EVERYDAY IDENTITIES, EVERYDAY ENVIRONMENTS: URBAN ENVIRONMENTAL GEOGRAPHIES OF PHILADELPHIA

A Dissertation
Submitted to
the Temple University Graduate Board

In Partial Fulfillment
of the Requirements for the Degree
DOCTOR OF PHILOSOPHY

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Diploma Date July 2016

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ABSTRACT

This study examines the environmental identity processes of Philadelphians involved in volunteer local everyday urban environmental stewardship through tree plantings and prunings, urban gardening, and neighborhood cleanups. A hybrid theoretical framework for environmental identities that simultaneously incorporates structural, discursive, and material concerns through the ground of everyday life was adapted from the political ecology of the body developed by Hayes-Conroy and Hayes-Conroy (2013). Three qualitative methodological techniques were performed: in depth interviews, participatory observation, and neighborhood walking tours. Results highlight the emotional and affective connections that participants held with their neighborhoods, neighbors and other participants, and trees and other nonhuman others.

ACKNOWLEDGMENTS

This dissertation would not have been completed without the support and encouragement of a great number of individuals. Dr. Hamil Pearsall has been a tireless mentor, always there with words of advice and encouragement. Drs. Melissa Gilbert and Allison Hayes-Conroy have also helped me turn an interest in environmental identities into a completed project through their expert and generous support.

My graduate school colleagues and professors at Temple University and the University of South Florida have also provided a rich intellectual climate that has stimulated my academic growth. They are too numerous to recognize here individually. My undergraduate advisors and professors at New College of Florida started me on this journey many years ago and I would not be here without them. Special thanks go out to Dr. Richard Coe at New College for taking a chance and mentoring an underperforming sophomore through the undergraduate thesis process.

Finally, I would like to thank my family and friends. Their emotional support and understanding made this all possible.

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CHAPTER 1
INTRODUCTION

On November 16th, 2014, I joined slightly over a hundred volunteers gathered in the outdoor entrance to a large loft in the Fishtown neighborhood of Philadelphia, Pennsylvania, sipping coffee or juice and snacking on donuts and pastries. Soon we were going to head out into the cold and plant some trees. After some milling about and organized confusion, we broke up into nine teams and went our separate ways, reconvening for a free lunch and drinks at a local brewery after planting 81 trees. My team of five spent around three hours planting five trees, working together to improve urban environmental quality. While it was a very convivial atmosphere with some great conversations, we were definitely working, performing physical labor to dig dirt, rocks, and bricks out of empty tree pits and plant new trees. Friendly interactions with both tree recipients and passersby added to the positive atmosphere and helped to cushion the weight of the materials that we were digging. After the first tree was planted, we paused to take a picture, bless the tree, and reflect on how it would hopefully have a long and happy life that would improve the lives of other neighborhood residents. Similar events were happening in other neighborhoods throughout Philadelphia and the rest of the United States.

Why are so many people volunteering to plant trees and perform other types of urban environmental stewardship? What do they get out of it? Are they changed by these practices? How are these practices of environmental stewardship influenced by individuals' sense of self, place, and nature? How do individuals' sense of self, place, and

nature influence participation in these volunteer urban environmental stewardship practices? What does it mean that volunteers are performing urban environmental reproduction rather than the state? What power relationships are involved in volunteer urban environmental stewardship? How are urban environments and urban environmental reproduction valued? These are the types of questions driving this research, with specific research questions detailed below.

Urban areas, long thought to be the antithesis of nature (Cronon, 1996), have finally been recognized in the last two decades as important sites of environmental improvement, politics, and activism by both natural and social scientists (Pickett et al., 1997; Bolund and Hunhammar, 1999; Grimm et al., 2000; Heynen et al., 2006; Cook and Swyngedouw, 2012). A large part of this recognition of urban environments has come through increased understanding of the many benefits that they provide to urban residents. For example, identified (and often quantified and monetized) benefits of urban trees include: amelioration of the urban heat island effect (Sampson, 1989; Sailor, 1995; Simpson, 2002; Heidt and Neef, 2008), energy conservation (Ebenreck, 1989; Andreau et al., 2008; Donovan and Butry, 2010), reduction of atmospheric pollution (Dwyer et al., 1992; Nowak et al., 2007a), carbon storage and sequestration (Sampson, 1989; Andreau et al., 2008;), absorption of storm water runoff (Dwyer et al., 1992; Xiao and McPherson, 2003; Chen and Jim, 2008), increased property values (Anderson and Cordell, 1985; Wachter and Wong, 2008; Sander et al., 2010), reduction of urban noise (Ebenreck, 1989; Chen and Jim, 2008), physical and psychological health benefits (Ulrich, 1984; Velarde et al., 2007), and recreational benefits (Chen and Jim, 2008). With urban populations growing exponentially across the world (Bolund and Hunhammar, 1999), and in the

United States (Lohr et al., 2004), addressing these urban environmental issues is crucial, making it essential to understand why individuals and groups behave the way that they do towards the environment. This research project seeks to bring us a step closer to understanding urban environmental behavior through an examination of the environmental identities of urban environmental stewards in Philadelphia.

Environmental identities are described by Agrawal (2005) as: an individuals' definition of the environment, their attitudes and actions towards it, and the emotions these meanings, attitudes and actions create. Investigating identity formation can shed light on how new modes of perceiving and relating to urban environments emerge in both individuals and groups, and the understanding of individual's environmental practices and their motivations that environmental identities research can provide is extremely important, given that these urban environmental practices can either exacerbate or ameliorate urban environmental issues such as pollution, resource scarcity, and climate change (Singh, 2013). Specifically, in terms of my research, understanding environmental identities begins to explain why urban residents choose to participate in volunteer local environmental stewardship practices. Given the rapid growth in the dependence on volunteer labor for urban environmental stewardship (Fisher et al., 2011), including in Philadelphia (Nutter, 2009), the understanding of the motivations behind participation that can be gained through examining environmental identities is essential for increasing urban environmental reproduction (recognizing that all nature is produced as argued by Smith (2008), and that separating the urban from the natural is problematic (Cronon, 1996; Heynen et al., 2006), urban environmental reproduction is still used here to highlight the large amount of influence humans have on urban environmental quality

(through both action and inaction) and to draw parallels between social and environmental reproduction). Furthermore, following Kooy (2008), if we see everyone as environmentalized, as having an environmental identity, this research encompasses more than what we think of as environmentalists. Those who have different perceptions of and relationships with urban environments and choose not to participate in volunteer stewardship also possess environmental identities that can help explain their feelings and actions towards urban environments. Just as essential to a reformulation of environmental politics and practices is understanding how these identifications articulate with economic and social issues to ensure that they are liberatory and not oppressive, as research has revealed that structural actors such as the state and the market are sometimes able to exert their desired environmental identities upon individuals, making it more difficult to form one's desired relationship with the environment (Agrawal, 2005; Hanson, 2007; Li, 2007*a*; Birkenholtz, 2008; Dowling, 2009; Mawdsley, 2009; Seki, 2009; Fletcher, 2010; Gabriel, 2011; Jepson et al., 2012; Leffers & Ballamingie, 2013; Ward, 2013) and instead succumbing to the desire of another in a relationship of domination (Lordon, 2014). The concerns over social justice issues surrounding environmental practices and identities come back to the issue of volunteerism, where research has argued that the removal of state urban environmental stewardship has influenced neighborhood groups and citizens in increasing volunteer stewardship, making questions of motivation behind participation and structural issues a major concern of this study.

Before analyzing previous environmental identity research, it is first necessary to explicate the general approach to identity taken here, although the two have a much more dialectical relationship in my work. Indeed, it was recognition of the ability of practices

to influence material urban environments and urban environmental identities that for me began to call into question ideas of a fixed or stable identity. Postmodernist, poststructuralist, postcolonial, and feminist scholars (among others) have all questioned and critiqued theories of unified, coherent, and stable identities (Hall, 2000; Vila, 2005; Alcoff, 2006), dispensing with psychological approaches such as Erikson's that view identities as stable or universal (Brubaker and Cooper, 2000). Although they are related, it is useful heuristically to divide such approaches into two separate critiques of modernist approaches to identity. The first is a processual approach which argues that identities are constantly forming and reforming rather than stable things or essences which continue on with us throughout our lives unchanged (Haraway, 1991; Lemert, 1994; Knowles, 1997; Hall, 2000; Brubaker and Cooper, 2000; Nightingale, 2011). The second is a relational approach which argues that identities are developed relationally with others, rather than contained relationships solely with one's self (Taylor, 1989; Mouffe, 1995; Massey, 1995; Rose, 1996; Torfing, 1999; Fraser, 2001).

First, adopting a processual approach to identity contradicts modernist, enlightenment, and rationalist conceptions of individuality. Indeed, the word identity is so strongly associated with the tradition of stable identities and so routinely used in reification processes that it becomes an empty signifier, meaning everything and nothing (Brubaker and Cooper, 2000). For this reason it is more appropriate to use a verb form rather than a noun to better describe the active processes of constant identity formation and reformation that humans undergo rather than something prefigured or a permanent condition that exists independent of these processes (Brubaker and Cooper, 2000). While the two terms are both used here, when I talk about identities I am actually referring to

identifications as constantly in processes of change, flux, and transformation (Perinbanayagam, 2000) and as multiply constructed (and reconstructed) across material, discursive, and structural fields. Identification "lacks the reifying connotations of identity (Brubaker and Cooper, 2000, page 15)."

Second, adopting a relational approach to identity similarly contests modernist ideas of individuality, recognizing the influences of others (human and nonhuman) on identifications. Indeed, identification implies this influence, as one is identifying with a person, group, or thing as a means of establishing a temporal sense of identity, attachment, or belonging (Brubaker and Cooper, 2000). Disidentifications are also essential in understanding the role of others on the continual construction of the self. These disidentifications can be thought of as boundaries used to construct identities, where acts of power serve in excluding what is different, other, outside, or unimportant (Torfing, 1999; Hardt and Negri, 2000), recognizing that we cannot have an us without a them (Mouffe, 1995). Both identifications and disidentifications speak to the inability to create a sense of self in a vacuum, without the influence of others, recognizing that a self is a self only among other selves (Taylor, 1989).

The second discussion of broader theories of identity necessary before reviewing previous research on environmental identities concerns the prioritization of everyday life. Lived experience and practice are seen as grounds for theoretical approaches to environmental (and all) identities, rather than an emphasis on extreme or catastrophic events, as previous research has made clear the important role of everyday environmental practices for environmental identity processes (Agrawal, 2005; Nightingale, 2011; Singh, 2013). Following Lefebvre (2003, 2004, 2014) and de Certeau (1984), the everyday is the

site where humans understand and make themselves and their environments. Furthermore, the everyday is a crucial site of political resistance, with Lefebvre's goal being "to take lived experience as the starting point, and elucidate it in order to transform it (2003, Page 99)."

Previous environmental identifications research has largely been driven by the disciplines of psychology, sustainability science, and political ecology. Unfortunately the work coming out of psychology and sustainability science, which are often applied in tandem, is largely dedicated to modelling and creating environmentally friendly behavior change, missing out on questions of power and more complex processes of identifications and disidentifications and consequently often lacking solid theoretical grounding (Dillon, et al., 1999; Light, 2000; Stets and Biga, 2003). For the above reasons the focus of my research is shifted to exploring what we have and have not learned from previous environmental identity research in what can largely be viewed as political ecology, along with opportunities for advancement through incorporation of concepts from broader theories of identifications. To use Paul Robbins' metaphor, political ecology provides both a hatchet to chop down previous atheoretical and apolitical approaches to environmental identities and a seed to plant and grow new ones (Robbins, 2012). Specifically, an approach to environmental identifications can ask questions silenced by the sustainability science and psychology approaches described above. What power relationships are involved in the choice and/or acceptance of specific environmental identities (Agrawal, 2005; Nightingale, 2011; Singh, 2013)? How and why do environmental identities change over time (Agrawal, 2005; Li, 2007*a*)? How do environmental identities influence material environments? How are environmental

identities influenced by material environments and nonhuman others (Jones and Cloke, 2002; Harris et al., 2013; Pearce et al., 2015)? Who wins and who loses?

Findings from previous political ecology centered environmental identifications research reveal several highlights that further understanding of environmental identity processes. First, environmental practices have been found to be highly influential to environmental identity formation, rather than stemming from the more common variety of preformed and static conception of identities critiqued above (Darier, 1996; Agrawal, 2005; Birkenholtz, 2008; Nightingale, 2011; Singh, 2013). Second, there is a tension between findings that suggest the imposition of environmental identities by the state and other larger structural forces (Agrawal, 2005; Birkenholtz, 2008) and those that find more room for individual and group agency in resistance to imposed identifications (Sletto, 2005; Li, 2007*a*; Jepson et al., 2012; Nightingale, 2011; Singh, 2013). Finally, research has also revealed the influence of nonhuman others on environmental identity processes (Jones and Cloke, 2002; Harris et al., 2013; Pearce et al., 2015).

Political ecology based environmental identities research has applied three different broad theoretical approaches to understanding processes of environmental identification: structural, discursive, and material, although some researchers have utilized more than one of these approaches or blurred the boundaries between them. Structural approaches appeared first, often drawing upon Agrawal's (2005) application of Foucault's theory of governmentality (1991) to the environment to examine vertical power relationships and how powerful state and economic organizations work to form norms of attitude and behavior surrounding environmental issues (Darier 1996; Taylor 1999; Agrawal 2005; Li, 2007*a*; Robbins, 2007; Rutherford 2007; Birkenholtz 2008;

Kooy 2008; Mawdsley 2009; Gabriel 2011; Baldwin 2013; Ward 2013). It was the Foucauldian work of Darier (1996) and Agrawal (2005) that first argued for the strong influence of practices upon environmental identities. Neoliberal environmental governance approaches (Brand, 2007; Heynen at al., 2007a; Perkins, 2009*a, b*, 2011) theorize a reliance on volunteers to produce urban natures as in line with larger structural shifts that have hollowed out the state and its provision of public services, similarly arguing that neoliberal environmental governance works to produce its' desired environmental subjects. Both of these two popular structural approaches theorize individuals and groups as taking on the desired environmental identities and actions of powerful outside groups, prompting interventions stressing the ability of individuals and groups to assert agency in environmental identity processes from discursive and material approaches.

While discursive approaches recognize the power of language in both the imposition of identities from above (showing similarities with the structural approaches discussed above) and resistance to these impositions from below, they are often employed as counters to what their proponents view as the overly structural nature of environmentality and neoliberal governance approaches as attempts to provide individuals and groups with a heightened power of agency. Conceptual frameworks utilized in discursive approaches to environmental identifications include: performativity, narrativity, and discourse theory (Nightingale, 2011; Hards, 2012; Wright et al., 2012; Singh, 2013).

Finally, material approaches bring in the role of affects, emotions, space, place, and the body in influencing environmental identity formations (Nightingale, 2011; Singh,

2013), also often serving as an attempt to respond to structural theorizations of environmental identities by bringing in more agency. Bringing materiality into environmental identity theory posits affects, emotions, space, place, and the body as active participants influencing (and being influenced by) identifications rather than passive, empty containers. Singh's (2013) environmental identity research in Odissa, India, found that villagers constructed identities as "forest people" that acted as environmental stewards through embodied and affective relationships with the forest where they came to care for and respect it. Nightingale's (2011) research in Nepal focuses more upon the role of space and the body in environmental identity processes, finding that spaces and identities are co-constructed based upon who is welcome where along with who performs embodied practices of eating in these spaces and how.

Each of the three approaches to environmental identifications has its limitations along with its strengths. Structural approaches drawing upon environmentality and neoliberal environmental governance have been heavily critiqued for portraying the state and the market as holding a totalizing top down power to construct environmental subjects, obscuring the agency held by urban and rural residents (Cepek, 2011; Ferguson, 2011; Singh, 2013). Cepek's work with indigenous Cofan people in Brazil found that despite a large conservation based regulatory regime, they participated in conservation activities based upon their own "political aspirations and cultural background rather than the aims and rationales of the ECP [The Field Museum of Natural History's Office of Environmental and Conservation Programs] (page, 502)", results that would have been missed if employing a strictly structural environmentality approach that did not leave

open the possibility of non-state actors asserting agency in environmental identity processes.

The primary concern with discourse based understanding of environmental identity formation is their emphasis on the discursive at the expense of the material, spatial, and embodied (Gregson and Rose, 2000; Nash, 2000; Fraser, 2001; Alcoff, 2006; Nightingale, 2011). The embodied laboring relationships in the forest that were so influential for Singh's (2013) participants discussed above would never have been uncovered in a research project solely focused upon discursive environmental identities.

Finally, material(ist) understandings of identity perform important work by bringing space and the body into understanding environmental identities, but often, sometimes as a reaction to overly structuralist applications of the first two approaches, fail to consider the interactions between individual, localized agency and power and larger scale structures of power. The pedagogical imposition of hegemony that Perkins (2011) found in Milwaukee's urban forest, where outside scientists were used to educate local communities about the monetary benefits of urban trees to quell resistance to tree planting is an example of the structural forces that could be missed in strictly materialist approaches to environmental identity research and theorization.

