some kind of drama. You know, health crisis, or if they get goats and then there's babies... It's not like they just take care of themselves.

Here, even Mary, a keeper who demonstrates a unique multispecies solidarity and willingness to take responsibility for remediating small bits of metabolic rift, displays a normalized level of ambivalence towards the lead situation she and her fellow keepers are grappling with. Over the past year, she has reconciled daily with the complicated history that brings her backyard animal-human encounters into existence, but like many participants, she can be understood as harboring some level of discomfort about the fact that this metabolic relationship was something she had not intended to grapple with as deeply as she now is.

Debra's response contrasts with both that of Linda and Mary in that she chose to change nothing about her practice of keeping chickens and eating their eggs after receiving positive chicken blood tests in the 2015 pilot study. Debra recalled “[i]t wasn’t clear from his study what that meant. You know, whether it went into the eggs or not. So I just left it at that.” Just a week before our June 2016 interview, Debra had researchers from the next phase of the study test her eggs, soil, water, and feed. She expected results back within a month, though she had not received them as of December 2016. When I asked Debra what she would do if these results come back positive in the eggs, she responded ambiguously but without alarm:

If there's lead in the eggs, I'm not gonna keep eating them and I'm not gonna keep giving them to other people, for sure. And, I don't know, [I'll] take it from there. I would imagine then the meat would also be contaminated, so it's probably not a good idea to eat the chickens either. So I'd probably just keep them, let them eat their own eggs or something.

From her participation in “Legalize Chickens in Boston,” Debra remembers the topic of lead in chickens coming up in discussion, though “never with resolution.” She told me that she believes the reason for this was the group's focus on the legaliztion and promotion of chicken keeping: “I think we were not particularly looking for the problems there might be, or looking to raise those. But I think that people were aware of them.” Here again, there exists a strange balance between acknowledgement of lead as a potentially serious issue for chicken keeping and an ambivalence towards seriously considering it in conversations about that very practice. Although she had not necessarily expected to find lead in her chickens, Debra holds the same matter-of-fact attitude as Linda and Mary regarding whether this is a topic chicken keepers in the area know about.

I think it should be, because I know there's lead in the soil. And, you know, there is in most urban settings. So unless you've replaced all your soil...it seems pretty certain that there's gonna be some lead out there...[These topics] have been in the back of my mind, so I'm just happy to have people that are looking into it. And it makes a lot of sense for urban chickens.

For Debra, this “common sense” attitude
towards the potential for lead contamination in urban chickens has implications for weighing the costs and benefits of urban chicken keeping on a larger scale. When telling me about her growing interest in local food production, she made clear that this was not directly because of getting chickens. In fact, she saw her experience with her chickens as a possible reason to critique the idealism of urban chicken keeping:

I mean, actually when I think about the chickens and the lead issue...If the lead is an issue [in my chickens’ eggs], then...these things are more complicated than you think. You think ‘oh sustainable, all this healthy’, then you realize it’s not that easy or simple.

In this part of our conversation, Debra’s husband joined our table and replied to his wife with his own sarcastic yet ironically deeply multispecies-oriented insight: “[y]eah, but you’re getting the lead out of the soil. It’s getting recycled.” We all laughed, but Debra’s husband made a point few directly invested in this scene seem willing to admit as the current status quo of these backyard ecologies: actual bodies of birds and humans are serving as vessels for the cycling of this lead out of the soil. Within the context of my human-centric interview with Debra on her experience of chicken keeping, her husband’s characterization of this situation as two species metabolizing toxic metals together out of the soil could only be tossed into the dialogue as a joke, but this joke stands as the most realistic multispecies and metabolically-aware characterization of the situation I heard during my research.

John also provides insight into the responses of researchers and city officials. At one recent Boston conference on urban agriculture and environmentalism, he recalled speakers avoiding or dismissing questions about lead, something he attributes again to a hesitancy he and others feel within the urban agriculture community about scaring people away from “something that is inherently good anyway.” I heard this sentiment from many other people including keepers and those who had raised questions with city officials. The responses they received signaled both an unwillingness to tackle the issue directly and a public consensus that further results are needed to assess the situation from a health and environmental perspective.

Finally, John’s experience as an urban agriculture store owner provides a unique lens into the responses of many actors in this scene. From the conversations he has had with keepers, he feels the issue of lead in chickens is a worry on “everybody’s” mind but manageable through techniques of stricter confinement and raised platforms, methods used by keepers he knows in several Boston neighborhoods. He demonstrated many of the same arguments I heard from my other research participants: keeping your chickens further from your house’s edge reduces risk of lead contamination from chipping lead paint; residential keepers are not eating enough eggs to impact their health if the eggs are indeed contaminated; and this is already a topic on keepers’ minds enough and too much discussion of it may discourage people from what is inherently a good practice. He noted, “[y]ou don’t want to scare people away, but if you’re thinking about chickens in your yard, you’re already thinking about lead anyway.” The actual experiences of keepers in this area however quickly prove these to be dangerous assumptions. Keepers I spoke to found spots of high and low lead levels spread randomly over their yards; most of these keepers are eating eggs at much higher rates than previous studies which focused on community-sharing set-ups to calculate the number of urban-raised eggs eaten daily by residents (Spliethoff et al. 2014); and many keepers expressed surprise at the possibility of lead contaminating their backyard chickens. The numbers of keepers unaware of potential lead contamination in their chickens and eggs are likely even higher among lower-income, non-English-speaking keepers who are not included in the current Tufts lead study, which has only been able to access the largely white, economically privileged “NUCK” population.

In focusing my discussion on the issue of lead within Somerville and Boston chicken keeping, I do not aim to paint the situation as a dire public health concern or call for immediate
policy intervention. There are no US health-based standards for lead levels in eggs, but studies such as Spliethoff et al.’s (2014) evaluation of lead in community-shared eggs in New York City caution that “any exposure to lead is considered to be potentially harmful to human health since no threshold for adverse effects has been identified” (3). Low levels of exposure combined with the bioaccumulation risk of lead in bones have been linked to nervous system and reproductive health impacts in particular (Spliethoff et al. 2014, 3). These effects are most urgent for children and pregnant women. Still, researchers in the current Tufts study state that for most healthy adults consuming these eggs, a health risk is unlikely even with lead contamination, and for most of these chickens ingesting lead, symptoms seem rare (see Figure 6).