The concerns associated with each of the three major approaches to understanding environmental identity processes, along with the power of several new hybrid approaches (Nightingale, 2011; Singh, 2013), led me to adapt the political ecology of the body theoretical approach of Hayes-Conroy and Hayes-Conroy (2013) to use in my research. Carney (2014) has also adapted this approach, finding it to be a powerful tool to

investigate the biopolitics of food insecurity among female transnational migrants in California. While the framework was developed to investigate food practices, Hayes-Conroy and Hayes-Conroy argue that it is "certainly applicable to body-space or body-environment practices in much broader terms (2013, page 88)." Environmental identities are an area of research where an adaptation of the political ecology of the body approach adds explanatory power. While the area of interest is different and the scalar categories were removed, otherwise the framework used in this study applies the political ecology of the body approach of Hayes-Conroy and Hayes-Conroy (2013). This hybrid approach, illustrated in Figure One, considers structural, discursive and material influences on identification simultaneously (adapting the framework of structural forces, knowledge production, and relational ontology used in the political ecology of the body approach of Hayes-Conroy and Hayes-Conroy (2013)), as opposed to previous research (including the new hybrid approaches mentioned above) that has often neglected one or more of these fields, leading to an incomplete understanding of the continuous processes of environmental identity formation, recognizing that these three fields are fluid and the boundaries between them are extremely fuzzy. Furthermore, the three fields often react to each other, as shown by the work of Hayes-Conroy and Hayes-Conroy (2013), Singh (2013) and Nightingale (2011), where the material field reacts to structural forces to allow for increased agency, allowing for the tripartite theoretical framework to capture these interactions and overlaps between fields that illustrate the fluidity and contingency of environmental identifications. While the diagram appears static, it should instead be understood as a continuous process that reflects the ongoing project of identifications.

Everyday life is seen as the ground through which the three fields and their overlaps are considered.

Specifically in terms of my research with volunteer everyday local urban environmental stewards, the hybrid theoretical framework detailed above provides an open and flexible approach to understanding the concrete interplay of the three fields and their influences upon identity in the lived, embodied experiences of everyday life. In the structural realm, while many participants were satisfied with the level of support for environmental reproduction provided by the City, there were others who were frustrated and wished that urban greening was not so dependent upon volunteer labor in their neighborhoods. Examining the discursive field revealed the power of community as a signifier to influence participation in volunteer urban environmental stewardship. Finally, material results revealed the deep emotional and affective ties that participants had with their neighborhoods, neighbors, and nonhuman others. Restricting the analysis to one or two of these fields would miss the complex ways that they interact, which will be discussed in detail in the results and discussion chapters.

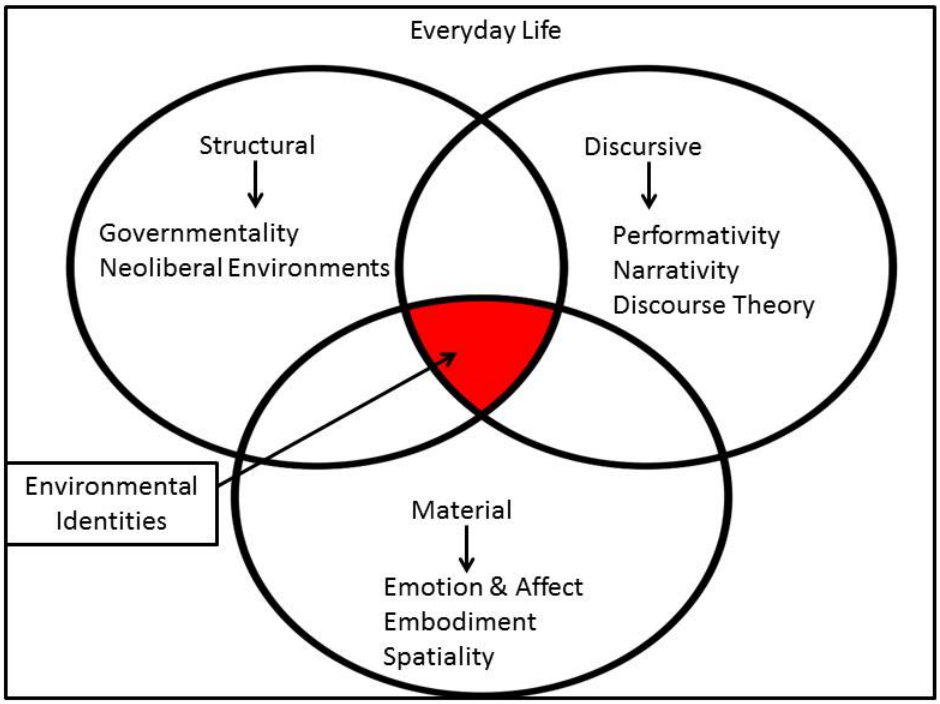

Figure One: Theoretical Framework of the Process of Environmental Identity

(Adapted from Hayes-Conroy and Hayes Conroy, 2013)

The hybrid theoretical framework developed above was used in this research to begin to develop a more nuanced understanding of environmental identity processes among urban local everyday environmental stewards in the Global North. There have been very few studies of environmental identities in urban areas (but see: Robbins, 2007; Mawdsley, 2009; Gabriel, 2011; Leffers and Ballamingie, 2013), especially in the Global North. The extension of this important and growing field to Philadelphia will begin to fill this gap in the literature. Furthermore, work with volunteer local urban environmental

stewards strengthens arguments advocating for the importance of urban green space, as it demonstrates the value placed upon such areas by urban residents. Finally, results also address the debates in geography and the wider social sciences around the relational emergence of identities and material environments. In other words, my research explores how local everyday urban environmental stewardship practices such as tree planting, urban gardening, and neighborhood cleanups influence both the environmental identities of my participants and the condition of the urban environments that they live in.

The City of Philadelphia is the setting for this study. The largest city in Pennsylvania, Philadelphia is more diverse and has higher levels of poverty than both the rest of the state and the United States (US Census, 2011; 2012). Given these issues of diversity and poverty, along with the high levels of spatial segregation of both of these populations in the city (US Census, 2012), it is important to critically investigate the power relations behind urban environmental identity processes, urban environmental volunteerism, and the conditions of material urban environments in Philadelphia's diverse neighborhoods.

The City of Philadelphia seeks to become a leader in the urban environmental movement, with Mayor Michael Nutter publicly stating his wish for Philadelphia to become the greenest city in America (Nutter, 2009). This makes the City an excellent location for research on individuals' environmental identifications, as the increased attention to urban environmental issues should make residents more aware of them. Specifically in regards to tree planting, Target 11 of the City's sustainability plan is to increase tree coverage toward thirty percent in all neighborhoods by 2025 (Nutter, 2009), and many of the initiatives to achieve other targets (such as rainwater diversion and

reduction of atmospheric air pollution) in the sustainability plan also rely upon extensive tree planting. As the city is constantly facing municipal budgetary pressures, a large part of this increase in urban canopy is dependent upon volunteer labor planting and maintaining trees. Similarly, Target 10 of the City's sustainability plan is to bring local food within 10 minutes of 75 percent of resident (Nutter, 2009), and while the main focus of the suggested programs to reach this ambitious target relate to more commercial large scale urban farming issues of production and distribution, there are also programs to increase urban gardening and community gardens.

Participants in this study were Philadelphians who engage in local everyday volunteer neighborhood environmental stewardship and activism through tree plantings, urban gardening, and park cleanups. While they may not participate in these activities on a daily basis, the emphasis on local neighborhood stewardship results in the effects of these stewardship activities being something that participants repeatedly encounter in their daily lives as they see the trees planted or pruned, the vegetables growing in their gardens, or the sidewalks and vacant lots cleared of trash in neighborhood cleanups. As mentioned previously, it is important to remember that everyone, rather than simply the volunteer stewards that I worked with, has an environmental identity (Kooy, 2008), and not to place value judgements on different ways of understanding and relating to urban environments. Rather, the choice was made to work with volunteer stewards due to the rapid increase of volunteer urban environmental stewardship (Fisher et al., 2011) and questions surrounding the role of the state versus private citizens and nonprofit groups in maintaining urban environments (Brownlow, 2006, 2011; Brand, 2007; Gabriel, 2011). Furthermore, the choice of stewards and stewardship activities (tree planting, tree

pruning, urban gardening, and neighborhood cleanups) provides entry points into each of the three fields contained in the hybrid theoretical framework developed above. The questions surrounding the role of the state and the inherent power relationships in volunteer urban environmental stewardship allow this research to delve into structural questions and their influence on environmental identifications. The conversations between participants in stewardship and the narratives developed surrounding neighborhood environmental quality and the effects of stewardship bring to the fore discursive influence on identity processes. Finally, the embodied experiences of digging, planting, and cleaning up neighborhoods during the stewardship events help to address the relationships between materiality and corporeality and environmental identifications.

Snowball sampling (Fink, 1995), where participants identify other possible candidates meeting the criteria outlined above was used for recruiting participants in this study. Recruitment efforts were directed to gain participants from diverse environmental groups engaged in neighborhood urban environmental stewardship so that respondents from different age, class, gender, and ethnic compositions could be reached. These diversity criteria were chosen due to their prevalence as social categories often argued to influence environmental identifications (Agrawal, 2005; Singh, 2013). Furthermore, participants were drawn from different levels of participation in these neighborhood environmental stewardship activities, from those in leadership roles to occasional participants, as this might influence their environmental identifications.

Specific research questions addressed include:

- How are the environmental identities of Philadelphians and their participation in urban environmental practices mutually constituted?
- How do structural forces influence this mutual constitution?
    - How does perceived neighborhood environmental quality influence this mutual constitution?
- How does discourse influence this mutual constitution?
    - How do issues of difference influence this mutual constitution?
- How does materiality influence this mutual constitution?
    - How does bodily presence, emotions and affects, and the negotiation of space influence this mutual constitution?

Three qualitative methodological research approaches were performed for this study: in-depth interviews, participatory observation, and neighborhood walking tours. These methodological techniques are targeted at capturing the processual nature of the everyday; at seeing it as an open ended, undecided bricolage of practices and emergent processes rather than a fixed object in and of itself (Harrison, 2000). Viewing research as a performance involving researcher and participant (and trees, vacant, lots, shovels, and many other "things") helps to stay grounded to the idea of identity as a series of identifications rather than some sort of stable enduring self, to remain oriented towards the process (and the gaps within it) rather than some sort of teleological endpoint (Latham, 2003).

The first procedure employed in this study was 30 in-depth qualitative interviews of at least an hour in length. Approximately a third of the participants were involved in

neighborhood tree care and two thirds were urban gardeners, along with a few who only took part in neighborhood cleanups. Slightly less than half of the interviewees were female, and slightly less than a third self identified as people of color. These interviews were mostly open ended, encouraging individuals to tell stories about their environmental concerns and practices, constructing narratives together that explain their identifications, attitudes, beliefs, behaviors, and emotions (Prokkola, 2014). The open nature and extended length of these interviews allowed for participants to provide a much more nuanced and rich portrait of their environmental identities and the complex processes that they continually arise from than that which would be the result of traditional survey procedures.

The participatory observation consisted of engaging in 10 neighborhood based environmental stewardship events, including tree plantings, urban gardening celebrations, and neighborhood cleanups alongside over 240 research participants, working together to co-create knowledge and use our bodies as research instruments (Elden, 2007; Hayes-Conroy, 2010). By digging, planting, watering, and collecting trash, I attempted to uncover the embodied emotions that these activities create, along with the motivations that stem from them among participants. Furthermore, the shovels, dirt, and trees themselves involved in these research events affected our bodies and were affected by them, drawing attention to how these various entities participate in the continuous construction of bodies and identities (Latour, 2004) through the discourse surrounding these many bodies and their interactions during stewardship events.

The final research method employed was 10 neighborhood walking tours with participants (Kusenbach, 2003; Pink, 2008; Carpiano, 2009; Duff, 2010; Evans and

Jones, 2011; Bendiner-Viani, 2013), which furthered understanding of how participants make sense of their urban environments and their identities. Participants also defined their own neighborhoods, as perceived neighborhood boundaries may differ from those defined by City agencies or nonprofits (Carpiano, 2009). Individuals are seen to both make these places and be made by them in a continuous, set of co-constitutive, relational processes (Edensor, 2000; Wylie, 2005; Duff, 2010; Bendiner-Viani, 2013). In other words, the daily experiences of participants materially influence the physical environments of their neighborhoods while simultaneously influencing identity processes. As an example, the process of environmental stewardship increases the amount of greenspace in some neighborhoods while also influencing the identities of residents in that neighborhood, both through participating in stewardship and simply the material physical changes. Furthermore, walking tours address the embodied nature of place, space, and identity construction, as the physical negotiation of the everyday by bodies is addressed by this method through exploring the ways the participants navigated their neighborhoods (Bendiner-Viani, 2013); this embodied negotiation of space brings in all the senses, as it is tactile, aural, and olfactory as well as visual (Lefebvre 2004; Edensor, 2008; Pinder, 2001). Finally, these tours also helped to understand the affective and emotional nature of place and identity making. Following Duff: "to experience place is to be *affected by place* (2010, page 881, emphasis in original)." Open ended discussions with participants on the walking tours increased understanding of the deep layers of emotion involved in everyday places. As with the other two methods, the in depth nature of this research precluded the development of a representative sample of either Philadelphians or Philadelphians who participate in these types of environmental

stewardship activities. Furthermore, given the wide range of stewardship types and groups, along with individuals acting as stewards outside of organized groups, the population participating in volunteer urban environmental stewardship in Philadelphia is unknown, making it extremely difficult to draw a representative sample of participants.

Results from the three qualitative methods revealed the strong influence of participants' emotional attachments to their neighborhoods, neighbors, and nonhuman others. Attending to emotions and affects in local everyday urban environmental stewardship recognizes their power in the mutual constitution of practices and identities. Following Ahmed (2004), "emotions *do things*, and they align individuals with communities – or bodily space with social space – through the very intensity of their attachments (page 119, emphasis in original)." Volunteers were assisting in urban environmental reproduction because they *cared* intensely, emotionally, and affectively about their neighborhoods, their neighbors, and trees as nonhuman others, rather than being duped or coopted by the state and/or the market as argued in environmentality and neoliberal environmental governance approaches (Agrawal, 2005; Brand, 2007). Of course, the situation on the ground is often more complicated than this simple binary between cooptation and resistance (Elwood, 2015) and care should be taken to draw out the rich interplay between the two poles of pure cooptation and pure resistance, recognizing that individuals and organizations can do both at different times (and perhaps even the same time).

Invocations of community were often used to explain participation in volunteer urban environmental stewardship. While the often problematic and exclusionary discursive and material usages of community have rightly been highlighted in recent

scholarship (Young, 1990; Rose, 2000; Joseph, 2002; Martin, 2003; Li, 2007*a, b*; Watts, 2007), this work explores how the concept was used by participants to demonstrate their emotional attachments to their neighborhoods. Often, during or after stewardship events, participants expressed a strong sense of pride and accomplishment in their efforts, feeling that they had immediately improved their neighborhoods.

An attachment to neighbors and fellow participants also influenced participation in everyday local urban environmental stewardship. Many participants mentioned the friends that they made and the value of their interactions working together over the years, and others also saw this as a form of valuing and building community. Speaking about her time spent working in a community garden, a mid-twenties white female participant said "So you just go all out and the time spent with my comrades was really fun, you know, all working together, it was kind of beautiful in a way", working together as beautiful speaks to the joy of encountering other bodies, entering into composition with them in affective laboring relations, and increasing individual and collective capacities to act (Deleuze, 1988).

Finally, participants formed an intense emotional attachment to trees and other nonhuman others. During the tree plantings and prunings, it was common to see and hear participants having strong negative reactions to trees in poor shape, feeling both sad that the trees were in such poor shape, but also sometimes mad that people were not taking care of them. One participant, talking about the emotional impact of seeing a tree in really bad shape said: "it's like seeing a hurt animal or small child." Interviewees also mentioned the loss or poor condition of neighborhood trees as emotionally traumatic events, with one respondent stating that when trees go down it is like "I lost one of my

friends." Yet, despite the emotional turmoil produced by repeatedly interacting with neglected and damaged trees, participants kept coming back. Some had been doing so since the 1990s. The intense emotional attachments to specific trees helps to explain why, along with the emotional importance of and sense of accomplishment participants associated with improving their communities through urban environmental reproduction.

Framing volunteer urban environmental reproduction as emotional economies of care based upon the circulation of emotion and affects between human and nonhuman participants serves to contest the hegemony of the market as the proper method of valuing these activities. Ethical and empirical critiques of market valuation of urban environments and urban environmental reproduction are presented, and then an attempt is made to go beyond critique, thinking through how they could be valued outside of the market. Emotional economies of care are thought of as multiplicities and becomings in the style of Deleuze and Guattari (1987), allowing us to think of them as a composition of multiple human and nonhuman bodies joined by their increased capacity to act (their affects). Multiplicities are becomings of heterogeneous bodies (understanding bodies in the widest possible sense, with their characteristics emergent rather than innate: "'Body' for Deleuze is defined as any whole composed of parts, where these parts stand in some definite relation to one another, and has a capacity for being affected by other bodies (Baugh, 2010, page 35)."): "each multiplicity is symbiotic; its becoming ties together animals, plants, microorganisms, mad particles, a whole galaxy (Deleuze and Guattari, 1987, page 250)." These becomings of heterogeneous bodies are guided by the power of affects and intensities, with their circulation understood as what bring them into being. Valuing this circulation as the impetus behind increased urban environmental

reproduction is offered as a counter to the hegemonic value of the market, recognizing that multiple value forms often exist alongside each other (Mauss 2002[1925]; Gidwani, 2013; Li, 2014). Finally, given the constant shifting within and between multiplicities, there is concern surrounding their becoming and persistence. Several potential ways are suggested to think through how emotional economies of care as multiplicities can be fostered, namely: through the multiplication of diverse, creative, and spontaneous encounters, the desire to increase the joy found in the increased affects of multiplicities, and finally the sense of hope provided by the presence of multiplicities.