Like many who are involved more directly in this scene, I also feel caution about pushing the lead situation towards an immediate solution that may forgo thinking about how to address the problem while preserving the benefits of urban agriculture felt by these communities. This being said, the ambivalence expressed by keepers combined with the fact that this potential matter of public health is not yet registering as a serious actionable concern among public officials is a collective response that is worth further inquiry. The stalled public response seems to be neither an entirely unwise course of action nor complete blindness to the breakdown of their city’s goodwill towards urban agriculture: those within this scene find themselves in some middle ground of wanting to keep space open for urban agriculture’s potential while also recognizing that this will provoke unanticipated questions.

As long as the imaginary of the postindustrial city is preserved, Boston and Somerville governments are free from their histories of urban industry and the resulting contamination, and responsibility for any complications encountered by urban neo-agrarians is diffuse and ambiguous. With the concept that we are past the industrial, residents and cities are conceptually off the hook for the industrial history that is still very much part of the place they call home. They are also conceptually and spatially distanced from present economic realities where industrial production has moved elsewhere while their own postindustrial labor enables the simultaneous pursuit of an idealized urban agriculture and an attempted remediation of its biological complications. Within this imaginary, urban agriculture exists as both an attempt to move outside capitalist discourse of food but also an example itself of “spaces of neoliberal governmentality,” which shift responsibility for change and costs of reproduction from the public to private sphere (McClintock 2014; 155).

Within a more nuanced view of these cities’ soils and bodies as still imbued with industrial legacies, however, the question of responsibility becomes more political. The yard is a marginal space that defies easy classification as a public

Figure 6: A chicken receives a “health-check” from a local business owner specializing in urban chicken keeping. During the check, the caretaker looks for signs of common chicken illnesses as well as symptoms that may suggest high levels of lead in the chicken’s blood due to its urban environment. Photo by author.
or private sphere, and urban livestock blur more categories and classifications than do tomatoes or kale. Likewise, the consumption of these eggs not only by private homes but also by friends and neighbors through sharing economies blurs the private nature of these residential practices. Could these cities be held responsible for remediating their residents’ soil? Does responsibility depend on the source of the lead—home paint contained in a private yard versus a neighborhood’s water supply, for example—or does responsibility in this scenario mean something larger, a response that city governments must take if they want to truly make urban agriculture a safe option for all inhabitants—white, black, and brown residents; chickens, sparrows, and hawks, low, middle, and high income? Taking a more nuanced view of urban ecology within this scene requires us to rethink what the complex practice of raising productive animals in the city entails for all bodies involved, what types of care are needed to cultivate new urban relationships with food and other species, and who is responsible for healing the humans, animals, and land caught up in these histories.

The lead situation is unique because more than any other break in the study participants’ idealized preconceptions of urban chicken keeping, it has forced urban chicken keepers and their proponents to look critically at what they are attempting to do. In the supposed transition of cities like Boston and Somerville from industrial centers to postindustrial urban ecologies, lead and other residues show how that transition is constructed rhetorically while remaining materially incomplete. These residues—evidences of Haraway’s “sticky knots” that attach beings’ worlds, and McClintock’s material legacies of costs of capitalism not yet fully or justly paid, materializing in the soil, eggs, blood, and bones of these urban agriculture projects—call for acknowledgement of the urban space’s history and new investments in the health of the bodies and land involved.

**Conclusion**

Increasingly, the question is not whether these keepers and the cities are going to respond to the rifts they are witnessing but rather, how will they respond? There is hesitancy in these stories as to what this reality might mean for urban agriculture’s imaginary, but there are also moments of potentially transformative ways of thinking. What would it really entail to recognize the interconnectivity of the city’s multispecies ecology? My research reveals a multilayered, complicated, yet unavoidable sense of responsibility to find ways to heal bits of the metabolic rift that has been present since the start of industry and that increasing numbers of city residents are beginning to acknowledge and discuss.

As is evident, the situation is currently swaying back and forth between ambivalent avoidance and opening some kind of responsibility for the histories of this particular place. These margins of becoming worldly and responding exist around these yards, so how do the actors here come to notice them and let them flourish? In other words, how does taking responsibility for our home space and our part in its history and future change when this realm now includes a landscape? The responses of this developing scene give some hope that when categorizations of place, home, and care themselves blur lines around domesticity, new spaces open up for becoming worldly with others. Nading states that “people negotiate and redefine health as they...develop and deploy knowledge about what kind of life...is worth monitoring, preserving, and reproducing” (2014, 11). Keepers and proponents are having to grapple with this question of their larger ecosystem’s metabolic health; for the healthy, green city, each cog in its metabolic wheel from the human to the microbes in the soil must be considered. Response cultivates further response, gathering up beings into “unpredictable kinds of ‘we’” (Haraway 2007; 5) in multispecies cohorts implicated together and therefore invested together in remediating bits of these histories.

What are the stakes of forging a new sort of multispecies solidarity in these responses, and where does this responsibility for making these responses lie? Is there space for transformative and just ecological thinking to matter here, even with frequently voiced concerns that these types of conversations may hurt the positive image of urban agriculture? My aim through
this analysis is to assert that the answer to this question can be nothing other than a resounding “yes” if urban agriculture hopes to have any of the lasting, significant, and just impacts its proponents aim for it to have in food system and larger urban change. The discovery of lead in Somerville and Boston's urban chicken coops has been able to break through the imagined linear progression of these historied spaces and provide a “potential point of engagement” (McClintock 2010, 13) for more nuanced conversation about urban agriculture’s position within not only imaginary but truly embodied multispecies relationships with food and urban life. Neo-agrarian urban chicken keepers have begun to and will increasingly be forced to grapple with conversations around embodied material legacies, responsibility for ecological remediation, and multispecies solidarities and sovereignties. In doing so, they may transform visions of what true urban neo-agrarism entails for the land and bodies implicated in this movement.
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References


The complex relationships that exist between “nature” and the built environment of cities are often both simplified and neglected in practice. Focusing on a coastal city in Chile, this paper illuminates various definitions and social constructions of nature and their inclusion or exclusion in practices of urban life, planning, and environmental management. Drawing on interviews and participant observation, this article analyzes how conceptualizations of nature affect urban environmental planning and management in the metropolitan area of Valparaíso. Analysis of these data shows that nature is primarily viewed as separate from cities, often leading to its exploitation or invisibility; when included in the urban form, systematic planning rarely prioritizes nature’s intricate interrelationship with the built environment. More specifically, the impact of such conceptualizations of nature and urban space can be seen in an ecological conflict in the region, in the town of Laguna Verde, and its connection to the coastline and nature of Valparaíso. This article suggests that we must define nature beyond the dichotomy of preservation or exploitation, in order to understand the various ways in which humans intersect with nature and to consider alternative paths for ensuring a sustainable relationship between the urban and natural components of our cities.