The results display the utility of the hybrid theoretical framework developed for this study and the new insights that it can provide environmental identity research. The tripartite theoretically framework offers environmental identity researchers the possibility of simultaneously considering the structural, discursive, and material influences upon identification processes and practices, recognizing the intersections, overlaps, and feedbacks in between the three fields that exist. Specifically, my approach opens up opportunities for recognizing the delicate interplay between structure and agency. Previous critical research with urban and rural environmental volunteer stewards has often taken an overly structural approach, arguing that environmental stewardship practices and identities have been the result of the rollback of state support for environmental reproduction and/or pedagogical techniques to enforce neoliberal environmental hegemony (Agrawal, 2005; Birkenholtz, 2008; Perkins, 2009; 2011). On the other hand, and partly as a reaction to such structuralist approaches to environmental identities, several new hybrid approaches have blended discursive and material theoretical frameworks to find agency on the part of individuals in their environmental

practices and identities (Nightingale, 2011; Singh, 2013). Unfortunately, these two previous styles have situated themselves on diametrically opposite poles of the structure versus agency debate. While the approaches of Nightingale (2011) and Sing (2013) provide valuable insights into the power of the discursive and material fields to push back against the structural, their approaches also seem to largely negate the power of structural forces. I am certainly not arguing that structure and agency are always perfectly balanced or that there are not examples where practices and identities are largely dictated by outside or top down structural forces (for historical examples, see: Scott, 1998). Instead, what the theoretical framework developed for this study does is ensure that all of these factors are considered on a case by case basis depending upon extensive empirical results. Following Foucault (1990, 1993), such an approach sees structure and agency, or power and resistance, as mutually constitutive, and always co-present, although in different amounts for different places, peoples, and times.

Despite the many insights into urban environmental identity processes developed by this study, there remain several limitations which provide opportunities for future research endeavors. First, Philadelphians who did not participate in local neighborhood environmental stewardship activities were excluded from this study, a population which should be a focus of future research to begin understanding the differences (or lack of differences) in the environmental identifications of participants and non-participants. Moreover, results do not address other types of environmental stewardship activities, especially those that are undertaken on a more individual basis rather than organized through a local neighborhood based group or which might not even be thought of as environmental stewardship activities by individual participants or organized groups.

Second, future research should work towards developing a better understanding of the correspondences between urban environmental stewardship acts and urban environmental change (Svendson and Campbell, 2008) in both privileged and marginalized neighborhoods. This includes examining the scalar effects of the common invocations of community among my research participants and how they shifted material and discursive urban environmental conditions, and on the ground work to create community "that need not be a parochial enclave but can be instead a place where we exercise our responsibility to the Other, understood as unassimilable, as absolute alterity (Gibson-Graham, 2003)." Finally, future research should strive to develop and incorporate new experimental and creative methods that can draw out the deeply affective nature of participating in everyday local urban environmental stewardship and the effects of these affects upon participation and environmental identification processes.

The dissertation proceeds as follows: the next section details an in depth review of the literature on environmental identities, separated based upon an emphasis on structural, discursive, and material fields. The strengths and weaknesses possessed by each field of emphasis, along with the power of several new hybrid approaches leads to the construction of a new theoretical framework that considers structural, discursive, and material influences on environmental identifications simultaneously, while remaining grounded in everyday life and lived experience. The subsequent chapter describes the methodological approaches use for this research. The City of Philadelphia is introduced as the study area, along with its geography of tree planting and urban gardening. The three qualitative methodological techniques performed are then detailed: in-depth interviews, participatory observation, and neighborhood walking tours. The next chapter

introduces the results, presenting them in separately from the structural, discursive, and material fields before synthesizing them in the chapter's conclusion. The first discussion chapter reflects on the struggle between structure and agency in urban environmental stewardship and environmental identity formation, demonstrating that emotional economies of care are the appropriate theoretical explanation of volunteer stewardship among my participants, rather than environmentality or neoliberal urban environmental governance. The second discussion chapter moves beyond a critique of neoliberal environmentalities scholarship and suggests multiplicities in the style of Deleuze and Guattari (1987) as an alternative way to value and spread emotional economies of care. Finally, the conclusion presents the larger ramifications of the findings of this research project, along with its limitations and opportunities for future research.

CHAPTER 2

LITERATURE REVIEW

"Neither incoherent nor immutable, neither senseless nor static, 'we' persist, never quite the same and, with rare exceptions, never entirely different," (Freeman 2010: 185).

"Constructing an identity is thus an act of power, for it excludes other possibilities and forms of the self" (Howarth, 2010: 314).

"My purpose in making these moves is not to construct a supertheory, an improbably seamless amalgam. Rather, I tolerate the untidiness and tension introduced by different theoretical traditions because of the distinct questions they pose, and the tools they offer to guide my analysis (Li, 2007*a*: 19)."

Introduction

Environmental identities are described by Agrawal (2005) as: an individuals' definition of the environment, their attitudes and actions towards it, and the emotions these meanings, attitudes and actions create. The understanding of individuals' environmental practices and their motivations that environmental identities research can provide is extremely important, as these urban environmental practices can either exacerbate or ameliorate urban environmental issues such as pollution, resource scarcity and climate change (Singh, 2013). Investigating identity formation can shed light on how new modes of perceiving and relating to urban environments, whether they have positive or negative influences on these environments, emerge in both individuals and groups, as environmental practices and environmental identities are seen to be mutually constitutive (Agrawal, 2005; Robbins, 2007; Gabriel, 2011; Nightingale, 2011; Singh, 2013). Recognizing the emergent character of practices that influence material urban environments and urban environmental identities begins to call into question ideas of a fixed or stable identity.

The existence of unified, coherent, and stable identities has been increasingly questioned by postmodernist, poststructuralist, postcolonial, and feminist scholars (Vila, 2005). Hall (2000) goes back even farther, locating the impossibility of self-contained and self-sufficient stable identities in the work of Marx, Freud and Saussure, and Alcoff (2006) uses Hegel as the source of inspiration for treating identities as processes rather than objects or even endpoints, finding in his work a shift from being to becoming (although he defined it as always a struggle with the other as in the master/slave dialectic). Regardless of the origin or inspiration of such theories, these arguments have provided a different approach to questions of identity, dispensing with psychological approaches such as Erikson's that view identities as stable or universal (Brubaker and Cooper, 2000). There are two related ideas involved in this stream of research and theory: first, that identities are constantly forming and reforming rather than stable things or essences which continue on with us throughout our lives unchanged (Haraway, 1991; Lemert, 1994; Knowles, 1997; Hall, 2000; Brubaker and Cooper, 2000; Nightingale, 2011), and second that identities are developed relationally with others, rather than contained relationships solely with one's self (Taylor, 1989; Mouffe, 1995; Massey; 1995; Rose, 1996; Torfing, 1999; Fraser, 2001).

Recognizing the impossibility of fixed or stable identities contradicts modernist, enlightenment, and rationalist conceptions of individuality. Furthermore, such a move serves as a reaction against ideas of a universal and essentialized human nature (Taylor, 1989; Lemert, 1994; Seidler, 2010), what Brubaker and Cooper (2008) define as strong conceptions of identity that "preserve the common-sense meaning of the term - the emphasis on sameness over time or across persons (page 8)", highlighting the importance

of processes of self-understanding, social power and historical influence (Brubaker and Cooper, 2000). It is more than just essentializations of human nature that process based theories of identity refute, however. Arguments against fixed identities also undermine essentializations based upon the traditional smaller universals of identity such as “race”, class, and gender (Haraway, 1991; Lemert, 1994; Knowles, 1997; Hall, 2000; Nightingale, 2011), what Lemert (1994) terms the “strong we”. Indeed, the word identity is so strongly associated with the tradition of stable identities and so routinely used in reification processes that it becomes an empty signifier, meaning everything and nothing (Brubaker and Cooper, 2000). For this reason it is more appropriate to use the verb form rather than the noun to better describe the active processes of constant identity formation and reformation that humans undergo rather than something prefigured or a permanent condition that exists independent of these processes (Brubaker and Cooper, 2000; Vila, 2005). While the two terms are both used here, when I talk about identities I am actually referring to identifications as constantly in processes of change, flux, and transformation (Perinbanayagam, 2000) and as multiply constructed (and reconstructed) across material, discursive, and structural fields. Identification “lacks the reifying connotations of identity (Brubaker and Cooper, 2000, page 15).” The formation of these identifications is seen as an iterative, unstable process, meaning that individuals form many different environmental identifications throughout the course of their lives. Furthermore, the elimination of universal identities means that not only do the identities of an individual shift over time, but that an individual holds multiple identities at the same time (Mouffe, 1995; Schrag, 1997; Datta, 2008). Often the existence of multiple identities is due to the influence of others (human and nonhuman) on the self that is discussed below, where

identities are seen as a performance dependent upon the audience (Branaman, 1997; Perinbanayagam, 2000; Wright et al., 2012). However, others are not the only influence on shifting and multiple identities. Research has also revealed the influence of different spaces and places on the (re)construction and performance of different identities (Anderson, 2004*b*; Datta, 2008; Duff, 2010; Nightingale, 2011).

Modernist conceptions of individuality are also challenged by recognitions of the influence of others on identifications. Indeed, identification implies this influence, as one is identifying with a person, group, or thing as a means of establishing a temporal sense of identity, attachment, or belonging (Lemert, 1994; Brubaker and Cooper, 2000; Vila, 2005). Included in identifications are group memberships, seen as helping define the makings of a self (Tomashow, 1995; Perinbanayagam, 2000). Disidentifications are also essential in understanding the role of others in the continual construction of the self. These disidentifications can be thought of as boundaries used to construct identities, where acts of power serve in excluding what is different, other, outside, or unimportant (Torfing, 1999; Hardt and Negri, 2000), recognizing that we cannot have an us without a them (Mouffe, 1995). However, the location of this difference or opposite of the signifier is often presupposed in the signifier itself (Fraser, 2001), similar to the Derridean idea of deconstruction and the constitutive outside (Massey, 1995; Mouffe, 1995), the absence that explains the presence. To speak of (and define *or identify*) women we have to reference men (Vaughan, 1997; Fraser, 2001), or as Hall (a Jamaican) explains it "I am the sugar at the bottom of the English cup of tea (2000, page 147)," remarking on how the English identity constructed around daily rituals of tea rely upon the unremarked and intentionally obscured connections with subordinated others in both the Caribbean and

the Indian subcontinent, the "outside history that is inside the history of the English (*ibid*)", or the disidentifications that are necessary for group and individual identity formation. In terms of this research, identifying as an environmentalist is also a disidentification with those who are not environmentalists. Finally disidentifications can be understood through the construction of the normal through processes of discursively and materially rendering others problematic, recognizing that identifications can be enforced externally as well as chosen internally (Rose, 1996). Both identifications and disidentifications speak to the inability to create a sense of self in a vacuum, without the influence of others, recognizing that a self is a self only among other selves (Taylor, 1989). Unfortunately the inclusion of non-human others as influences on identity processes has largely been missed (but see Harraway, 1991) in these wider debates in theorizing identity, making it even more essential to develop greater understanding of environmental identity processes.

Environmental Identity Research

Psychology, sustainability science, and political ecology have been the three major fields previously used in environmental identities research. Psychology and sustainability science based research, often applied in tandem, has largely focused upon how to model and create sustainable (environmentally friendly) behavior change, missing the complex interactions between different facets and forces of identification processes and often lacking solid theoretical grounding (Dillon, et al., 1999; Light, 2000; Stets and Biga, 2003). Furthermore, this work on creating positive environmental behavior change

is largely trying to emulate the natural sciences in constructing universal models and theories (e.g. Olli et al., 2001; Stets and Biga, 2003; Owen et al., 2010), missing the context dependent and situated influences on environmental identity processes (Hargreaves, 2012) and the need to understand environmental practices and identities as lived experience (Hards, 2012; Pearce et al., 2015). Sometimes psychology and/or sustainability science approaches are even taken to the extent of building complex statistical models to form generalizations surrounding the relationships between essentialized categories such as "race" and gender and environmental identities (e.g. Stets and Biga, 2003). Connected to this attempt at universalization is "an overemphasis on the measuring of relatively static environmental 'attitudes' and 'values' and relatively little attention to the more dynamic notion of identity (Hayes-Conroy and Vanderbeck, 2005)", precisely the understandings of identity that were critiqued above. If there is an acknowledgement of the possibility of identities changing over time, it is still largely a teleological narrative that reaches the desired endpoint of an environmentally conscious identity (Hayes-Conroy and Vanderbeck, 2005). Sometimes this evolution to environmental consciousness is spurred by a traumatic event, or "transformative moment" (Hards, 2011) an approach the fails to recognize the importance of everyday lived experience and environmental identifications as a lifelong process rather than something with a beginning and an end. Finally, these approaches also elide the ever present struggles for power present in environmental (and all other) processes of identity. The apolitical focus of psychology and sustainability science approaches to environmental identities leads me to instead draw upon a political ecology framework

Political ecology asks how environments and societies are mutually constructed, looking for and posing solutions to both environmental degradation and social inequalities (Robbins, 2012). Specifically, a political ecology based approach to environmental identifications can ask questions that are not addressed by the sustainability science and psychology approaches. What are the power relationships involved in the choice or acceptance of specific environmental identities (Agrawal, 2005; Nightingale, 2011; Singh, 2013)? How and why do environmental identities change over time (Agrawal, 2005; Li, 2007*a*)? How do environmental identities influence material environments? How are environmental identities influenced by material environments and nonhuman others (Jones and Cloke, 2002; Harris et al., 2013; Pearce et al., 2015). Who wins and who loses? The questions driving political ecology based research reveal the ability of the approach to investigate and contextualize environmental identities, power relationships, and material urban environments, especially when compared to those from psychology and sustainability science, such as: do you consider yourself an environmentalist (Owen et al., 2010), how do identities and attitudes predict environmental behavior (Stets and Biga, 2003) and how does social context influence environmental behavior (Olli et al., 2001)?

So, what have we learned and not learned from political ecology research into environmental identity processes? The many different theoretical approaches applied that are discussed in greater detail below have produced findings that can often seem contradictory. Furthermore, there have been very few studies of environmental identities in urban areas (but see: Robbins, 2007; Mawdsley, 2009; Gabriel, 2011; Leffers and Ballamingie, 2013), especially in the Global North. Given the vast social and economic

differences between the urbanized Global North and the rural Global South, it remains to be seen whether the results discussed below transfer from one locale to the other (Schroeder et al., 2006).

However, findings from previous environmental identifications research reveal several highlights that both further and complicate understanding of environmental identity processes. First, environmental practices have been found to have a strong influence on environmental identity processes, rather than environmental identities stemming from the sort of stable and static conception of identities critiqued above (Darier, 1996; Agrawal, 2005; Birkenholtz, 2008; Nightingale, 2011; Singh, 2013). Second, there is a division between results that suggest the imposition of environmental identities by the state, the market, and other larger structural actors (Agrawal, 2005; Birkenholtz, 2008; Perkins, 2009) and those that find more room for individual and group agency in resistance to imposed identifications (Sletto, 2005; Li, 2007; Jepson et al., 2012; Nightingale, 2011; Singh, 2013), presenting two different interpretations of the reliance on volunteers for environmental stewardship. Finally, research has also revealed the influence of nonhuman others on environmental identity processes (Jones and Cloke, 2002; Harris et al., 2013; Pearce et al., 2015). Each of these three main findings from political ecology based environmental identity research is discussed in detail below with examples from previous research.

Emphasis on the influence of environmental practices in identity processes reveals the importance of lived experience and everyday life in environmental identity formation (Agrawal, 2005; Nightingale, 2011; Singh, 2013). Such an emphasis also serves to reinforce the processual understanding of identities/identifications developed above,

recognizing that environmental identities shift over time as new environments and environmental practices are experienced (Agrawal, 2005). Agrawal's (2005) influential research in Kumoan, India found that villagers developed identities as forest stewards due to their enrollment in conservation practices by the state. Participation in forest patrols was more influential than traditional demographic factors such as wealth, gender, or ethnicity. Importantly, practices were seen by Agrawal (2005) to influence beliefs, rather than the traditional approach that has argued for beliefs informing practices. Others (Nightingale, 2011; Singh, 2013) have argued that the influence goes both ways, with both practices informing beliefs and beliefs informing practices. However, through emphasizing the importance of practices Agrawal (2005) does open up environmental identity formation to the influence of lived experience and everyday life.

Similar to long and continuing debates in the wider social sciences, environmental identity research has often disagreed regarding the influences of larger structural processes and individual agency on environmental identity processes. Early work, influenced by Agrawal's (2005) usage of Foucault, saw environmental identities as imposed by the state through the use of knowledge as power (Birkenholtz, 2008). While Agrawal (2005) did not construct a completely totalizing picture of environmental identities lacking the opportunity for any individual agency on the part of the villagers, he has still been criticized for constructing too structural of a system of environmental identity processes (Cepek, 2011; Sing, 2013). Li's long term ethnographic work in Indonesia (2007*a*, 2014) has found ambivalence between indigenous villagers accepting the state's conservation logic and wanting to assert their land rights for economic gain, arguing that they both had agency and were formed within matrices of power. Singh

(2013) and Nightingale (2011) also find Agrawal's work too restrictive arguing for the presence of agency in affects and spatial practices, respectively. The tension between structure and agency remains to be resolved in research in environmental identity processes (if it should be, some would argue for the productiveness of this tension) and will remain a major focus of this research.

Finally, environmental identities research has expanded the role of others in influencing identity processes to include others who are not human. Pearce et al.'s (2015) research in Australia found that urban residents form deep connections to trees in their neighborhoods that made them central to people's sense of self and place. Harris et al.'s (2013) research highlighted the importance of the emotions circulating between suburban Americans and their lawns. Identifying emotionally and/or affectively with nonhuman others plays a major role in influencing environmental practices and identities. The following section provides an in depth review of structural, discursive, and material approaches to environmental identifications research.