**Keywords:** nature, environmental planning, urban planning, Valparaíso, Chile
The professor stood at the front of the room and asked us what type of relationship a young boy living in the hills of Valparaíso might have with nature. How would he interact with la naturaleza on a daily basis? At first, the classroom was quiet and the students around me seemed unsure how to respond. Eventually, one student mentioned las quebradas, steep ravines between the residential plateaus in the hills of the city, as places where the boy might encounter nature. The professor quickly refuted this thought, remarking that las quebradas are generally used as informal urban garbage dumps and are not conducive to physical interactions with nature. Another mentioned the plazas scattered throughout the city, because of their inclusion of grass and trees. A third pointed to the beach and the city's connection with its ocean, although this water edge is only accessible at the far reaches of the city. Finally, students began to name green spaces. Yet, very tellingly, the names they could recall were all spaces outside of the boundaries of Valparaíso. Their final conclusion was that the boy from the hills, or los cerros, would have to escape the city in order to find la naturaleza. In doing so, they defined Valparaíso's environmental context by the nature that it lacks, instead of by the nature it contains.

This classroom discussion provided a context for the research that I had been trying to define during my first months abroad in Valparaíso, Chile. From my arrival, the city and its relationship to nature fascinated me. Valparaíso lacks open spaces and public access to its long coastline, but there is a magical charm in its winding streets, colorful houses, and hidden pockets of green. Drawn to urban environmental studies, I wanted to know why “nature” was so invisible within the city and what “nature” meant in the daily lives of residents and for the future of Valparaíso.

Exploring the themes that captivated me from my arrival, this article examines the ideas and practices of “nature” in the metropolitan area of Valparaíso, asking how citizens, academics, and municipal employees conceptualize it, and in what ways “nature” is then interwoven into processes of urban planning and growth. More generally, I ask, how is “nature” defined in contemporary urban society in Chile, and how is it currently debated, given its historical and social context? Additionally, how do these divergent definitions interact in the current regional discourse and practice of urban planning and environmental management? These questions, while locally significant, are also important on the global scale of urban development. Political actors and residents in cities have a responsibility to consider the consequences of rapid urban growth, which typically prioritizes economic benefits over environmental, social, and aesthetic ones.

Using the above questions as a guide, this article will show how urban planning and the management of nature are related to multiple understandings of nature as a theoretical concept. Currently, the metropolitan area of Valparaíso offers a limited inclusion of nature in the urban sphere, in a culture that does not consider cities as ecosystems with important connections between the human and non-human components. In the specific case of Valparaíso, and its relationship to the nearby area of Laguna Verde, I argue that this initial evaluation begs for a redefinition of commonly-held ideas of what nature means and how we connect it to our urban spaces, in order to envision a more inclusive system of urban environmental planning and management. In planning for more sustainable cities, we must understand and evaluate people’s conceptions of nature, recognizing how they will affect the future paths of global cities.

**Investigating Social Conceptualizations of Nature: Theory and Methods**

My research connects to a wealth of academic resources on human conceptions of nature, environment, and sustainability, and how these
concepts influence the growth of our cities and the practice of urban planning. Fundamentally, this article builds on and responds to the work of William Cronon, which deconstructs North American and European conceptions of wilderness as places that are virgin and separate from humans. Cronon has argued for a new conception of wilderness that includes humans and their built environment, suggesting that we would then adjust our interactions with the environment to be more responsible (Cronon 1995). In a similar theoretical vein of nature analysis, I rely on the work of Emma Marris, who writes that we have lost nature in two senses: we have destroyed it, often through urban construction, and we have “misplaced it. We have hidden nature from ourselves” (Marris 2011, 1). She also argues for a new conservation paradigm that would focus on more than the preservation of “pristine wilderness,” so that people begin to value and see nature in other places. Building on these two works, I ask if this same crisis of identification of nature is happening in Chile, and whether understandings of la naturaleza need the same type of redefinition that Cronon and Marris imply.

Another important component of my research framework comes from authors who have written about how these new conceptions of nature can influence our ideas of urban planning, especially on themes of the environment and sustainability. They focus on the ways in which nature can be incorporated into the design, planning, and management of urban places, understanding the city as an ecosystem (see Beatley 2000; Hough 2004; Laurie 1979; Spirn 1984). Hence, they argue that our conception of nature and humans as separate elements limits our cities, as we ignore the important relationships that are at work between the human and non-human organic components of our urban landscapes.

My research pins these theories geographically to an urban region that could make an important contribution to scholarship on cities and their nature. Chile is a rapidly developing and urbanizing country with a complicated history of both protecting and abusing its natural resources. The metropolitan area of Valparaíso is a principal urban conglomerations within Chile, due to its nearly one million inhabitants, its diversity of economic activity including a burgeoning tourism industry, and its cultural heritage. This case study takes into consideration the region’s particular mix of governmental bureaucracy, geographical challenges, historical antecedents, and cultural conceptions of nature and urban life to make its argument, but its conclusions are applicable elsewhere. This research suggests a way in which other researchers can combine place-specific theories of nature with the technical process of planning and sustainable development, arguing that how we think about nature matters.

In order to include information specific to Chile and the region of Valparaíso, and expand on the sources that are mentioned above, I draw on a range of personal experiences. My primary data come from living in the area for six months in 2015, conducting interviews with local government employees, academics, and citizens, as well as recording informal observations of the city and its surroundings, while studying at the Pontifical Catholic University of Valparaíso. This article draws on a set of thirteen interviews from a range of participants: three government officials, two from the municipality of Valparaíso and one from the regional government; five citizens or activists engaged in issues of urban planning and development or environmental conflicts; two university students; and three professionals and academics based in the capital city of Santiago. Twelve of these interviews were conducted in person between May and July 2015, while the last one was conducted over Skype in September 2015 after I returned to the United States. All interviews were conducted in Spanish, although one included English, too. The interviews focused on urban planning and environmental management, and sought to uncover participants’ professional and personal connections with their surrounding urban and natural environments. They represent a wide breadth of viewpoints, but there are also missing voices. For example, the government officials that I interviewed are all employees, and not elected officials. Although this article will refer to their ideas in relation to the municipality of Valparaíso, they do not
represent the views of all municipal employees. Just as citizens differ in their conceptualizations of “nature” and their beliefs about the city of Valparaíso, so do government officials. Beyond interviews, I collected anecdotes and observations from various conversations and related classroom discussions from my months abroad that inform my thought process and ideas. These interviews and informal ethnographic material are important in my research because they expose the details of situations that are often not visible on the surface. Comparisons between interviews can uncover the miscommunications that run so deeply in this region’s processes of urban planning and relationship with nature.  