Political Ecology Approaches to Environmental Identities

Previous political ecology based research into environmental identities can be roughly divided into three types: structural, discursive, and material. Structural approaches that draw upon Foucault's governmentality (1991) examine vertical power relationships and how powerful state and economic organizations work to form norms of attitude and behavior surrounding environmental issues (Darier 1996; Taylor 1999; Agrawal 2005; Li, 2007*a*; Robbins, 2007; Rutherford 2007; Birkenholtz 2008; Kooy 2008; Mawdsley 2009; Gabriel 2011; Baldwin 2013; Ward 2013). Green neoliberalism or

neoliberal environments (Brand, 2007; Heynen at al., 2007a; Perkins, 2009*a,b*, 2011) theorize a reliance on volunteers to produce urban natures as in line with larger structural shifts that have hollowed out the state and its provision of public services. Discursive approaches recognize the power of language in both the imposition of identities from above and resistance to these impositions from below. Conceptual frameworks utilized in discursive approaches to environmental identifications include: performativity, narrativity, and discourse theory (Nightingale, 2011; Hards, 2012; Wright et al., 2012; Singh, 2013). Finally, material approaches bring in the role of affects, emotions, space, place, and the body in influencing environmental identity formations.

Each of the three approaches to environmental identifications has its limitations along with its strengths. Structural approaches drawing upon environmentality and neoliberal environments have been heavily critiqued for portraying a totalizing power of the state and the market to construct environmental subjects, obscuring the agency held by actors other than the state (Larner, 2003; Barnett, 2005a; Ferguson, 2010; Brownlow, 2011; Cepek, 2011; Ferguson, 2011; Singh, 2013). The primary concern with discourse based understanding of environmental identity formation is their emphasis on the discursive at the expense of the material, spatial, and embodied (Gregson and Rose, 2000; Nash, 2000; Fraser, 2001; Alcoff, 2006; Nightingale, 2011). Finally, material(ist) understandings of identity perform important work by bringing space and the body into understanding environmental identities, but often, sometimes as a reaction to overly structuralist applications of the first two approaches, fail to consider the interactions between individual, localized agency and power and larger scale structures of power.

While the previously developed approaches to understanding environmental identity formation provide great insight into human-environment relationships, I will argue that a hybrid political ecology of the body approach adapted from the work of Hayes-Conroy and Hayes-Conroy (2013) provides the strongest means of understanding the relationships between humans, their environments, and identity formation. This hybrid approach, illustrated in Figure One, considers structural, discursive and material influences on identification simultaneously, recognizing that these three fields are fluid and the boundaries between them are extremely fuzzy. Indeed, following Hayes-Conroy and Hayes-Conroy (2013), it is essential to recognize that the three fields are interdependent, with the resultant analytical imperative of considering them simultaneously. Everyday life, expanded upon below, is seen as the ground upon which the three fields and their interactions are lived and experienced.

The short history of examining environmental identity formation has seen the application of many different theoretical approaches, including: governmentality (Hanson, 2007; Li, 2007; Birkenholtz, 2008; Dowling, 2009; Mawdsley, 2009; Seki, 2009; Fletcher, 2010; Gabriel, 2011; Bose et al., 2012; Jepson et al., 2012; Leffers & Ballamingie, 2013; Ward, 2013), narrative identities (Hards, 2012; Wright el al., 2012), discourse theory (Nightingale, 2011), and performativity (Nightingale, 2011; Singh, 2013). There have also been a multitude of hybrid approaches utilizing elements of different theoretical frameworks (Singh, 2013; Nightingale, 2011).

Environmental Identities and Everyday Life

Before reviewing the multitude of political ecology based theoretical frameworks used to explain environmental identifications within the structural, discursive, and material fields, an argument is advanced for the importance of grounding the theoretical approach in everyday life. This is in contrast to emphasis on extreme or catastrophic events. Following Lefebvre (2003, 2004, 2014) and de Certeau (1984), the everyday is seen as the site where humans understand and make themselves and their environments. Furthermore, the everyday is a crucial site of political resistance. For de Certeau (1984), everyday practices allow for a redeployment, or a rewriting of an imposed order, finding spaces of resistance in what are elsewhere seen as totalizing systems. Lefebvre (2003) similarly saw everyday life as a political project, with the goal "to take lived experience as the starting point, and elucidate it in order to transform it (Page 99)." Chatterton and Pickerill (2010) found in their research that everyday practices of doing activism where what constituted political identities and that political values were often expressed through practice. Loftus (2009) extends this realm of political possibility to urban environments: "the conditions of possibility for radical critique are immanent within the socio-natural relation of day-to-day life (page 327)." The everyday has also been theorized as essential to processes of environmental identification through an emphasis on environmental practices such as forest labor, eating, and water gathering in the work of Agrawal (2005), Nightingale (2011), and Singh (2013), finding in the realm of the quotidian sites of both domination and resistance in the (re)production of identities and environments. "Attending to the ways that subjects and socio-natures are deeply material and *bound up in the everyday* thus pushes forward understandings of how power becomes enrolled in

symbolic-material processes (Nightingale, 2011, page 156, emphasis mine)." Nightingale's argument, at least to my reading, emphasizes the importance of not romanticizing or reifying the everyday "as a pure, pristine realm, heroically unbowed by the grubby domination of the powerful (Latham, 2003, page 1998)". While it is an important site of resistance, it is also an important site of domination (Latham, 2003). Indeed, following Foucault (1990), power and resistance go hand in hand and might even be seen as mutually constitutive. So it is not that the extra-everyday should be ignored (Tiwari, 2010), but that it should be given less of an emphasis and grounded in the everyday, as this is where these extreme events are made sense of and their repercussions lived. Indeed, according to Lefebvre: "the extra-everyday rhythms the everyday and vice versa (2004, page 95)." Finally, it is important to recognize that while the approaches to the everyday here have been developed in Marxist traditions, feminist approaches to the everyday have also worked to valorize the importance of lived experience and social reproduction that were (and still are) often ignored in patriarchal social and academic discourses (Seidler, 2010).

Governmentality

Foucault's (1991) theory of governmentality was extremely influential in early approaches to understanding environmental identity (Hanson, 2007; Li, 2007*a*; Birkenholtz, 2008; Dowling, 2009; Mawdsley, 2009; Seki, 2009; Fletcher, 2010; Gabriel, 2011; Bose et al., 2012; Jepson et al., 2012; Leffers & Ballamingie, 2013; Ward, 2013). He saw governmentality as existing in a shift in state practices of government from a

punitive approach towards past transgressions to influencing and guiding future behavior (Foucault, 1991). Foucault's governmentality is connected to his theorizing of biopower (Foucault, 1990; Rabinow and Rose, 2006), where the management of population became the end goal of government, along with his understanding of power as productive rather than simply destructive (Foucault 1990; Gordon, 1991). This management of a population took place through tactics rather than laws, or even the use of laws as tactics, with goal "to arrange things in such a way that, through a certain number of means, such and such ends may be arranged (Foucualt, 1991, page 93)." These tactics in governmentality bring together governing and modes of thought "structuring a field of knowledge and power so that power itself is seen as rational (Hanson, 2007, page 248)." The creation of scientific knowledge as a means of imposing this coercive power upon subjects is an integral component of governmentality. Foucault (1991) wrote of statistics as the science of the state, managing the biopolitics of the population (see also Hacking, 1991). This use of power to create desired subjectivities was seen to have both individualizing and totalizing effects (Foucault, 1983; 1994; Rabinow and Rose, 2006), which could be seen as creating both individual environmental subjects and groups of environmentalists. Finally, the concept of governmentality serves to dispel monolithic, essentialized, and totalized understandings of the state, replacing them with modes of governmentality and government as a practice and process rather than an entity.

Understanding governmentality as a bricolage of modes of managing relationships between men and things, especially things such as "the territory with its specific qualities, climate, irrigation, fertility, etc.; (Foucault, 1991, page 3)", makes human-environment relations a facet of governmentality, although Foucault was never

much of an environmentalist (Darier, 1999). While Darier (1996) may have been the first to use governmentality to understand the production of environmental subjects (but see Luke, 1995 for a more general application of governmentality to environmental politics four years after the English translation of Foucault's' governmentality lectures), Agrawal's (2005) influential book *Environmentality* was instrumental in expanding interest and research in the field. His work in Kumaon, India explains a shift from villagers violently protesting forest conservation to acting as forest stewards. This creation of environmental subjects was achieved through the use of forest statistics to create a new technology of decentralized regulation, characterized by Agrawal (2005) as imagined autonomy, where villagers were serving the needs and desires of the state while enforcing what they believed to be their own priorities. Two important theoretical points can be drawn for Agrawal's (2005) work, first, that environmental beliefs can follow actions (the villagers became environmentalists after being involved in regulation by the state caused them to participate in environmental practices), and second, that environmental beliefs were associated with these practices rather than traditionally associated factors such as wealth, gender, or ethnicity. Practices are similarly used by Althusser (1971) and Robbins (2007) as part of the materiality of ideology influencing identity processes, and this emphasis on practice serves to demonstrate the power of lived experience and the everyday in environmental identifications. Another important use of the term environmentality is deployed by Anderson (2012), representing both the physical, nonhuman environment as well as the social being structured under neoliberalism, providing great potential to close the holes found in many (most)

environmentality studies that fail to consider humans as part of the environment along with the roles of nonhumans in shaping said environment.

Many applications of the governmentality or environmentality framework that drew heavily upon Agrawal's (2005) work followed (Hanson, 2007; Li, 2007*a*; Birkenholtz, 2008; Dowling, 2009; Mawdsley, 2009; Seki, 2009; Fletcher, 2010; Gabriel, 2011; Bose et al., 2012; Jepson et al., 2012; Leffers & Ballamingie, 2013; Ward, 2013). In Philadelphia, Gabriel (2011) used historical archival material to show how the creation of the large Fairmount Park system was used to discursively construct the park as nature apart from the city that was for recreation rather than labor.

The importance of statistics in shifting environmental beliefs and actions is also shown specifically in the realm of forestry by Demeritt's (2001) historical study, where the construction of statistical and visual representations of the declining forests in the United States in the 1870s enforced a new regime of governmentality under the name of conservation. The prevailing image of the American West as a boundless frontier and source of unending natural resources was supplanted by these representations of timber scarcity, creating new environmental subjectivities of scarcity and conservation (Demeritt, 2001).

While the large body of research conducted using environmentality attests to its academic popularity, the approach has also received its fair share of critique as well (Luke, 1997, 1999; Gibson, 2001; Elden, 2007; Rutherford, 2007; Cepek, 2011; Ferguson, 2011; Singh, 2013). One source of this critique is the structuralist and totalizing aspect of many investigations into environmental governmentality that seem to

strip away any sense of agency from actors other than the state (Cepek, 2011). This focus upon a vertical system of power being imposed by the state precludes understanding the role of affect, emotion, and embodiment in the formation of environmental identities (Singh, 2013). It is important to note that Sletto (2005), writing around the same time as Agrawal, framed environmental governmentality in a more positive light, finding that Trinidadian swamp dwellers using their subjectivation as environmental subjects to fight against powerful agricultural interests that were enclosing upon their territory. Sletto's (2005) interpretation of governmentality begins to demonstrate how the approach can be developed in a less totalizing and sinister approach to power. Ferguson (2011) echoes this, pointing out that Foucault was not against the exercise of power or the government of the conduct of others, rather recognizing the potential for such projects to hold progressive political potentialities. Certainly using Foucault to critique oppressive impositions of neoliberal rationalities has its place, but should be followed by the construction of alternatives (Ferguson, 2011). While it is certainly harder to say what one is for than what one is against, it is essential (Ferguson, 2010).

Similarly, it is also important to take into account some of Foucault's later works (1988*a*, *b*, 1990*b*, 1993) that look at the positive construction of the self along with the domination of the self by others:

> "he has to take into account the interaction between those two types of techniques-techniques of domination and techniques of the self. He has to take into account the points where the technologies of domination of individuals over one another have recourse to processes by which the individual acts upon himself … governing people is not a way to force people to do what the governor wants; it is always a versatile equilibrium, with complementarity and conflicts between techniques which assure coercion and process through which the self is constructed or modified by himself (Foucault, 1993, pages 203-4)."

In his 1982 seminar at the University of Vermont, Foucault further defined technologies of the self as those

> which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality. (1988*b*, page 18)

Indeed, this interplay between techniques of domination and techniques of the self reflects Foucault's understanding of power as productive (1990) rather than simply repressive: "The analyses I have been trying to make have to do essentially with relationships of power. I understand by that something other than the state of domination (Foucault, 1987, page 114)." This idea of power presupposes agency, only acting upon those who can respond (Gordon, 1991), otherwise it would be an occurrence of the state of domination which Foucault is trying to avoid. There are similarities here with Spinozan frameworks that distinguish between power as *potestas* and *potentia,* a power to direct the acts of others as opposed to a power to act (Ruddick, 2008, 2010) and Negri's distinction between biopower as biopotere (power creating the *bios*) and biopotenza (*bios* creating power (Casarino and Negri, 2004)). An incorporation of techniques of the self alongside technologies of domination would improve environmentality studies' understanding of the formation of subjects, recognizing the constant negotiations between outside structural forces and individual and/or group agency.

Furthermore, Anderson (2012) argued that considering affect and biopower simultaneously corresponds with the constant excesses of life that escape biopower in a Foucauldian non-totalizing regime "It is not that life has been totally integrated into techniques that govern and administer it; it constantly escapes them (Foucault, 1990, in Anderson, 2012, page 29)." Li (2007) and Rutherford (2007) argue that governmentality is comprised of continuous and contested processes that are always becoming rather than one that is ever completed, focusing upon governmentalities rather than governmentality. Recognizing the fractured nature of governmental regimes allows resistance to arise within them rather than a political program that does nothing more than critique the current conjecture and "wishfully rely on some messianic 'rupture' in the political (Williams et al., 2014, page 2811)." Another important critique of applications of governmentality theory is its inability or unwillingness to look beyond the state in the creation of environmental identifications (Rutherford, 2007). Timothy Luke's work (1997, 1999) shows the power of international environmental nonprofits to create environmental subjects, echoing Gramscian and Althusserian concerns over the role of civil society in the formation of the masses and revealing the weaknesses of governmentality approaches that do not look beyond the state and/or fail to consider the imbrication of the state and civil society. Furthermore, the transnational governmentality proposed by Ferguson and Gupta (2002) is an important addition to focus upon the nation-state given the vast networks of many environmental nonprofits, once again looking at the influences of civil society on structural limitations to agency. Finally, Gibson (2001) has argued that the voice of the subject is often missing in research on

governmentality and Elden (2007) has critiqued the lack of consideration of the spatiality of governmentality.

If consideration of these critiques is incorporated into studies of environmental identity processes using a governmentality approach, the theory can provide a strong framework for understanding environmental identity formation. Following Elden (2007), the governmentality lecture is a speculative look at Foucault's thought at the time (1978) rather than any sort of completed analysis or methodological treatise. Furthermore, following Gordon's (1991) introduction to governmentality, these conjunctural analyses may be more in keeping with Foucault's (1991) formulations, which sought to demonstrate the lack of an essential state, instead framing government as a practice or activity rather than a thing: "the state is no more than a composite reality and a mythicized abstraction, whose importance is a lot more limited than many of us think (page 123)." Li (2007) provides a strong example of a non-totalizing and conjunctural approach to environmentality, recognizing two major limits to governmentality 1) the difficulty of managing people and 2) the limits in the form of available knowledges and techniques. I would add the materiality and agency of nature as another limit to environmental governmentality, for, as Guattari (1989) says "there are limits to the technico-scientific power of humanity. Nature kicks back (page 134)." Her work in Indonesia found that attempts to create environmental subjects inadvertently but inherently created groups with connections that could mobilize in a situated and contingent manner to contest the state's conservation logic to suit their own ends. Jepson et al. (2012) provide another example of resistance to environmentality, as West Texas ranchers and farmers with strongly held skeptical environmental identities supported

wind farms for their economic benefits without coming to believe in global warming. Strengths of the environmentality approach include: an emphasis on the importance of practices in forming environmental identities (Darier, 1996; Agrawal, 2005; Birkenholtz, 2008), an examination of the relations between the material and the discursive rather than a privileging of one realm (Ettlinger, 2011; Srinivasan, 2014) (although some have claimed that governmentality has favored the discursive over the material (Kooy, 2008)), and although Li (2007) argues that Foucauldians do not often pursue this approach, an examination of both the rationale of governmental approaches and how they are played out in concrete historical and geographical situations.

Environmentality based research has worked well to develop understandings of structural influences upon environmental identity formation. Neoliberal environmental governance has also been widely utilized to theorize structural transformations in urban environments, volunteerism, and identity processes.

Neoliberal Environmental Governance

Critiques of neoliberal natures have grown exponentially in both depth and breadth recently, both as general overviews and collected volumes (Heynen and Robbins, 2005; Heynen et al., 2007; Bakker, 2010; Castree, 2010) and research addressing specific topics such as ecotourism (Duffy, 2008), biotechnology (McAfee, 2003), water (Bakker, 2007; Swyngedouw, 2007), carbon trading (Bond, 2012), green consumerism (Thoyre, 2015), and most relevant for this study, urban greenspaces, parks, and forests (Heynen and Perkins, 2005; Perkins, 2009*a*, 2009*b*, 2011). Unfortunately, similar to early research

in political ecology (Robbins, 2012), the principal focus of this stream of research has been rural rather than urban (Perkins, 2009*b*), although it has answered well the general call to explore the relations between neoliberalism and the environment (Brand, 2007). These critiques are informed by wider critiques of neoliberalism that focus upon the retreat of the state and a reliance upon nonprofits and volunteers (Rose, 2000; Giroux, 2005; Harvey, 2005; Mitchell, 2009). While the neoliberalism of nature also includes privatization, enclosure, and valuation (Heynen and Robbins, 2005), the focus here is on the governance aspect of neoliberal nature, or "the institutional political compromises through which capitalist societies are negotiated (Heynen and Robbins, 2005, page 6)." Focusing on governance helps to build a bridge between environmentality and neoliberal natures research through an investigation of the types of environmental citizens that are desired (and actually created) by neoliberal projects and regimes. Foucault himself made this connection between governmentality and the economic sphere: "the essential issue in the establishment of the art of government: introduction of economy into political practice (1991, page 92)."