This article begins with a short section explaining how I define and situate “nature” within my research, with particular reference to language and the differences between English and Spanish. The following section looks at geography, history, and conceptualizations of nature in Chile and in Valparaíso. After establishing this framework, the article focuses on a case study of the port of Valparaíso and its connection to the town of Laguna Verde, where a quarry will be built to allow for expansionary projects in the port. This final section examines the complex relationship that the city of Valparaíso has with its natural surroundings, particularly in light of the perception that the city lacks a significant connection to nature and the environment.

Placing Nature in Valparaíso

The ways humans have defined and continue to define the word “nature” are so varied that it can seem impossible to write about this word without explaining its particular meaning each time I use it. “Nature” is a complex term because it can represent an abstract idea, as, for example, when we talk about escaping the city to return to nature. It can also be something tangible when we attempt to define the physicality of nature and its existence, such as determining that a tree in the woods is nature, but maybe a stray dog in the city is not. My intention in this article is to use “nature” in an open and inclusive way, instead of limiting. In this definition of nature, I borrow from Anne Spirn:

It is the consequence of a complex interaction between the multiple purposes and activities of human beings and other living creatures and of the natural processes that govern the transfer of energy, the movement of air, the erosion of the earth, and the hydrologic cycle. The city is part of nature. (Spirn 1984, 4)

Ideally, I propose, every time that I use the word “nature” in this article, I would base it on a definition such as Spirn’s. In practice, the word will not always be used in this way because I discuss a range of conceptualizations based on diverse social meanings and personal experiences. In referring to other people, or a history of conceptualizations, the definition of “nature” will shift depending on the situation, and I will then clarify its meaning. When I use the word “nature” apart from other’s experiences, I will be referring to this restructured conceptualization of nature, as something beyond the idea of wilderness and the world outside of our cities, and which now embraces the many ways in which humans and their built environments are inextricably tied to the natural world.

Beyond this theoretical delineation of nature, this article grapples with the complexity of the specific words and language that we use to convey the concept. In this study in particular, this is more complicated and significant because all fieldwork and interviews were done in Spanish, but written about in English, with translations throughout. Since this research is based, in part, on how people’s language choices betray their conceptualizations of the idea of nature, it is important to discuss how participants label the concept.

In a direct translation, the word nature would most easily correspond to the Spanish word naturaleza, as they both come from the same Latin root, natura, which means “course of things; natural character, constitution, quality; the universe” or literally, “birth.” Naturaleza is the word that I used most commonly when describing my project to potential participants and in conducting interviews, because I see it as better enveloping
the theoretical conceptualization that I seek to explore. In Chile, the word *naturaleza* evokes ideas of wilderness and conservation and is often used in advertising the beauty of Chile, both to promote it to tourists and to generate national pride.

Moving away from the linguistic connection that “nature” shares with *naturaleza* or *natural*, the concept of “nature” overlaps with many other words, as the meaning fragments in various directions. In trying to define the physicality of nature, *medio ambiente* captures the connotations of “environment,” referring to the effects that humans have on nature. It is generally used in a more formal register in official written documents and professional conversations. *Espacio verde* or *área verde* refers to green space, which is particularly salient in the urban context of nature, while *sustentabilidad* borrows the form and meaning of sustainable from English to discuss caring for the environment into the future. As I use these words throughout, I will clarify what a participant’s or document’s word choice means, but these generalizations provide important context for understanding how we use language to identify and place nature. As we will see, complexities of language and conceptualization often create tension when colliding interest groups want to define and use nature in conflicting ways.

As reflected in the terms above, concepts of nature in Chile are primarily shaped by scale and geography. Today’s Republic of Chile formed through the combined influences of its dramatic geography and its human, social, economic, and cultural history. Major historical features include relations with Indigenous people, colonization by the Spanish Empire, independence in 1818, and later political transitions, including the turn towards socialism of the 1960s-70s, a period of military dictatorship (1973-1990), and a return to democracy. A full exploration of how distinctions of culture, history, and geography shape the meanings and use of nature is beyond the scope of this article. Most important here is recognizing that meanings of nature in Chile are formed by the particular geographies and ecosystems of the place, and defined more specifically by who controls and interacts with them over time.

Geographically, Chile is an extremely long and narrow country, stretching around 2,600 miles north to south (about 4,185 km), with an average width of about 90 miles (about 145 km). Ezequiel Martínez Estrada, an Argentine writer, called it “the worst-located and worst-shaped nation on the planet” (Collier 2004, xix). Situated west of Argentina, south of Peru, and southwest of Bolivia, Chile spans climates ranging from arid desert in the north, through rich agricultural land and lush forests in the middle, to alpine environments, including the Andes Mountains along its eastern border and southern tip. The Pacific Ocean lies to its west.

Chile’s range of geographies and array of natural resources have inspired complex relationships between the human and non-human components of its environment. Central to this is a conflict, particularly in the last century, between patterns of environmentally destructive mass production and a growing trend to protect and preserve the “pristine” landscapes of the country. Since colonization, both conquistadors and boosters have focused on the natural beauty of the country, and the range of economic products it could produce to attract European colonial investment and immigrants (Hutchinson 2014, 9). This focus continues today, with a national pride that boasts the success of Chile’s free-market economy, which has long been based on industries of timber, fishing, agriculture, and mining. However, this economic connection to the land should not be romanticized: a historically narrow focus on mass production has led to rampant exploitation with deforestation and intensive cultivation of exotic species, chemical-heavy industrial agriculture, the destruction of fish populations and traditional, small-scale fishing communities, and a wide range of labor conflicts (Hutchinson 2014, 14). At the same time, Chileans now aim to promote their national environmental treasures, especially as a way of attracting foreign tourists. Accordingly, the country has to reconcile habits of production and consumption with the image of pristine natural beauty that the government and many citizens seek to promote.

The region of Valparaíso has likewise been defined by its geography and utilization of natural resources. Rising dramatically above the
ocean, midway down the coast of Chile, the city of Valparaíso nestles in an amphitheater of hills that curve around a limited section of flat land in the center. According to Sánchez, Bosque, and Jiménez (2009), the city consists of three spatial components that affect its development: la bahía, el plan, and los cerros (p. 273, and see figure 1). La bahía is the bay, which now features a major shipping port; el plan is the flat part of the city, closest to the ocean, before the city rises into the hills; and los cerros are the hills, which refers to both the geographical features and the neighborhoods that are demarcated by the topography of hills and valleys, resulting in at least 45 separately recognized cerros. These physical divisions recur in discussions about nature within the city, as they come to determine where nature is seen to exist within Valparaíso and how los porteños (residents of Valparaiso – literally, those of the port) interact with it. As the following section will explain, it is a Chilean's relationship to their urban environment that determines how they engage with and define nature.

Conflicting Conceptions of Nature in Valparaíso

In a conversation with Pablo, a university professor in Santiago, the capital city of Chile, we talked about the relationship that Chileans feel between their urban homes and “nature.” He explained that, “People don’t understand that their natural environment is part of [Santiago]. Or rather, that their closest system, the urban sector, which is really an urban ecosystem, fits within a much larger ecosystem.” In this reflection, Pablo recognizes the disconnect that Chileans identify between la ciudad and el campo, or “the city” and “the country.” This division results in nature being identified in its associations with beauty and spectacle, which is physically expressed in the

Figure 1: This image shows the sharp contrast between la bahía, el plan, and los cerros. Photograph by author, August 2015.
nature “out there” of protected preserves of wild and pristine nature. It is also identified in this way as a resource for economic growth, expressed physically in the nature “out there” of exploited and damaged landscapes, which are no longer seen as pristine. Here, we also see a key difference between nature portrayed as empty of human beings, although it has often been preserved to allow for public usage, and nature as natural resources, which are owned and exploited, directly involving humans. “Nature” is also identified as a powerful agent in the disaster it can cause, physically expressed in the “out there” nature that threatens fragile human environments in the form of fires and floods, earthquakes and tsunamis.

Narrowing the focus to Valparaíso and its surrounding region, particular patterns emerge of nature’s connection to defined physical spaces. These often come from formalized government recognition, but also appear in how everyday people talk and act. In some cases, nature is given a clear physical representation within the urban landscape. It is seen in the preserved green spaces of parks and plazas, especially in el plan, which are often conceptualized as separate from the city even when they exist within it, or in protected reserves and open space directly outside urban boundaries. In an interview with Nicolás, however, it became clear that not all parks and plazas in the city are considered equal in terms of the “nature” that they offer. In an ideal world, for Nicolás, plazas and parks would be a “place of rest,” or an escape from the “accelerated life of cities.” He clarified this by saying that plazas in the center of Valparaíso do not cultivate the same kind of entorno as this ideal, as they are filled with too many people, stray dogs, and activity to provide any relaxation. In this way, Nicolás reflected on the idea that nature can improve the quality of life in cities by providing an “escape,” just as it does in the large parks and preserves that are found outside of cities. However, Valparaíso’s public spaces may not be fully fulfilling this purpose.

In addition to green spaces within the city, nature is also seen in la bahía, in its physical aspects, such as public beaches and fishing docks, and in the form of a visual connection to the ocean. As has been mentioned, porteños’ ability to access their ocean is limited, due to most of Valparaíso’s coastline being privatized for port infrastructure and potential future growth. Due to this, protecting views and scenic overlooks, or vistas and miradas, is important because the visual connection between elevated areas in the city and the ocean is one of the only ways in which residents maintain an attachment to their coastline. Residents, especially long-term ones, who have treasured having a view of the ocean, react strongly when the city grows in such a way that it cuts off their last connection to the water. Víctor, a porteño architect and community activist involved in movements against port modernization projects, explained in an interview how it is Valparaíso’s amphitheater-like shape that makes its urban growth decisions so important. He said, “[Valparaíso] is a city in which everything affects you. There are few cities in the world that look inwards at themselves.”

This focus on the view in Valparaíso and the importance of having a visual connection with the ocean is a key way in which nature remains outside of the city and disconnected in a tangible sense.

Apart from these more recognizable representations of nature within the urban landscape, nature is also present in places that are less well defined or regulated, and therefore easier to overlook, or even invisible. In Valparaíso, nature is often physically embodied in small spaces, outside of official government recognition. This manifests itself in underutilized urban spaces that become informally occupied, but are not valued enough by the government to be designated as green or open spaces, often because they do not resemble more traditional forms of nature. An example of this would be las quebradas, which have great potential to be cared for and utilized as green spaces in the city, but instead serve as urban garbage dumps because of the lack of regulation of them by the municipality (see figure 2). The same can be said of other instances of private nature, such as domestic gardens and windowsill plantings, as well as trees along roadways and urban fauna, such as bird populations or even the stray dogs that overwhelm the city. These types of nature do not fit into the planning for city parks and plazas, meaning they are ignored in official discourse and practice. They are only
Figure 2: A quebrada in Valparaíso that has been transformed into an accessible green space for the neighborhood. Photograph by author, August 2015.
emphasized if citizens choose to care for them. In this way, physical manifestations of nature outside of official discourse become invisible, contributing to the feeling that Valparaíso lacks “nature.”

These general patterns of conceptualizing nature in urban space, as well as the earlier discussion of the specificities of language, become crystallized in the case study below, which incorporates these broader explorations of the relationship between Valparaíso’s urban and “natural” components into specific decisions and actions. From the port of Valparaíso and contestations of how the space should be used, to the town of Laguna Verde to its south and the environmental conflict being staged there, this case study uses participants’ voices to look more closely at nature’s identity in the region.

Managing “Nature”: A Case Study in the Port of Valparaíso and Laguna Verde

The Metropolitan Region of Valparaíso faces the same sort of dilemma as Chile as a whole: how can nature be conceptualized in a way that allows for its industrial exploitation, while still maintaining an image of protection and preservation? This question is inherent in discussions of environmental management in Chile because established global and local economic and industrial forces have a great deal of power and, as happens around the world, their interests are often prioritized over those of the locale’s nature. A clear example of this tension has emerged in the Region of Valparaíso, where the power of industry, as reflected in the port of Valparaíso and its governmental support, conflicts with the needs of porteños and residents of the town of Laguna Verde, to the south. This case study focuses on the ongoing discussion about the management of the city’s port and coastline, looking at how this urban conflict intersects with environmental questions in Laguna Verde. It explores questions of public space and accessibility, while further revealing the relationship that the city has with nature, both inside and outside of its urban boundaries.