There is a vast body of literature on neoliberal cities from many different critical stances, and the research on neoliberal urban natures is growing. However, unfortunately the great majority focuses upon the often disastrous social and environmental effects of neoliberal nature in cities rather than the intended and actual influences upon individual and group identities. This is one of the major gaps in scholarship that this research begins to address, especially regarding the individual and group responses to increased dependence upon urban environmental volunteerism. Fortunately Brand (2007) provides a generalized interpretation of neoliberal urban environmental management's goals in

fostering environmental citizenship and identities. He sees urban regimes' dependence upon volunteerism as a shift in responsibility for urban environmental management, dependent upon citizen's enrollment as environmental stewards: "urban environmental agendas increasingly depend on and actively promote changes in collective and individual behavior in a diversity of spatial scales and settings, in turn producing a new frame of reference for personal decision-making and conduct in everyday life (Brand, 2007, page 624)."

The few specific analyses of urbanized neoliberal natures have used a Marxist political ecology framework to demonstrate the attempts to enroll citizens as environmental stewards and the resulting uneven development. Perkins (2011) takes a Gramscian approach to understand neoliberal hegemony in urban forestry provision in Wisconsin. He finds that hegemony is created though pedagogical approaches that motivate residents to plant trees through education about their monetary benefits. Perkins sees this as a further marketization of both urban residents and urban forests: "pedagogy is not just about the trees as it appears on the surface; it is about the *'proper' market relations for producing* trees within a capitalist economy (page 563, emphasis in original)." Similar conclusions are drawn by Perkins in his examination of urban forests (2009*a*) and parks (2009*b*) in Milwaukee. Reliance upon the public and nonprofit organizations to provide urban parks is seen as both an austerity measure and attempt to create environmental citizens that take individual responsibility for urban social and environmental reproduction (Perkins, 2009*b*). Campbell's (2015) analysis of New York City's Plant One Million campaign is more ambivalent about the neoliberal nature of this tree planting program that relies heavily on volunteers for successful implementation, but

acknowledges that one of the goals of using volunteers as tree planters and stewards is to foster a sense of environmental awareness and responsibility.

Another important critique of the neoliberal dependence on volunteerism for social and environmental reproduction instead of the state is that it can maintain and even increase uneven development due to correspondences between uneven development and uneven voluntary sector capacity (Fyfe and Milligan, 2003; Pincetl, 2003; Perkins, 2009*a, b*). Given the neoliberal reliance on localized and individualized environmental responsibility (Perkins, 2009*a, b;* Harris, 2011), areas that are unable to respond to calls to take charge of their own urban environments are increasingly marginalized. This marginalization is explained away by the state and others as a failure of residents to take interest in and responsibility for their neighborhoods (Brownlow, 2006, 2011). Conway et al. (2011) found this to be the case in Toronto, where resident associations were drivers of uneven urban forest canopy cover, Heynen and Perkins (2007) found that reliance on private production of trees in Milwaukee increased inequities in urban forest distribution, and Holifield and Williams (2014) found that friends of parks volunteer groups were more likely to remain active in the whiter and more affluent neighborhoods of Milwaukee. Given that many studies have found that unequal access to urban forests, parks, and other types of greenspaces is present based upon racialized and class based socioeconomic markers (Iverson and Cook, 2000; Pedlowski et al., 2003; Heynen and Lindsey 2003; Jensen et al., 2004; Brownlow, 2006; Heynen, 2006; Heynen et al., 2006; Comber at al., 2008; Landry and Chakraborty, 2009, Dai, 2011; Pham et al., 2012), the uneven ability of neighborhood based voluntary sector organizations to improve these uneven urban environmental conditions

is a major concern. Recent studies have shown that volunteers tend to be whiter and more educated than the general public (Fisher et al., 2011). However, recent research has also exposed the complexity of measuring access to greenspace and the importance of taking the historical development and change of urban neighborhoods into account when analyzing these issues of spatial justice (Boone et al., 2009). Furthermore, Brownlow (2011) reveals that urban environmental volunteerism is not necessarily undertaken at lower levels in unevenly developed and socioeconomically marginalized areas. Finally, correspondences between different levels of urban environmental volunteerism and different types of neighborhoods could alternatively be explained by divergent preferences for urban forests, parks, and greenspaces (Kaplan and Talbot, 1988; Hester et al., 1999; Fraser and Kenney, 2000; Payne et al., 2002; Lohr et al., 2004; Elmendorf et al., 2005; Elmendorf et al., 2005b; Ho et al.; 2005; Brownlow, 2006, 2011; Bujis et al., 2009; Pincetl, 2010; Perkins, 2011). Despite these caveats, correspondences between uneven development and uneven voluntary sector capacity remain major concerns when social and environmental reproductions are the victims of neoliberalization. Future research should work towards developing a better understanding of the correspondences between urban environmental stewardship acts and urban environmental change (Svendson and Campbell, 2008) in both privileged and marginalized neighborhoods.

Similar to the critiques leveled at environmentality and governmentality, much of the literature problematizing neoliberalism and neoliberal natures focuses upon the rigid and structuralist ways it has been theorized (Larner, 2003; Barnett, 2005*a*; Ferguson, 2010). Along with theoretical critiques, empirical research has demonstrated the

flexibility and contingency of projects many would deem neoliberal, along with the possibility of individuals and groups coopting neoliberal programs to suit their own goals, rather than simply being coopted by them (Fyfe and Milligan, 2003; Gilbert and Phillips, 2003; Gibson-Graham, 2006; Blomley, 2007; Ferguson, 2010; Brownlow, 2010; Elwood, 2015; Jackson and Palmer, 2015). Finally, performing neoliberal natures research may serve to obscure the issues with capitalist natures in general (Bakker, 2010).

Empirical work with community organizations relying heavily on volunteer labor has also revealed the difference, hybridity, and contingency in projects stemming from what many would characterize as neoliberal ideologies. Elwood (2015) calls attention to the limitations of conceptualizing volunteerism in community organizations as either resisting or being coopted by neoliberalism, finding in her work with groups in Chicago that instead organizations do both at different times in creative and strategic ways. Ferguson (2010), through analysis of pro-poor neoliberal projects in Africa, finds that organizations can appropriate certain neoliberal moves without being part of the ideological project of neoliberalism, arguing for the ability for the migration of techniques across purposes and projects, as Lefebvre (2014) did theoretically in 1981. Specifically regarding the neoliberalization of nature, Gilbert and Phillips (2003), Blomley (2007), Bakker (2010), and Brownlow (2011) all argue that either these projects can be reappropriated for progressive purposes or do not necessarily have negative effects upon all actors involved. Gilbert and Phillips' (2003) research in Toronto found that neoliberal reduction of urban environmental services resulted in volunteers engaging in performative environmental citizenship, claiming their right to nature in the city. Blomley (2007) found that attempts to create private defensible space in the style of crime

prevention through environmental design in Vancouver instead result in the construction of a commons for the community, arguing that "even neoliberalism can contain, if you like, forms of neo-socialism (page 187)." Bakker (2010) argues that geographers should not abandon researching neoliberal natures, but is disappointed that "subtler questions of identity, and the divergent views on markets within environmental organizations and environmental movements more generally, are rarely systematically addressed (Page 728)." Brownlow's (2011) research in Philadelphia, discussed further below, found that African Americans volunteering in Cobbs' Creek Park, which had been neglected by the City for decades, were able to insert their alternative identities from below rather than being coopted by the state. Finally, Jackson and Palmer (2015) found that indigenous people in Australia were able to use neoliberal commodification of nature in creative ways to serve their own ends.

Finally, theorizing about neoliberal natures draws attention away from capitalism's negative influences on nature (Bakker, 2010). While theorists have constructed detailed critiques of the differences between neoliberalism and previous regimes of accumulation (E.g. Rose, 2000; Giroux, 2005; Harvey, 2005) most of them would not be satisfied with simply a return to the Keynesian compromise between capital and labor. Indeed, given the many understandings developed of capital's inevitable implication in ecological crises (Harvey, 1993, 1996; O'Connor, 1996; Foster, 1999; Smith, 2008), critiquing neoliberal natures can seem very reformist, begging the question: should be not be critiquing capitalist natures rather than neoliberal natures?

Scholarship on neoliberal natures that takes the above critiques into account has potential to illustrate impositions of power from above in urban environmental identity

processes without constructing completely structural and totalizing accounts that eliminate the possibility for individual and group agency. According to Bakker (2010) "scholarship on neoliberal natures has already done a great deal to move us beyond hegemonic, oversimplified understandings of neoliberalism (Page 720-1)." Indeed, while highly critical of the neoliberalization of Milwaukee's park system, Perkins (2009*a*) still acknowledges that neoliberalization of the environment can and does result in positive outcomes. Similarly, his analysis of citizen and nonprofit led reforestation efforts in the same city admits that "these kinds of governances do *much* good (Perkins, 2009*b*, page 403, emphasis in original)." The critique of voluntarism does not mean communities should not be involved in urban reforestation, "rather, community participation should be encouraged and buttressed by state agencies with diverse staff who are accountable to the public for their dedicated investment in equitably distributed urban forests and other forms of green infrastructure (Perkins, 2015, page 30). Holmes' (2015) careful empirical research in private protected areas in Chile find that they are often employed strategically, rather than through a true acceptance of neoliberalized values. Finally, Heynen and Perkins (2005), drawing inspiration from Brenner and Theodore (2002), use a more relational and process based approached to neoliberal natures: "The internal relations of neoliberalization, as a process, provide an ideal focal point for investigation, as opposed to an increasingly impenetrable *thing* called *neoliberalism* (page 102, emphasis in original)." These understandings of the neoliberalization of urban environments as processes rather than completed things, always in contact and conflict with other forms of urban projects and regimes, provide some assistance in dispelling critiques of totalizing and overly structural approaches to neoliberal natures and

neoliberal urban environmental citizens. Following Campbell (2015) in her assessment of New York's Million Trees Campaign "to critique wholesale the neoliberal context is to miss the real commitments to advancing equity and environmental quality within that space; while to universally laud the achievements of the campaign is to miss the opportunity for further advances toward those ends (page 242-3)." What I still find lacking is a sense of individual agency in the face of neoliberalized urban environments, as citizens often are portrayed as having a binary choice between enrolling themselves as neoliberal environmental volunteers or continuing to live in marginalized urban environments. Ward (2013) also argues that is as important to see what the targets of neoliberal governmental projects think about them, rather than just the principles behind rules and plans

Unfortunately discursive influences have not been investigated as extensively and for the most part we need to turn to the wider field of identity theory whose further integration could improve our understanding of environmental identity formation and reformation. Underutilized discursive approaches to environmental identification include: narrative, discourse and performativity.

Narrative Identity

Narrative theorists of identity largely draw inspiration from the work of Paul Ricoeur, who characterized life as "*an activity and a desire in search of a narrative* (1991, page 434, emphasis in original)", and are often situated in sociology and psychology backgrounds. According to narrative identity theory, individuals create

multiple characters and plots for themselves, telling stories about their lives to make sense of the continuously shifting and decentered identities that they (re)construct. There are differences among narrative identity theorists based on the level of coherence given to these narratives, which is connected to emphases on large or small narratives. While some narrative theorists of identity (e.g. Bruner, 2004) focus upon big stories or autobiographies, the majority instead emphasize the importance of small stories (Schrag, 1997; Holstein and Gubrium, 2000; Vila, 2000; 2005; Bamberg, 2006). It is thought that small stories help in revealing how tellers negotiate their identities all of the time, rather than simply in the face of extreme events (Bamberg, 2006). Focusing upon this play of characters and plots in everyday life strikes a middle ground between theories of coherent and incoherent narrative identities, recognizing the power of discursive and spatial formations to shift identifications, but still allowing for some core of coherence that's binds together experiences and allows for them to make sense (Freeman 2010; Gergen and Gergen, 2011). "Individual people may perform and 'live with' rather contradictory and antithetical narratives (Prokkola, 2014, page 443)", but in this 'living with' they are integrated into the practices of daily life.

This focus on the small stories, or a "sociology of the mundane as it applies to the selves in our society (Holstein and Gubrium, 2000, page 221)"and even more tellingly: "the self as a 'practical project of everyday life' (Villa, 2005, page 233)", provides great promise for synthesis with the emphasis on everyday life presented by Lefebvre (2003), de Certeau (1984; de Certeau et al., 1998; Sheringham, 2006), and especially Loftus (2009, 2012), who has applied the previous two theorists' philosophy of the urban quotidian to understand urban human-environmental interactions through a Marxist

political ecology lens. Narrative theory also holds promise for synthesis with the theories of performativity discussed below, as the construction of narratives is seen as a performance, recognizing the power relationships inherent in where and to whom the narrative is being constructed (Prokkola, 2014). Despite its utility for understanding human-environment relationships, there have only been a few attempts to use narrative identity theory to understand environmental identifications (Hards, 2012; Wright el al., 2012). Wright el al. (2012) found that corporate sustainability managers used different characters to help bridge the contradictions between their personal and organizational discourses, maintaining a sense of coherence thusly. The ability of narrative to explain the negotiation of structural forces discursively here brings a heightened sense of agency not present in most governmentality approaches. Indeed, Vila (2005) argues that narrative identity theory can act as the bridge between structure and agency, as the ability to choose between characters and plots is seen as why specific discourses are chosen to be adopted, while still recognizing that different individuals in different places and times have differing abilities to choose between discourses. Hards (2012) used narrative research to help understand why her research subjects identified as environmentalists, finding that transformative moments often spurred future environmental actions. Her work supports the arguments above surrounding the connections of narrative and everyday life, as she found that using narrative approaches helped to understand environmental practices and identities as lived experience. This represents one of the gaps in the literature to be filled by this research, as theories of narrative identity are incorporated into the hybrid environmental identity framework developed here through a

consideration of the power of discourse and storytelling in influencing environmental identities and practices.

Discourse Theory

Along with narrative identity theory, the post-marxist discourse theory of Laclau, Mouffe and Žižek (Laclau and Mouffe, 1985, 1987; Žižek, 1989, 1996, 2000) has many insights that can improve understandings of human-environment relations and environmental identification processes. Building upon the advancements in a nonessentialist Marxism forged by Antonio Gramsci (1971) and Louis Althusser (1971, 2006), Laclau and Mouffe suggest that nothing in society is purely foundational or superstructural; that the "state, economy, and civil society are interpenetrated (Torfing, 1999, page 38)." Also essential to this school of discourse theory (recognizing here the differences between the three scholars along with their similarities, for some of the differences between Laclau and Žižek, see (Butler, 1993: CH 7)), is their less authoritative and totalizing conception of hegemony as:

> an articulatory practice instituting nodal points that partially fix the meaning of the social in an organized system of differences. The discursive system articulated by a hegemonic project is delimited by specific political frontiers resulting from the expansion of chains of equivalence. (Torfing, 1999, page 109)

Following Howarth (2010), it is important to see this conception of hegemony as a political practice that includes both the making and breaking of discourse coalitions and their maintenance by the constituting forces. Furthermore, it is important to trace the

social forces that result in the ossification of some hegemonic projects and the dissolution of others.

The advantage that this style of discourse theory brings to understanding environmental identifications is a more nuanced conceptualization of power and the state that is absent in much of the governmentality literature. Class and economic concerns are brought into questions of identity without dominating them, viewing class as a continual process of becoming that along with other facets (such as "race', sexuality, ability, etc.) are mutually implicated in a never ending process of identity formation and reformation (See also Gibson-Graham et al., 2000; Chatterton and Pickerill, 2010), which I read as more open than Hardt and Negri's (2004) theory of class as defined by collective struggle. Similar to Butler (1997*a*), the stable distinction between the cultural and the material is challenged, legitimating revolutionary social movements that do not follow orthodox notions of class from Marxist critiques. Finally, a more nuanced approach to power struggles is also brought into the equation, enriching the connection between environmental identifications and social movement theory. The struggle over framing (both within social movements and between social movements and their antagonists) (Tarrow, 1992; McAdam et al., 1996; Benford and Snow, 2000; Martin, 2003), can be seen as counter-hegemonic projects attempting to articulate nodal points centering on their preferred position (which is essentially not necessarily related to class based interests). As an example, the work by the Pennsylvania Horticultural Society and others to promote the benefits of urban trees could be seen as attempts to fix the meaning of urban trees as an essential component of urban societies through the politics of signification, framing them as positive (Benford and Snow, 2000) and ignoring the

negative aspects of urban trees (Lyytimaki and Sipila, 2009), especially those that are poorly maintained (Brownlow, 2006).

Conceptually, post-marxist theories of hegemony and struggles over framing advance understanding of the processes of collective identity formation, which was introduced into social movement theory as a response to the rationalist resource management theories of social movement formation (Friedman and McAdam, 1992; Stoecker, 1995; Polleta and Jasper, 2001). Importantly, processes of collective identity formation are just as dependent upon others (and other groups) as individual identity formation (Johnston and Klandermans, 1995). Another related important contribution of Laclau and Mouffe towards understanding social movement formation is their understanding of the universal and the particular regarding identity formations. Gamson (1995) argues that recent social movement theory has investigated collective identity but has not considered the desire to destabilize identities from within social movements, stemming from "a general dilemma of identity politics: Fixed identity categories are both the basis for oppression and the basis for political power (Page 390)." Li (2004) emphasizes the tension between too narrow of an articulation of identity to build a social movement with power and too broad of an identity to retain any meaning and have an other to define itself against. Butler (1993) argues against a politics of fixed identity:

> It seems important, then, to question whether a political insistence on coherent identities can ever be the basis on which a crossing over into political alliance with other subordinated groups takes place, especially when such a conception fails to understand that the very subject-positions in question are themselves a kind of 'crossing', are themselves the lived scene of coalition's difficulty (115)

This contradiction is answered by Laclau and Mouffe through an understanding of both concepts conditioning each other, problematizing the binary between universal and particular (Torfing, 1999). There is a kind of circularity between the two where hegemonic projects universalize but never fully, eventually breaking back up into their constituent particularities after failed attempts to articulate universally, over and over again. Here is where their concept of chains of equivalence, which "expresses a sameness that transcends particular identities (without undermining their particularity) (Torfing, 1999, page 174)" is particularly relevant, as it shows how individuals can create more universal groups without losing their individuality. Chains of equivalence (although the term is not used) are demonstrated by the work of Chatterdon (2006), where he shows the power of dialogue with the opposition at protest events. Hardt and Negris' concept of the multitude as a set of different social subjects "whose constitution and action is based not on identity or unity (or, much less, indifference) but on what it has in common (2004, page 100)" is also similar to chains of equivalence in retaining individual differences within a group that works toward a common political goal without establishing a fixed identity. In other words, the conceptual goal of displacing fixed group identities without disabling the ability of group political struggle "replaces the contradictory couple identity-difference with the complementary couple commonality-singularity (Hardt and Negri, 2004, pages 217-218)."