This story begins in Valparaíso, a city defined by its history as a port. Since the 1800s, the growth of infrastructure has been concentrated along its coastline. In 1912, construction began in earnest after the national government earmarked funds for port development. Yet, the rise of Valparaíso proved short-lived. Usage of the port quickly fell after the opening of the Panama Canal in 1914; there has been no new major construction in the port since 1930, apart from limited projects of maintenance and modernization. Recently, however, the Spanish conglomerate, OHL Concesiones S.A. was granted a license to develop a new project, Terminal II, in the port. The aim in constructing Terminal II is to expand the port’s capacity by providing a dock that can accommodate two Post Panamax ships, adding to Terminal I’s capacity to dock one Post Panamax ship. This expansion is mandated by the State, which has a national plan for all ports to intensify their activity. Some see it as a positive change because of its potential contributions to both the economic activity and historical identity of Valparaíso.

Anna, an employee of TCVAL, the concessionary responsible for assisting in the management of Terminal II, discussed in our interview nature’s relationship to the port expansionary project in terms of federally mandated environmental impact statements. She emphasized several times that the project has gone through multiple sequences of environmental studies and that it complies with all national regulations. She was careful throughout the interview to defend the project, worried that I was looking for ways in which the project is exploiting loopholes that allow it to avoid questions of environmental preservation.

In the context of the port, nature is contextualized within the word medio ambiente, the term most often used to talk about environmental issues in politics. In this way, “nature” becomes a checklist in environmental protection evaluations that allow project managers, such as those at TCVAL, to follow certain regulations and work to ensure environmental protection. This type of scenario loses much of the broader context by which other words, such as naturaleza, might consider the coastline as a public space and a community resource. By only considering
“nature” once the project is underway, TCVAL defines the concept in a very limited way. Unable to look beyond environmental regulation compliance, nature becomes encapsulated in considerations of water pollution or species diversity; the potential to integrate it into the urban fabric of Valparaíso by developing a more open and accessible coastline with green space is lost.

The question that many residents ask, particularly the activists involved in the movement against the expansion, is whether, beyond following environmental requirements, citizens’ interests would have been better served by bringing in other uses. In thinking about alternatives to expanding the port infrastructure, or expanding it in a different way, could the coastline be used to connect porteños physically with their ocean and open up green and public spaces? If nature were imagined beyond technical and defensive considerations of environmental protection, would decisions be made differently?

As noted, these questions of public space along the coastline become particularly important because of the city’s general density and lack of open or green spaces. As Víctor, the porteño architect and activist who earlier expressed concern for the loss of vistas in Valparaíso, said, “The issue is that they want to occupy the best of the city, which is the coastline.” This reflects Víctor’s belief that government officials who continue to support the projects of port expansion undervalue Valparaíso’s possible, and historically valued, connection to its ocean. Without official acknowledgement of the opportunity for and importance of alternative types of coastline development, it seems unlikely that the port industry will be displaced.

However, Alejandro, a professional working on urban development issues in Valparaíso, mentioned a particular strategy that activists are using to generate more pressure against OHL Concessions in the hopes that they will leave. Besides focusing on the negative effects that Terminal II will have on Valparaíso, they are also turning towards Laguna Verde, which is the staging ground for a related conflict. In his words, “They’re making war in Laguna Verde and here in Valparaíso with the idea that at some moment the concessionary will say, ‘Sorry. It’s not worth it. I’m leaving and I will pay you the seven million dollars.” Here, Alejandro refers to the fine that OHL Concessions would have to pay if it backed out. He believes that if that were to happen, then activists would see it as an opportunity to change the plans of the municipality and instate a plan that could open up areas of the port to public use.

By expanding to include the related, destructive industrial activities in both Valparaíso and Laguna Verde in their movement, activists are arguing that the port modernization project is being realized in ways that are damaging to both communities and their local environments. In moving from looking specifically at the port to the nearby space of Laguna Verde, the debates about Valparaíso’s coastline have intensified.

The town of Laguna Verde lies on a small bay to the south, in the commune of Valparaíso. It relies on fishing and agricultural production, along with some tourism, to survive. I had heard it mentioned various times as an important reserve of green space outside Valparaíso, one of the only green spaces that the city could really claim as its own. In an interview with María, a municipal worker for the city of Valparaíso, for example, she responded to a question about green spaces by saying, “We have one area of wilderness protection, which is Laguna Verde. As a city we have very few green spaces. We are one of the municipalities [in Chile] with the fewest number of green spaces...Our idea is to take advantage of it because Laguna Verde has a lot of potential.”

From this conversation and countless others, it was easy to imagine Laguna Verde as a source of wild nature available outside of the city, legally protected by the city of Valparaíso for its environmental value, until I interviewed Marcos, a Laguna Verde resident and environmental activist. In that interview, I realized that Laguna Verde – both the actual town and its surrounding natural area – is where TCVAL plans to build a quarry in order to extract material to fill in the expanding port of Valparaíso, if they receive the necessary government and legal approvals. In the interview, it became clear that the quarry, as an...
exploitable “natural resource,” threatens the public vision of a more pristine and aesthetic nature in Laguna Verde. Additionally, it threatens the community life and cultural value of the town itself. The natural area has been protected by the municipal planning department of Valparaíso in the past, and is still understood to be environmentally valuable. Nonetheless, it will now be exploited in order to benefit the port at the expense of threatening the environmental health of the space.

The image of Laguna Verde as a wild oasis outside of Valparaíso was quickly shattered on my first visit, when I met Marcos for an interview. We began talking behind a café in the small town before driving up steep hillside roads to overlook the valley that the quarry threatens (see figure 3). He began our conversation by presenting the history of neglect suffered by residents of Laguna Verde, caused particularly by the actions – or failure to act – of elected government officials in Valparaíso. He described the community’s lack of access to public transportation, healthcare, clean water, and electricity as “a violation of human rights.” Although the space may have been historically protected for its natural value, this has not included a history of respecting the needs and wants of those who live there.

Laguna Verde, in fact, had the distinction of being designated a Biosphere Reserve by UNESCO in 2005, which recognizes its high levels of biodiversity, including an important biological corridor. Marcos contextualized the ecological importance of Laguna Verde for the metropolitan area by saying, “this is the lung of Valparaíso because, if one looks, Valparaíso doesn’t have a single green space,” emphasizing the importance of Laguna Verde to porteños. However, many in Laguna Verde also rely on the natural area for their livelihood, participating in agriculture, fishing, and apiculture, besides potentially appreciating the

Figure 3: A view of the valley outside of Laguna Verde, which is threatened by the quarry. A small river can be noted in the foreground as well as agricultural activity on the valley floor. Photograph by author, May 2015
landscape for its aesthetic or recreational value.

The planned quarry stands in opposition to this shared understanding that Laguna Verde and its natural resources deserve protection, as it will pollute water resources in the valley, affecting flora, fauna, and the human community, effectively turning the community into a *pueblo fantasma*, or a ghost town, according to Marcos. He recognized the miscommunication present in Laguna Verde, saying,

> We want to safeguard the cliffs, which are part of a [natural] reserve that would be affected by the exploitation of the quarry. They are protected places by the Chilean government and we believe that, today, they aren't respecting them by supporting a project like this.¹³

Marcos’s comment calls into question the validity of preservation designations used by municipalities to protect green, open spaces outside of their urban areas. In this example, Laguna Verde is legally recognized as an environmentally important space, particularly because of the green escape that it offers *porteños*. Nonetheless, if local and regional government officials opt to support the construction of the quarry, they are choosing the economic benefits gained from exploiting the area’s natural resources over its long-term environmental preservation.

Marcos also recognized the false hopes present in the promises made by the incoming company, particularly in their promises of mitigation. He laughed during our conversation, saying that their first mitigation would be to put one stoplight in the town in order to help regulate the increased truck traffic flow, and the other would be to “give presentations about the nature that exists here...to those of us that already know the flora and fauna, and which they are going to destroy. So, according to us, it is a really bad joke.”¹⁴ Marcos emphasized the fact that the company in charge of realizing the quarry project has no connection to Laguna Verde and no relationship to the area, nor does it really care about the fate of the humans or biosphere. He expressed his disgust by stating, “There is not any place in the world where a transnational company arrives, exploits riches, and leaves profits.”¹⁵ Marcos has long felt disenchanted by the promises made by the Valparaíso government, and now by the incoming extraction company, because he can see that any commitment to protecting Laguna Verde is false. He cannot envision a situation in which the quarry is built and Laguna Verde survives as a vibrant community and a protected natural space. This is understandable given the degree to which plans for the quarry largely brush over the concerns of residents of Laguna Verde and environmental activists in the region. The project will be pushed through regardless, because those who have economic and political power deem its benefits more important than its consequences.

Laguna Verde’s environmental conflict underscores how complicated conceptualizations of nature determine the ways in which it is incorporated into urban planning and managed. Many of my participants, residents and government employees alike, clearly stated that they see the outlying community of Laguna Verde and its natural surroundings as an irreplaceable green space outside of the city. Since urban planning in Valparaíso has not emphasized the consideration and inclusion of nature, the city relies on places like Laguna Verde to be their reserves of “nature” outside of the city. In this way, municipal officials can still tout the “green” that surrounds the city, although there are hardly any green spaces in the city proper, nor other ways in which nature is recognized. However, despite its purported importance to the municipality, Laguna Verde is being converted to an extraction site that will contribute to port development in Valparaíso. This position views Laguna Verde and its nature only in terms of natural resources to be exploited and economic benefits to be gained for the city of Valparaíso.

Marcos sees this as another example of Valparaíso planners and elected officials putting the central city’s urban needs and wishes above the needs of rural, outlying Laguna Verde. He sees that they are prioritizing port development in Valparaíso, regardless of the potential environmental and human costs. Explaining the
role of politics in the conflict, he said,

...the municipality, as I told you, has consciously abandoned us and, even more, done so in clear and open support of property developers and transnational companies entering here. So, our fight is not only against the companies, but also against the politicians of this country.

This abandonment is even more complex because the city government, and many of those who call Valparaíso home, continue to identify Laguna Verde as crucial to their relationship with nature. If Laguna Verde becomes contaminated or the town becomes a “ghost town,” it will sever a strong connection that porteños feel they have to their surrounding natural environment. Both those in Laguna Verde and those in Valparaíso will feel the damage to and loss of an important nature in the region if the quarry is built and Laguna Verde becomes unrecognizable.

However, this conflict is greater than just Laguna Verde because of the consequences that the construction of the quarry has for Valparaíso. In the event that the quarry is constructed and Terminal II is built, powerful industry and supportive government officials in Valparaíso will have made two very poor decisions. First, the city will have ignored citizens’ appreciation of Laguna Verde’s ecological resources and its status as an accessible green space outside of their urban sphere, in favor of industrial exploitation of its “natural” resources. The city would be turning its back on the movement made to preserve Laguna Verde as a Biosphere Reserve in the past, since this massive operation will fundamentally transform ecological relationships and diversity in the area. Second, the negative consequences of constructing a quarry in Laguna Verde are only exacerbated when one realizes the purpose of extracting the rock material. These resources from Laguna Verde will be fueling a port modernization project in Valparaíso, which will effectively permanently close most of the port of Valparaíso to residents. If Terminal II is built in Valparaíso, it minimizes the available land and water that can even be considered for projects promoting urban open space. Moreover, an infrastructure project as invasive as Terminal II is irreversible. As Víctor said earlier, the coastline is Valparaíso’s best feature, but expansion projects guarantee that it will remain in the hands of industry, for the economic benefit of the city, instead of in the hands of the people, where it could be redesigned to provide environmental, civic, and aesthetic benefits for the city.

Reimagining Nature in Valparaíso, Chile

Following the lead of William Cronon (1995) and Emma Marris (2011), this article sheds light on varying conceptualizations of nature in Chile, looking at how Chileans identify nature, where they see it located within their country and their cities, and how they might include, exclude, or even destroy its existence. Cronon and Marris, among others, write about a new environmental paradigm that recognizes humans within nature and encourages the acceptance of nature as existing in our cities, not just behind the boundaries that we build around it in our national preserves and parks. In this article, I have pursued these insights in a new context – Valparaíso, Chile – through both a general examination of diverging ideas of nature and a case study.