Performativity

Judith Butler's (1990, 1993, 2002, 2010) theory of performative identity, despite its initial focus upon gender, has been extremely influential throughout the social sciences, including research into environmental identifications. While she herself acknowledges that it is difficult to say exactly what it is (1990, xv), and her suspicion towards grammar (1993) suggests that we do not yet have the language to express and understand the circular temporality and/or retroactive nature in identifications (See also Choi, 2013), I interpret performativity as a continuous process of constructing understandings of the self through both bodily acts and other discursive processes. The implications of taking a performative approach are: "that the gendered body is performative suggests that it has not ontological status apart from the various acts which constitute its reality (Butler, 1990, page 127)." So rather than gender (or an environmental identity) existing as a pre-discursive "metaphysical substance that precedes its expression (Butler, 2010, page 147)", it is instead an effect of its continuous performance. This radical constructivist position is a reaction against feminists who view gender as constructed but sex as natural (e.g. Alcoff, 2006), which Butler (1990) believes reinforces the nature/culture binarism and its oppressive effects. Performative research into environmental identifications has focused upon hybrid approaches that interweave Butler's theory with other understandings of identity formation. Stuart Hall (1996) called for an incorporation of performativity and the work of Butler into the understanding of "racial" identity formation. Indeed, she argued against other feminists who prioritized gender and/or sex:

> though there are clearly good historical reasons for keeping 'race' and 'sexuality' and 'sexual difference' as separate analytic spheres, there are also quite pressing and significant historical reasons for asking how and where we might read not only their convergence, but the sites at which the one cannot be constituted save through the other. (Butler, 1993, page 168)

Hoping to add environmentalized identities to this mutual constitution of racialized and sexualized identification, I argue that performativity also has much to offer the theorizing of environmental identifications.

While these three theoretical frameworks centered in the discursive field have much to offer the understanding of environmental identity, they are not without their limitations. A primary concern with all of them is their emphasis on the discursive at the expense of the material, spatial, and embodied (for critiques of the lack of theorizing embodiment in Butler see: Gregson and Rose, 2000; Nash, 2000; Fraser, 2001; Barad, 2003; Alcoff, 2006; Nightingale, 2011). While this is certainly a valid critique and identity theorists using narrative, discourse or performative theories should take care to incorporate other approaches that make more room for the body, I think it can still be found in some of these approaches, especially Butler's. She extends the realm of discourse beyond the realm of speech well:

> the model of the speaking subject fails to provide an adequate way of understanding how performativity works. After all, there does not have to be an actively speaking subject or discrete act of enunciation for a discursive operation to wield its effects. (Butler, 2010, page 150)

Refuting both radical constructivist and essentialist positions, Butler argues: "the debate between constructivism and essentialism thus misses the point of deconstruction altogether, for the point has never been that 'everything is discursively constructed'

(1993, page 8).” Similarly, Laclau and Mouffe put forth a strong response to charges of social constructionism leveled against them: “the fact that a football is only a football as long as it is integrated within a system of socially constructed rules does not mean that it thereby ceases to be a physical object (1987, page 103).” Howarth’s configuration of discourses as “*relational configurations* of elements that comprise agents (or subjects), words, actions, and things (2010, page 311, emphasis in original)” helps to open up the understanding of discourse beyond simply linguistic practices, as does Choi’s (2013) call to study the materiality of discursive formations, and Williams’ (1977) argument that “signification, the social creations of meanings through the use formal signs, is then a practical material activity; it is indeed, literally, a means of production (page 38)”. Furthermore, they are less concerned with the understanding of state based (and beyond the state) structural forces that nuanced investigations of governmentality can provide, although Laclau and Mouffe do propose structural limits to agency, according to Torfing’s reading: “nothing could be more wrong than to turn the assertion that everything is discursively constructed into the proposition that everything can be discursively constructed in any possible way (1999, pages 152-3).” Paradoxically, Butler has often been critiqued for what is seen as a lack of agency in performativity, based upon a reading of her that assumes that performativity always works and assigns it a strong level of structural power. Such a reading fails to recognize the Lacanian constitutive lack in the formation of the subject that Butler’s performativity shares with Laclau and Mouffe (Torfing, 1999): “performativity never fully achieves its effect, and so in this sense ‘fails’ all the time; its failure is what necessitates its *re*iterative temporality, and we cannot think iterability without failure (Butler, 2010, page 153, emphasis in

original).” The iterability and citationality of performativity is where Butler (1990) locates her theory of agency, with the continuous investment in subjection opening up possibilities, although it is important to recognize that for her, as with Foucault, subversion can only happen when working within the law: ““If subversion is possible, it will be a subversion from within the terms of the law, through the possibilities that emerge when the law turns against itself and spawns unexpected permutations of itself (Butler, 1990, page 127).” More work is needed to understand concretely when and why performativity fails, it is not enough to simply say that it does and therefore there is agency (Seidler, 2010), similar to the need discussed above to deepen investigations of hegemonic practices and projects to understand why certain articulations fail and others succeed (Vila, 2005; Howarth, 2010). This is similar to the critique that discourse theory is unable to explain why one interpellation is chosen rather than another (Vila, 2000). Vila proposes that considering narrative identity along with discourse can solve this issue, as what he and others (Taylor, 1989; Schrag, 1997; Holstein and Gubrium, 2000) identify as the moral stance of narrativity is seen as crucial to understanding the process of identifications. In other words

> my identity is defined by the commitments and identifications which provide the frame or horizon within which I can try to determine from case to case what is good, or valuable, or what ought to be done, or what I endorse or oppose. (Taylor, 1989, page 27)

This search for narrative coherence among the different characters and plots constituting an individual’s identity is seen as helping to understand why certain identifications are chosen over others:

> the multiple interpellations and tropes that surround us are somehow evaluated in relation to the plot of our narratives, in such a way that evaluation triggers a complex process of negotiation between narratives, interpellations, and tropes, a process that can end in very different ways. (Vila, 2005, page 246)

Finally, Massey (1992, 1995) has critiqued Laclau and Mouffe for their lack of consideration of space, especially Laclau's opposition of the spatial and the political while remaining sympathetic to their larger project of an anti-essential radical democracy, which is troubling when considering the importance of space in identification processes discussed below and the importance of the spatial narratives of everyday life that are so important to de Certau (1984). These concerns prompt me to argue that a hybrid approach that takes the strengths of each framework along with additional influences on identity provides for a more nuanced and powerful understanding of environmental identifications. These additional theoretical considerations that have not been fully integrated into the previous approaches to environmental identity include: materiality, spatiality, affect and emotion, and embodiment.

Hybrid Approaches and Material Concerns

The recent work of Nightingale (2011) and Singh (2013) that incorporates a diversity of theoretical concerns into their investigations of environmental identifications will be used as foundations for this hybrid approach. Nightingale (2011) combines concerns surrounding the relational production of identities, place, and space (Rose, 1996; Knowles, 1997; Whatmore, 1997; Casey, 2001; Ahmed, 2004; Anderson, 2004*a*, *b*; Browne, 2007; Datta, 2008) with theories of embodiment and materiality, through an

examination of eating together as embodied, material and spatial practices that provide opportunities for the construction of new power dynamics between people. In contrast to traditional understandings of space as a container and place as a background, "from this perspective places are not passive stages on which actions occur, rather they are the medium that impinge on, structure and facilitate these processes (Anderson, 2004a, page 255)." Everyday life is essential to this the relational production of identities, place, and space, as Lefebvre's work (2003; 2014) shows the influence of the lived on how people and space mutually produce each other.

The body receives similar treatment, as this stream of research has "urged a move beyond the depiction of bodily matter as passive material upon which discursive, representation regimes act, to come to see it instead as an active agent in the unfolding of social activity (Hayes-Conroy and Martin, 2010, page 269)." Embodied theories of identity also help to dispel the Cartesian mind-body dualism by recognizing that the body and the self are one (Schrag, 1997; Lefebvre, 2004; Carolan, 2009; Hayes-Conroy and Martin, 2010; Seidler, 2010; Tiwari, 2010), and Alcoff (2006) argues that it is not possible to understand identification processes without incorporating the body. Recognizing the importance of lived bodily experience and practice in identity (re)formations helps to dispel the rationalist and modernist divisions between nature and culture which placed the mind in culture and the body in nature as an animalistic source of subjective emotions to be transcended (Seidler, 2010). Feminist scholars have also shown that the nature/culture dualism is mirrored by a male/female binary that dismisses unvalued bodily, emotional, and irrational experiences as feminine (Merchant, 1982; Milton, 2002; Seidler, 2010). This dualism has led to an undervaluing of emotional

attachments to place and their role in identity formation and motivating individuals to participate in political protests and actions (Woods et al., 2012). Finally, these theories of embodied practice and identities see bodies (like identities) as processes rather than entities (Valentine, 1999; Hayes-Conroy and Martin, 2010).

Bringing in space to these embodied theories of identity allows for an understanding of the relational development(s) of spaces, places, identities, and bodies, all mutually constructing and reconstructing each other constantly (Grosz, 1994; Tiwari, 2010; Woods et al., 2012). "Bodies and places are woven together though intricate webs of social and spatial relations that are made by, and make, embodied subjects (Nast and Pile, 1998, page 4)." The palimpsest is a useful metaphor for thinking through these processes, as the constant layering of meanings and matter on places, spaces, bodies, and identities (re)produce these entities, and similarities with the iterability emphasized by performativity (Butler, 1990) are apparent. Rose summarizes these ideas well, although perhaps from more of a structuralist and totalizing framework than Nightingale (or I) would be comfortable with: "human being is emplaced, enacted through a regime of devices, gazes. Techniques which extend beyond the limits of the flesh into open spaces and assemblies (1996, page 143)." Similarly, the failure of identification can produce a (material) displacement: "the disorientation and uncertainty about where one stands as a person seems to spill over into a loss of grip on one's stance in physical space (Taylor, 1989, page 28)." This is illustrated through the spatial regulation of ritual purity, where spaces and individuals are simultaneously defined based upon who is allowed to enter where (Nightingale, 2011). Anderson's (2004*b*) work on environmental direct action is also useful here, finding that the daily practices of protest activity have the power to shift

the identity of both places and individuals. These processes are where Nightingale (2011) finds space for agency, for while she agrees to the ambiguous nature of the subject found in Althusser (1971), Foucault (1991) and Butler (1990, 1997) (among others), where the subject chooses to invest in its own subjectivity (for it is better to be a subject than to be nothing at all), it is also argued that previous theorizing of this ambiguity has been too constraining, finding that "it is the interstitial spaces of the material and the symbolic that the ambivalence of the subject is so potent (page 161)."

Singh's (2013) powerful intervention into the environmental identity literature shares some of the concerns of Nightingales' (2011) but also expands upon the important theoretical consideration of affect. Ahmed's (2004) affective economies are applied to nature, where: "emotions *do things*, and they align individuals with communities – or bodily space with social space – through the very intensity of their attachments (page 119, emphasis in original)." Singh (2013) sees daily practices of caring for degraded forests as affective labor, with these practices of care transforming both the forests and individual and collective identities. Hardt and Negri (2004) have also developed a theory of affective labor "that produces or manipulates affects such as a feeling of ease, well-being, satisfaction, excitement or passion (page 108)", "even a sense of connectedness or community (Hardt, 1999, page 96)", but for them it falls under the broader category of immaterial labor that also includes the production of: "information, knowledges, ideas, images, relationships, and affects (page 65)". Singh's work expands their concept of affective labor to include both material (forests) and immaterial (affects) products and relationships with both human and non-human others, and although they acknowledge that "immaterial labor almost always mixes with material forms of labor (Hardt and

Negri, 2004, page 109)" the blurring (or even collapsing) of the boundaries between the material and immaterial is missing from their account of affective labor and its products. When considering these expansions their concept of immaterial labor as biopolitical labor that produces "who we are, how we view the world [and] how we interact with each other (Hardt and Negri, 2004, page 66)" is a powerful way of understanding affective influences of environmental identifications. Finally, it is also important to also expand their definition of affective labor to include what might be thought of as negative or uncomfortable affects such as fear (Ruddick, 2010) and to recognize that the affects and relationships generated through this type of labor do not necessitate contact with others, human or non-human (i.e. the entertainment industry and the virtual transmission of affect (Hardt, 1999)).

Affects as embodied relationships of becoming together with the forest are found to be the reasons why villagers care for and preserve forests over which they have little or no rights, through the creation of individual and collective identities as "forest people" (Sing, 2013). Here the boundaries between the self and the environment are seen as porous and human subjectivity is shaped by engagement with the total environment, not just the social. Indeed, following Ruddick (2010): "for Spinoza, the individual refers equally to human individuals (themselves composite individuals, formed of many discrete parts) or nature in it entirety, or a range of non-human things or bodies (Page 26)." Deleuze's concept of the pleat or the fold is useful here to trouble ideas of interiority/exteriority and think of bodies as flows, processes, and relations (Doel, 1996; Rose, 1996), along with Lefebvre's project of Rhythmanalysis: "If there is difference and distinction, there is neither separation nor an abyss between so-called material bodies,

living bodies, social bodies and representations, ideologies, traditions, projects and utopias. They are all composed of (reciprocally influential) rhythms in interaction (2004, page 43).” Finally, Ahmed (2004) argues that the circulation of emotions “create the very effect of the surfaces or boundaries of bodies or worlds (page 117)” when they stick to subjects, aligning imagined subjects with imagined communities (Anderson, 1991). Anderson develops a nice summation of this type of research: “attending to affective life orientates inquiry to how new ways of living may emerge (2010, page 29).” This emergence of new ways of living might help to understand why certain hegemonic projects succeed in their articulation, as the fantasmical is seen as the emotional and passionate identification with new ways of being and becoming (Howarth, 2010.). Although the emphasis is upon affect and embodiment, the importance of materiality is implied here through the participation of forests in identity formations, and of course the body itself is also a material object (Singh, 2013). While Nagel’s critique that social movement scholars have not adequately investigated “the role of feelings and emotions in accounting for the rise and decline of collective action (2001, page 127)”, is certainly still the case, recent work has explored the affective and emotional nature of the political and social movements (Merrifield, 2010; Roelvink, 2010; Clough, 2012; Routledge, 2012, Woods et al., 2012; Haberlen and Spinney, 2014), but has focused on protests and other extreme events. Anderson (2012) has theorized that the aleatory nature of affective life may offer a political counter to normalizing processes of biopower that attempt to direct both individual and collective affective life, and this research will begin to fill the empirical knowledge gap around the affective and emotional components of everyday environmental politics.

Distinguishing between emotion and affect acknowledges the debate between the two theoretical approaches in geography over the last decade or so. However, the papers in response to Pile's (2010) attempt to assert the importance of psychoanalysis for both schools (Bondi and Davidson, 2011; Curti et al., 2011; Dawney, 2011; Pile, 2011) display the divisions between *and* within the two schools, making clear both the persistence and richness of differing approaches to emotion and affect. Bondi and Davisdon (2011) develop a strong argument, drawing upon Wittgenstein, for leaving the two concepts vague and fuzzy. Indeed, this theoretical fuzziness acknowledges the messiness of both geographical practice and thought (Bondi and Davidson, 2011). In addition, they argue that "efforts to delineate sharp and stable conceptual boundaries around and between emotion and affect are misplaced, and entail a form of categorical violence (Bondi and Davidson, 2011, page 595)." I tend to agree, and would extend the argument to the other theoretical approaches to identity presented here. However, the point of Anderson and Harrison (2006) that developing a theory of emotional geographies needs "some form of positive statement about what emotions *are* or *are not* … even if multiple and only offered to be subject to revision (page 335, emphasis in original)" if the field is not to instead encompass all and be in reality a social geography is also worth taking into consideration. When combined with Pile's (2011) argument that emotional geographies are too reluctant to develop definitions of the field of study and many theories of affect are too eager to do so, I feel comfortable with some sort of middle ground of multiple, fuzzy, tentative definitions of the fields, similar to that which has been developed for the other theoretical frameworks discussed here that recognizes how they have been utilized differently by different researchers and shifted over time. To generalize, research on

emotional geographies seek understanding of emotions as ways of being and becoming, knowing and doing, drawing inspiration from humanist, feminist, and non-representational geographers. On the other hand, geographic research on affect focuses on the capacity of bodies to affect and be affected, often drawing inspiration from Spinozan/Deleuzian approaches. Affect is often seen as non- or pre- cognitive (Pile, 2010), separating it from emotions. This separation has drawn critique from feminist geographers (Thien, 2005), who consider it a continuation of characterizations of emotion as feminine and subordinate to masculine reason, and find many theories of affect to be mechanistic, renewing Cartesian separations of the mind and the body. Troublingly, Hardt and Negri (2004) argue that emotions are purely mental and affects are both mental and embodied. To me it is hard to see how both terms are not always both mental and embodied, and drawing distinctions between processes that happen in material and mental space seems unproductive. While the tensions between and within geographies of affect and emotion have certainly been productive, they have also been at times acrimonious. I think maintaining these tensions, while keeping the two fields open for reinterpretation and refusing to privilege one over the other is the best way to proceed.