From the outset, it was clear in my interviews and observations that conceptualizations of nature in Chile still focus strongly on its existence outside of cities. For many, if nature is within cities, it is only visible and protected in areas carefully set aside for it, such as preserves and parks or manicured plazas. There is a limited conceptualization of cities as existing within natural systems that connect humans and nature in far more diverse ways than just visiting a “natural” area such as a city park or beach. This research pulls apart the various social meanings that nature has been assigned, looking carefully at how it is conceptualized in the abstract and also expressed and identified physically, in relation to particular places. The case study of Laguna Verde illuminates this further, by providing a conflict that foregrounds diverging conceptualizations and valuations of nature.
As I noted in the classroom scene in the introduction, my classmates struggled to identify ways in which a young boy living in the cerros of Valparaíso might connect with nature in his urban surroundings. In the end, they settled on the preserves and parks outside of Valparaíso’s boundaries, which become the only “urban” nature that porteños really see since nature has become so hidden in or excluded from the city. This narrative of the preservation of natural spaces outside the city is complicated by the example of Laguna Verde, wherein industrial leaders and the economic development of Valparaíso have taken precedence over any natural or cultural value that was once recognized in Laguna Verde. Municipal employees, activists, and porteños commonly refer to Laguna Verde as the primary green space of Valparaíso. Yet this is ignored in the current plan, which will exploit it in order to develop the coastline. This plan will render both Laguna Verde and the coastline inaccessible as public, open spaces, demonstrating that nature is not a primary concern in these developments. Within this conflict, nature is reduced to environmental health and environmental impact statements once development has begun. Without the work of activists, nature’s permanence and precedence outside of that definition would never be considered as valuable.

In the case study, nature is sacrificed in both Laguna Verde and Valparaíso because of the limits within which it is commonly defined. For the industrial powers that look to nature as something to be used and exploited, nature ceases to exist beyond the economic value that it is assigned. In the eyes of the municipality, nature is easy to protect and value until other needs take precedence, such as in Laguna Verde where nature was allowed to be green and open until a better economic option was offered. By supporting the quarry and the development of Terminal II, porteño officials have decided not to see or value the ways in which port infrastructure could exist alongside alternative port uses that would give porteños a physical connection with their ocean again. Conceptualizations among residents of Laguna Verde and Valparaíso are understandably varied, as everyone experiences nature differently, but the plan of the quarry and Terminal II ignores many of their concerns. The need for more green and open spaces in Valparaíso, like porteños’ desire to experience their ocean not just as a distant view, is ignored, and at the expense of all elements of life, human and non-human, in Laguna Verde.

The issue here is that, for far too long, nature has been thought of in Chile, as in other areas, in terms of two extremes: preservation or exploitation. On the end of preservation, humans are excluded, as they do not fit as part of “nature,” while on the end of exploitation, humans become the central actor and redefine the value of “nature” for their own economic purposes. In thinking about cultural shifts that alter this spectrum, Emily Wakild captures an alternative in her research on Mexico’s national park system. She writes:

“Few, if any, hoped to leave nature untouched, but thousands thought about the generations that would follow them and hoped to conserve the benefits of thick forests and healthy waters for recreation, agriculture, and daily life. This meant the nature these parks created was explicitly for people, not for nature alone.” (2011, 14)

As Wakild reveals, Mexico’s national park system does not define nature as pristine, but instead considers the ways in which human activity can be included in practices of preservation. This breaks from European and North American ideals of wilderness that say nature only exists when humans are excluded, and accepts that nature can be defined in ways that prioritize the inclusion of humans. Particularly in cities, it is essential to recognize that “nature” is not for nature alone, but that it can be made for people, since the two are inextricable in an urban environment. In looking at nature in Chile, it is necessary to ask if this same crisis of identification is happening, and whether la naturaleza needs the same type of redefinition that Cronon and Marris offer in their work.

Moving forward, this research could be replicated in other cities and regions around
the world. Analyzing historical and cultural conceptualizations of nature in this way can help efficiently and successfully plan for local management of the natural environment in its complex interactions with the urban environment. Environmentally conscious urban planning is becoming more important as our world faces the consequences of climate change. For too long, nature has been seen as an entity separate from humans and the cities that we have built. It is time for cities and their citizens to reconnect with the diverse forms of nature, both obvious and hidden, that exist within their boundaries, opening themselves up to more productive and mutually beneficial relationships that recognize nature as an integral part of themselves.
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Endnotes

1 There is a point to be made here that interviews often betray specific intentions or a bias in the interviewer. As I was new to the process of interviewing, reflecting back on it now, I wonder what aspects of nature my participants left out because I had not explicitly raised them, and they therefore felt them irrelevant to our conversation. It now seems clear that some components of nature in the city were glossed over. For example, water is a central aspect of urban environmental planning, particularly in drought-plagued areas of Chile, but it was hardly mentioned. It is important to keep in mind what might be left out of the discourse analyzed here and why those particular themes might be more hidden.

2 “La gente no entiende que su medioambiente es parte de aquí. O sea, que tu sistema más cercano, el sector urbano, que es un ecosistema urbano, está dentro de un ecosistema mucho más grande.”

3 As many critics have noted (such as David 1999, and Pyne 2001), this categorization also has an anthropocentric cast in that “natural” processes, which have occurred for millennia, only become “disasters” when their paths affect where human beings have claimed land or
References


4“punto de descanso”…“vida tan acelerada en ciudades”

5“Environment”, in the sense of atmosphere

6“...es una ciudad en que todo te afecta. Son pocas ciudades en el mundo que se miran a sí mismas.”

7“Post Panamax” refers to a new ship design that is being used in ocean traveling, called Post Panamax because it cannot fit through the Panama Canal.

8“El tema es que quieren ocupar lo mejor de la ciudad que es el terreno de la costanera.”

9“Están haciendo la guerra aquí en Laguna Verde y la guerra aquí en Valparaíso por la idea de que en algún momento el concesionario va a decir, ‘Lo siento. No vale la pena. Me voy y te pago el siete millón de dólares.”

10“Tenemos un área silvestre protegida que es la parte de Laguna Verde. En términos de ciudad, tenemos muy pocas áreas verdes. Somos una de las comunas con menos áreas verdes... Nuestra idea es ir potenciando eso porque Laguna Verde tiene mucho potencial”

11“una violación a los derechos humanos”

12*este es el pulmón que tenemos en Valparaíso porque, si uno mira, Valparaíso no tiene ningún área...* built settlements.
“Nosotros queremos salvar los acantilados que se verían afectados por la explotación de la cantera, que son reserva. Son lugares protegidos por el Estado chileno y que creemos que, hoy día, no se está respetando al avalar un proyecto como este.”

“Entregar charlas de la naturaleza que existe aquí... a nosotros que conocemos la flora y fauna y de lo que ellos van a destruir. Entonces, eso es, según nosotros, un chiste de muy mal gusto.”

“No hay ninguna parte en el mundo donde una transnacional llegue, explote riquezas básicas, y deje ganancias.”

“...la municipalidad, como te digo, ha hecho abandono consciente y, además, en apoyo abierto y claro para que entren aquí las inmobiliarias y las transnacionales. Entonces, nuestra lucha no es solamente con las empresas, sino con las políticas de este país.”