While the hybrid approaches of Nightingale (2011) and Singh (2013) go farther than previous research in incorporating the diverse influences on environmental identity processes, I argue that they do not go quite far enough. What is missing is an in depth consideration of the structural forces influencing environmental identity (governmentality and neoliberal environmental governance) along with the discursive (performativity) and material (affect and emotion, embodiment, and spatiality) spheres that are so skillfully illuminated. For example, Nightingale's (2011) work in Nepal masterfully shows how

spatialized daily bodily practices open up the possibility of subverting structural power and producing new subjectivities, but fails to explain how and why this subversion and assertion of agency is a rare occurrence. Similarly, Singh's (2011) clearly elucidates the formation of biopower from below, but does not provide a thorough understanding of the biopower from above that her participants were struggling collectively against. This is understandable, given the many poststructuralist influences they draw upon, along with the concern to give agency to the individual and the local. The challenge is to balance both concerns, allowing for agency while still accounting for structural forces. Finally, the introduction of narrative identity theory can also help to understand the ambiguity of the subject, as the plots and characters that people construct to make sense of themselves help to explain why one subject position is chosen over another (Vila, 2005).

Conclusion

The theoretical understanding of environmental identities developed here hat adapts the political ecology of the body approach of Hayes-Conroy and Hayes-Conroy (2013), represented in Figure One, incorporates strengths from and corrects for the weaknesses of several different approaches. This epistemological pluralism recognizes that each approach, especially when considered through the lens of the everyday, has something to contribute to the development of environmental identities that may not be present in all spaces and times. Despite the additional challenges raised by proceeding from this sort of diverse theoretical field, the benefits to be gained from simultaneously considering structural (governmentality, neoliberal environments), discursive (narrativity,

performativity, and discourse theory), and material (embodiment, affect/emotion, and spatiality) components of identity formation are worth the effort (Hayes-Conroy and Hayes-Conroy, 2013). This simultaneous examination of the different frames allows investigation into the overlaps, interactions, and feedbacks between structural, discursive, and material considerations, locating environmental identities at the intersection of the three frames and recognizing the fuzzy, blurred lines between them. Understanding identities and identifications as processes helps to locate the overlaps and interactions between the three realms of the theoretical Venn diagram, recognizing the fluid nature of environmental (and all) identities and allowing for the production of new subjectivities.

Structural inequities in urban tree and park provision that lead to neighborhoods becoming micro urban heat islands simultaneously create affective atmospheres (Anderson, 2012; Simpson, 2013) of discomfort during Philadelphia's hot summers that can stimulate negative processes of identification with these urban environments, providing an entry point for the body in governmentality and neoliberal urban governance through the practices of everyday life that are often neglected in discursive, material, and hybrid approaches to environmental identity that are reacting against perceived overly totalizing structural approaches. To bring in the discursive realm, these negative identifications with the neighborhood could be intensified though narrativization of both the structural neglect and material lack of comfort, displaying how the discursive and structural fields can mutually constitute oppressive systems of power. Importantly, the material and discursive can also push back against structural forces and provide agency to those who are marginalized, or a struggle for agency by individuals and groups that is rarely considered in structural approaches. For example, the uncomfortable affective

atmospheres caused by neighborhood neglect could result in residents taking matters into their own hands and planting trees or taking other measures to improve these negative affective atmospheres engendered by structural neglect. Or, the joyous affects produced through the embodied labor with others (human and non-human) could also serve to increase participation in stewardship and lead to the production of new subjectivities. Discursively, the narrative of neglect could be used to lobby for material improvements. It is unknown ahead of time if these reactions from discursive and material realms will succeed in subverting or minimizing the influence of top down structural powers, but at the very least they open the opportunity for the production of new subjectivities. In other words, following Sharp et al., place "can be understood as solidifying configurations of 'social relations', 'material practices', elements in 'discourse' and forms of 'power' (2005, page 25.)"

Others have emphasized the advantages of using multiple theories and frameworks to construct and analyze data (Hammersely and Atkinson, 1983; Li, 2007*a*), and as Deleuze so aptly put it; "A theory does not totalize; it is an instrument for multiplication and it also multiplies itself (Foucault and Deleuze, 1972, page 2)." Recognizing the inherent tensions involved in using multiple (and possibly contradictory) theoretical approaches, Li (2007*a*) characterizes the goals of her approach as "not to construct a supertheory, an improbably seamless amalgam. Rather, I tolerate the untidiness and tension introduced by different theoretical traditions because of the distinct questions they pose, and the tools they offer to guide my analysis (2007, page 19)." Of course, this representation is only a heuristic device, and as with all typologies, simplifies the nuanced interactions between and within theoretical approaches and the

delineated realms of the structural, discursive and material (Sharp et al., 2005). Performativity, for example, has been shown to be both discursive and embodied (material) (Butler, 2003, 2010), despite the many critiques (Gregson and Rose, 2000; Fraser, 2001; Alcoff, 2006) of its' privileging of the discursive. Furthermore, Nightingale (2011) shows how the symbolic (or discursive) and the material can often collapse into each other in complex processes of identity, Kooy argues that "within governmentality, thought itself is conceived of as a material practice, linked to a complex array of apparatuses of material production (2008, page 48)", and following Williams (1977) we should "see language and signification as indissoluble elements of the material social process itself (Page 99)". Finally, it is important to emphasize that this characterization of the interplay of the three frames is one of many possibilities, and not privilege one or the other as the site of power or resistance to it.

CHAPTER 3

METHODOLOGY

Introduction

This section details the tripartite research design. First, the City of Philadelphia and its geography of tree planting and urban gardening are introduced as the study area. Second, the research participants are described. The third section details the three qualitative methodologies undertaken in this study: in-depth interviews, participatory observation, and walking tours. The fourth section explains the analysis carried out on the results. Finally, the appendixes (A-C) provide the recruitment text, a sample qualitative interview guide, and the walking tour script.

Along with practical, temporal, and budgetary concerns, the history and current geography of urban environmental volunteerism make Philadelphia a prime location for research into environmental identifications. The city has always been interested in maintaining a thriving urban environment, as is evidenced by the establishment of a street tree ordinance in 1700 (Gerhold, 2007) and the expansion of the Fairmount Park System to over 3,000 acres by 1869 (Beers, 1982). The recent Mayoral term of Michael Nutter has seen the city return to its environmental roots through a broad campaign for sustainability seeking to make Philadelphia the greenest city in America (Nutter, 2009). A large portion of this sustainability renaissance is predicated upon volunteer time and labor to improve Philadelphia's urban environments, making the city an excellent location for the study of urban environmental volunteers' identity processes. Furthermore, the high levels of diversity and segregation (US Census, 2011; 2012) make

it important to ensure that environmental identifications and material urban environments are chosen and not enforced from above.

Participants were Philadelphians engaged in local everyday neighborhood environmental stewardship through tree plantings, urban gardening, and park cleanups. This focus upon everyday and local activities was chosen to align with the previously discussed importance of everyday life and lived experience in the formation of environmental identities (and material urban environments). The in depth nature of the three qualitative methodologies performed for this study precluded the formation of a representative sample of Philadelphians participating in these activities. Furthermore, the population participating in volunteer urban environmental stewardship in Philadelphia is unknown, making it impossible to draw a representative sample of participants.

Three qualitative methodological procedures were performed for this study: in-depth interviews, participatory observation, and neighborhood walking tours. The selection of these methods was guided by the theoretical concerns expressed previously surrounding environmental identity processes: Structural (environmentality), Discursive (discourse, narrative, performativity), and Material (embodiment, affect and emotions, and space). The first qualitative method employed in this study was in-depth qualitative interviews of at least an hour in length with individuals participating in everyday local neighborhood environmental stewardship activities. The interviews were mostly open ended, encouraging individuals to tell stories about their environmental concerns and practices, however potential prompts for important core theoretical issues that did not arise naturally in the conversation are detailed in Appendix One. The second method performed for this research was ten participatory observation events, including tree

plantings and prunings, urban gardening events, and neighborhood cleanups. By digging, planting, watering, and collecting trash, I attempted to uncover the embodied emotions that these activities create, along with the motivations that stem from them both within myself and within participants through observation and discussion. Furthermore, understanding how bodies occupy and negotiate space enables understandings of both (Tiwari, 2010). This method supplements the traditional qualitative practice of in-depth interviewing with the intention of having the body talk along with talking about the body (Hayes-Conroy, 2010). The third and final method performed was neighborhood walking tours with participants. The selection of the walking tour method is inspired by the previous discussions of the importance of the everyday and lived experience in identity formation, and participants were asked to guide the researcher through the local places that are essential to their understanding of the City, its environment, and their place in it.

Study Area

The City of Philadelphia is the setting for this study. In the late 1600's, when William Penn was considering the original plan for Philadelphia, he envisioned a "widely dispersed, low-density, countrified town," a "Greene Country Towne," as many European cities of the time were struggling with problems of fire and disease that resulted in part from cramped confines and lack of planning (Dunn and Dunn, 1982). The grid plan developed by Thomas Holme in 1687 included wide streets and five squares set aside as public parks. The city was originally planned with 530 individual one acre and half-acre parcels meant for large estate houses, however landowners divided the original lots into

as many as 20 lots and row housing, thus eliminating orchards and gardens (Dunn and Dunn, 1982). Philadelphia established a street tree ordinance in 1700 (Gerhold, 2007). Later in the city's history, Fairmont Park was established in 1885 in part to protect the Schuylkill River, which supplied the City's drinking water (Weigley, 1982). By 1869 the Fairmount park system included 3,000 acres (Beers, 1982). There is also a history of valorizing urban forests in Philadelphia, as the City established a street tree ordinance in 1700, its' citizens petitioned to have street trees planted in 1792, and hired what was possibly the first urban forester in the United States in 1896 (Gerhold, 2007).

Today, Philadelphia is the largest city in Pennsylvania, with an estimated population of approximately 1.5 million in 2011 (US Census, 2011). The city (41% white) is more ethnically diverse than both the United States (78.1% white) and Pennsylvania (81.9% white). The city is also poorer, with 25.6% of residents below the poverty line between 2007-2011, compared to 14.3% and 12.6% in the United States and Pennsylvania, respectively. This poverty is unequally distributed, as evidenced by Philadelphia having the fourth highest Gini Coefficient, a standard measure of inequality, among the top twenty-five most populous counties in the United States (U.S. Census, 2012). Geographically, Philadelphia is comprised of 134.1 square miles of land area, with an average population density of 11,379.5 persons per square mile.

The recent increased emphasis on and movement towards urban environmental improvements make Philadelphia an ideal site for this research topic, as this will hopefully make residents more aware of their environmental identifications through an expanded local discourse of the urban environment as detailed below. The City published a sustainability plan in 2009, in which Mayor Michael Nutter expressed his wish to make

Philadelphia the greenest city in America (Nutter, 2009), similar to statements made by Los Angeles' Mayor Antonio Villaraigosa in 2005 (Pincetl, 2010). GreenWorks, the sustainability plan created by a Sustainability Working Group of municipal employees with input from nonprofits, business and civic leaders and the general public, focuses upon five areas (an interesting divergence from the traditional "three e's" of sustainability): Energy, Environment, Equity, Economy, and Engagement and includes 15 targets. Target 15, the single target for the engagement area, ambitiously calls for the use of "new technologies and old-fashioned word of mouth to engage every Philadelphian in this important work (Nutter, 2009, page 7)." Amid concerns that Philadelphia's sustainability efforts would end when Nutter left office in 2016, a ballot measure to amend the City's Home Rule Charter and make the Mayor's Office of Sustainability permanent was created for the Fall of 2014 elections. The ballot measure passed with approximately two thirds approval, further demonstrating Philadelphia's commitment to sustainability (philly.com). The City's Green Cities, Clean Waters stormwater management plan is also innovative, seeking to manage stormwater through green infrastructure rather than underground pipes (Philadelphia Water Department, 2011). The EPA has since sought to expand the model provided by Green Cities, Clean Waters nationally (United States Environmental Protection Agency, 2011). Environmentalism also has a strong presence in local media outlets, as Dilworth and Stokes (2013) found hundreds of articles present in the major local outlets between 2002 and 2009, which is reflective of the widespread grassroots environmental activism in Philadelphia, ranging from urban agriculture (Vitiello, 2012), to student groups, to sustainable business networks, to environmental justice movements (Sicotte, 2012).

Finally, the high levels of diversity and segregation mentioned above make it important to ensure that environmental identifications and material urban environments are chosen and not enforced from above. The next two subsections provide an introduction to the geography of tree planting and urban gardening in Philadelphia, as these were the two main local everyday urban environmental stewardship activities focused upon in this study. The following section describing the participants details why these two activities were selected.

The Geography of Tree Planting in Philadelphia

Tree planting to increase the canopy coverage of Philadelphia's urban forest is a major element of the current sustainability plan. Target 11 of the City's sustainability plan is to increase tree coverage toward thirty percent in all neighborhoods by 2025 (Nutter, 2009), and many of the initiatives to achieve other targets (such as rainwater diversion and reduction of atmospheric air pollution) in the sustainability plan also rely upon extensive tree planting. As the current tree canopy estimates are approximately twenty percent based upon one meter resolution remotely sensed data from 2008 (Oneil-Dunne, 2011), reaching this target would require a great deal of work. Unlike many other major cities, the majority of Philadelphia's trees are publicly owned (Nutter, 2009), either in the Fairmount Park system or as street trees. Given the many budgetary pressures faced by the City, it is struggling to maintain its current urban forest stock while also increasing the number of trees. These difficulties in urban forest management have led Philadelphia to create partnerships with nonprofits and other institutions to fill the gap in funding and technical skills. The city recognizes that it is

does not have the funds to complete these ambitious objectives alone, necessitating the significant involvement of private citizens in tree planting and the aggressive pursuit of public-private partnerships with neighborhood, civic, and business groups.

> *Greenworks Philadelphia* recommends that Philadelphia build upon the tremendous contributions already being made by such organizations as the PHS and UC Green to develop a large-scale public tree-planting campaign. The effort would rely upon nonprofits, corporations, individuals and community organizations, as well as Fairmount Park and other departments, and use technology to harness the power of those groups. (Nutter, 2009, page 60)

The Philadelphia Horticultural Society's (PHS) Tree Tenders program has been instrumental in this regard, training thousands of volunteers in basic tree planting and maintenance since its establishment in 1993. Currently there are forty nine neighborhood Tree Tenders groups active in Philadelphia, covering a large portion of the City (PHS Online). Many of these groups are part of the local neighborhood or civic association. The spatial distribution of these groups is displayed in Figure Two. The neighborhoods covered by Tree Tenders groups are diverse in both class and racialized composition (U.S. Census Bureau, 2010).

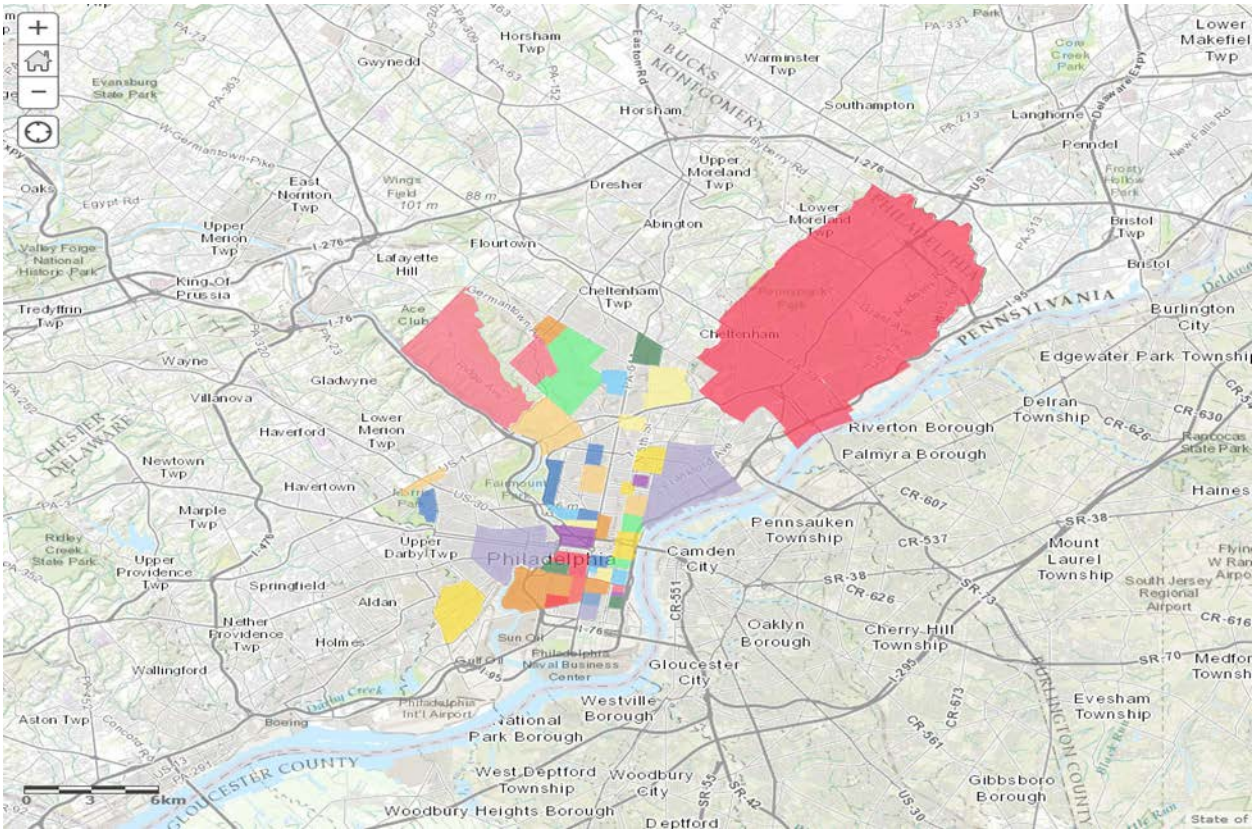

Figure Two: Tree Tenders Groups in Philadelphia

(Source: PHS Online)

The Geography of Urban Gardening in Philadelphia

Philadelphia has long been an important center of urban and community gardening (Vitiello, 2012), the origin of which Vitiello and Nairn (2009) locate in the 1897 founding of the Vacant Lot Cultivation Association. Their fieldwork in the summer of 2008 located 226 gardens in Philadelphia, totaling approximately 60 acres and producing over 2 million pounds of crops estimated in value at $4.9 million (Vitiello and Nairn, 2009). These figures are a precipitous decline from data generated in the mid-1990s, attributed to a combination of an aging population of gardeners, a reduction in

available funding for urban gardens, and the Neighborhood Transformation Initiative of Mayor John Street clearing many vacant lots that had guerilla gardens on them (Vitiello and Nairn, 2009). Target 10 of the City's sustainability plan is to bring local food within 10 minutes of 75 percent of residents (Nutter, 2009), and while the main focus of the suggested programs to reach this ambitious target relate to more commercial large scale urban farming issues of production and distribution, there are also programs to increase urban gardening and community gardens. This is an ambitious target, given that the average ingredient in the average Philadelphian's meal is grown 1,500 miles away (Vitiello, 2012), which illustrates the minor impact that urban farms and gardens have made on the average resident.

Philadelphia's Neoliberal Urban Sustainability Movement?

The growing interest in and policies toward environmental sustainability in Philadelphia have the potential to both increase environmental sustainability and social inequities, as research in Philadelphia (Vitiello, 2012) and other cities (Jonas and While, 2007; Gibbs and Kreuger, 2007) has revealed linkages between urban sustainability initiatives such as urban gardening (Qastel, 2009; Rosol, 2012; Vitiello, 2012; Reynolds, 2015), urban forestry (Heynen at al., 2006) and brownfield redevelopment (Pearsall, 2010) and increased marginalization. Concerns of sustainability producing greater uneven development are exacerbated when urban greening is conducted based upon neoliberal models relying on public/private partnerships, nonprofit groups, and volunteers rather than state provision of public services (Fyfe and Milligan, 2003; Pincetl, 2003; Perkins,

2009a, b). Philadelphia's Fairmount Park System is a prime example of neoliberal urban environmental governance (Gabriel, 2016), as it is one of the most poorly funded large urban park systems in the United States, relying upon over one hundred friends of park groups to perform volunteer urban environmental reproduction, estimated at hundreds of thousands of hours of volunteered labor in 2000 (Brownlow, 2011). Furthermore, the limited municipal funding allocated to parks in the city is increasingly directed towards parks in whiter and more affluent neighborhoods (Brownlow, 2011). Similarly, urban agriculture in Philadelphia receives limited municipal funding (Vitiello, 2012), instead relying on nonprofits and private donations of capital and labor. Finally, the reliance of the city on public private partnerships and volunteer labor to reach its goal of increasing urban forest canopy has been discussed above. Concerns surrounding the reliance on non-state actors for urban environmental reproduction in Philadelphia and among the participants in my study are discussed in depth in Chapter Five.

Participants

Participants were individuals who engage in everyday local neighborhood environmental stewardship and activism through tree plantings, urban gardening, and park cleanups in Philadelphia. This focus on local participation in environmentalism rather than activism such as protests is due to the previously discussed importance placed upon the everyday in the formation of environmental identities (and material urban environments). While these types of events may be weekly or monthly rather than daily occurrences, when contrasted with extreme events such as protests they remain in the

realm of the everyday and local, as the results of these environmental efforts are part of the daily spatial activities of participants who are affected by the urban forest and broader environmental landscape in their neighborhoods. However, as discussed previously, a rigid separation between the everyday and the extra-everyday should be tempered by an understanding of how they interact (Lefebvre and Levich, 1987), and perhaps the participation in the everyday types of events my research focuses upon instead reflects a different type of political desire or passion than protests. Indeed, it is unknown whether my participants also took part in protests alongside their everyday local volunteer urban stewardship. Following Lefebvre and Levich (1987), tree plantings, urban gardening, and park cleanups are seen as the beginnings to a change in space and the city that can transform the everyday, and the local is seen as the "primary scale where abstract environmental principals or values intersect immediate quality of life concerns (Svendson and Campbell, 2008, page 1)". These three activities were also selected due to the emphasis on embodiment, emotions, and affect in the theoretical framework developed for this study. While of course everything is embodied, the labor involved in planting trees, gardening, and collecting trach involves the hard work and interaction with urban environments and elements not found in more mundane environmental activities such as recycling. The importance of others (and the other) for identity processes is also a reason for the chosen activities, as they are all group activities that allow for identification and disidentifications. Furthermore, the previously discussed emphasis on tree planting in Philadelphia also serves to increase their importance and everydayness for environmentalists. Participants may not even see themselves as environmentalists, environmental stewards, or activists and it is important not to interpellate them as such

from the researchers' perspective (Althusser, 1971). Furthermore, it is also important not to foreclose the realm of environmental practices around tree planting, urban gardening, and park cleanups. Participants may participate in many other practices that they view as environmental and may perhaps be more important to the formation of their environmental identities than tree planting and park cleanups. I took care in the methodology to draw out these other practices and understand their influence upon processes of environmental identity.

Although the goal was not to develop a representative sample of either Philadelphia residents or the demographics of Philadelphians who participate in these types of environmental stewardship activities, as the in depth nature of the qualitative methods precludes constructing a large enough sample, as detailed below, I attempted to recruit from diverse environmental groups engaged in everyday neighborhood environmental stewardship and activism so that respondents from different age, class, gender, and ethnic compositions could be reached. These diversity criteria were chosen due to their prevalence as social markers thought to influence environmental identifications (Agrawal, 2005; Singh, 2013). Results from New York suggest that the population involved in volunteer tree stewardship is more white, educated, and female than the average population of the city (Fisher et al., 2011), reflecting national trends in volunteerism, but it is unknown whether these characteristics hold for volunteer participants in other locations and other volunteer urban environmental stewardship activities. This method of purposeful sampling helped understand the influence of these identifications on environmental identifications, and vice versa. Furthermore, participants were drawn from different levels of participation in these neighborhood environmental

stewardship activities, from those in leadership roles to occasional participants, as this might influence their environmental identifications. Snowball sampling (Fink, 1995), where participants identify other possible candidates meeting the criteria outlined above was used for recruiting participants in this study, and several interviews resulted from suggestion from previous interviewees. Specific organizations that were contacted to attempt to reflect the diversity of Philadelphia in the research participants are shown in Table One and Figure Three. Unfortunately only half (five out of ten) of the targeted tree tenders groups were both responsive and willing to provide interviewees (Kensington South, Philly Tree People, Oak Lane, University City Green, and Passyunk Square). The text of the recruitment letters (distributed via email) is shown in Appendix A. Finally, Philadelphians who did not participate in local neighborhood environmental stewardship activities were excluded from this study, a population which should be a focus of future research to begin understanding the differences (or lack of differences) in the environmental identifications of participants and non-participants. The demographics of the research participants are detailed below for the results of each method.

Organization	**Activities**
Kensington South	Tree Tenders, Neighborhood Clean Ups
Philly Tree People (Fishtown)	Tree Tenders
Oak Lane	Tree Tenders
Overbrook	Tree Tenders
University City Green	Tree Tenders
Northern Liberties	Tree Tenders
Passyunk Square	Tree Tenders
Olney	Tree Tenders
Northeast	Tree Tenders

Table One: Targeted Tree Tenders Groups

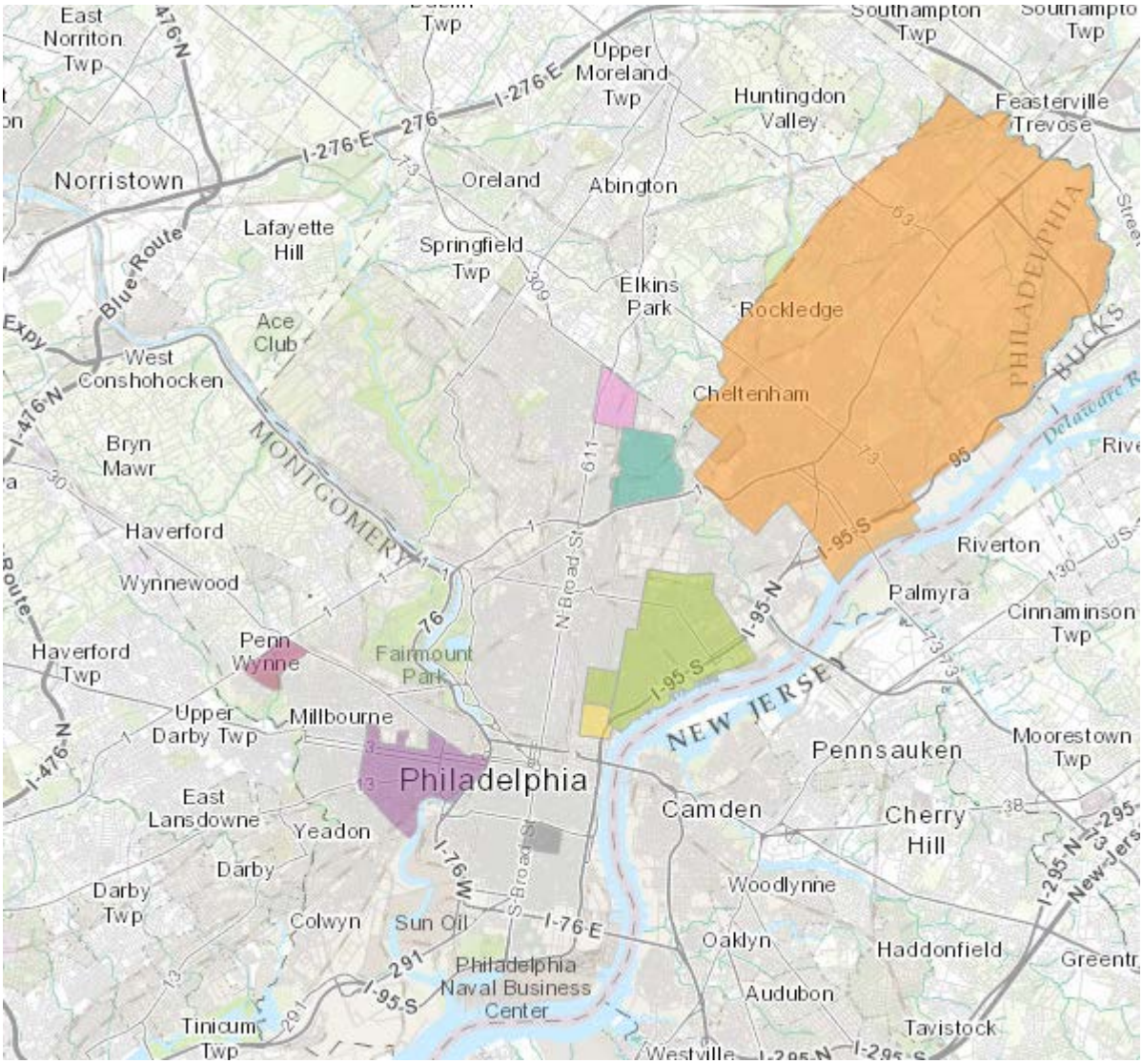

Figure Three: Targeted Tree Tenders Groups

Source: (PHS Online)

Methods

"To pay attention to the texture and the skin of the everyday is to valorize that which is perceived as mirage (Harrison, 2000, page 501)."

"The ear, the eyes and the gaze and the hands are in no way passive instruments that merely register and record (Lefebvre, 2004, page 83)."

Introduction

Three qualitative methodological procedures were conducted for this study: in-depth interviews, participatory observation, and neighborhood walking tours. These three different types of research activities were selected to address all of the different theoretical concerns expressed previously surrounding environmental identity (re)formation: Structural (environmentality), Discursive (discourse, narrative, performativity), and Material (embodiment, affect and emotions, and space). Table Two illustrates the connections between the approaches and the chosen methods, which are detailed in the description of each method below. Similarly to the Venn diagram of the three fields (structural, discursive, and material) in Figure One, these connections and the theoretical concerns are separated largely for heuristic purposes. This research looks to move beyond conventional social science research that "locks academic inquiry into a closed logic of *either* material *or* mental approaches to studying human life (Anderson, 2002, page 302, emphasis in original)", recognizing the need to dissolve Kantian boundaries between reason and emotion. Furthermore, following Hammersley and Atkinson (1983), these social science methods are seen as refinements of techniques used in everyday life, integrating the concern for practice and lived experience in environmental identification processes into the research performance (Latham, 2003). Finally, this choice of methods is influenced by critiques such as Latham's (2003) of human and cultural geography's lack of creative, experimental, and playful engagement with empirical work that attempts to "enliven more positively our vision of what human-geography methodologies might be (page 1994)" after the poststructural turn and critiques of traditional social scientific methods. These playful methodological

experimentations are targeted at capturing the processual nature of the everyday; at seeing it as an open ended, undecided bricolage of practices and emergent processes rather than a fixed object in and of itself (Harrison, 2000). The hybrid methodology developed here attempts to map onto the hybrid theoretical framework developed in the literature review (see Table Two), and the connections between each methodological technique and theoretical frame are detailed in depth below. Viewing research as a performance involving researcher and participant (and trees, vacant, lots, shovels, and many other "things") helps to stay grounded to the idea of identity as a series of identifications rather than some sort of stable enduring self, to remain oriented towards the process (and the gaps within it) rather than some sort of teleological endpoint (Latham, 2003).

In-depth Interviews

The first qualitative method employed in this study was thirty in-depth qualitative interviews of at least an hour in length with individuals participating in everyday local neighborhood environmental stewardship activities. These activities included tree care (pruning and planting), gardening, and neighborhood cleanups, with some participants taking part in more than one type of activity. Roughly a third were involved in neighborhood tree care and two thirds were urban gardeners, along with a few who only took part in neighborhood cleanups. Slightly less than half of the interviewees were female, and slightly less than a third self identified as people of color. While these

Approach	Qualitative Interviews	Participatory Observation	Walking Tours
Structural			
Environmentality	Questions on governmentality & other structural issues		Structural factors in neighborhood
Material			
Embodiment	Questions on embodiment	Embodied component of environment practices	Embodied practice of walking
Affect and Emotions	Questions on affect and emotions	Feelings created through environmental practices	Affect and emotions of the neighborhood
Spatiality	Questions on spatial practices		Negotiations of space
Discursive			
Performativity	Performative aspect of interviews	Performative nature of environmental practices	Performative character of walking tours
Narrativity	Narrative aspect of interviews		Spatial narratives

Table Two: Connecting Theory and Methods

demographics are not necessarily representative of the Philadelphians participating in these (or other) local neighborhood environmental stewardship activities (or Philadelphians in general), developing such a representative sample would be prohibitive to gathering the rich depth of data developed in this study. The interviews resulted in data surrounding the influence of structures, discourses, and materialities upon environmental identities.

The interviews were mostly open ended, encouraging individuals to tell stories about their environmental concerns and practices, constructing narratives together that explained their identifications, attitudes, beliefs, behaviors, and emotions (Prokkola,

2014). However, there were some prompts attempting to reach core theoretical issues around environmental identifications if they did not arise organically in the conversations with participants. These include: governmentality and other structural issues, interactions between environmental identifications and other identifications, affect and emotions, embodiment, and spatial and material practices. Specifically regarding structural issues, I asked participants how they would rate the environmental conditions in their neighborhood and who they felt was responsible for those conditions. Structural prompts often moved quickly into a discussion of the job that they felt the city was doing in maintaining the urban environment in their neighborhoods. Prompts towards discursive issues asked how the way people talked about their neighborhoods influenced their thoughts and actions towards it and how their relationships with other participants influenced their participation in stewardship activities. Finally, prompts towards material issues asked how participating in stewardship made them feel, if they enjoyed the physical nature of stewardship and being outside, and how the environment of their neighborhood influenced the different paths they took to navigate in their daily life. The performative and narrative nature of interviews and conversation allowed for these aspects of environmental identity construction to also be examined through this method (Hammersley and Atkinson, 1983; Atkinson and Coffey, 2003). Construction and performance are indeed telling metaphors for the narrative interview process, as the interviews are seen as constructing rather than simply transferring knowledge (Prokkola, 2015). Potential prompts that were revised through review by expert qualitative researchers are detailed in Appendix B.

The open nature and extended length of these interviews allowed for participants to provide a much more nuanced and rich portrait of their environmental identities and the complex processes that they continually arise from than that which would be the result of traditional survey procedures. The interviews were recorded and transcribed, with notes taken as well in case of technological issues and to develop a context for the transcripts. A few of the interviews took place in noisy locations such as coffee shops and cafes where recording was not an option and for these interviews it was necessary to rely solely upon my notes and memories of the research performances. Reflexive journaling after each interview helped me to understand the results of the interviews along with my place in producing and interpreting those results, in an attempt to understand rather than eliminate my effects as a researcher upon the results (Hammersley and Atkinson, 1983).

The approach to research as an experimental performance detailed above necessitates recognizing the shifting positionalities and relations of researcher and researched throughout the research process. Furthermore, the approach to identity as identification, as shifting, fluid, and emergent while also being historical, reinforces researched and researcher positionalities as different in different times, places, and spaces. So, while it is easy to write of my positionality as researcher in stable and essentialized terms of an educated white male from a middle class background, of course it is much more complicated and messy than that, and my positionality was always complicated by the relations with the positionality of the research participant(s) I was interacting with. Furthermore, I encountered participants at different levels of interaction, some after already working together in one of the participatory observation events, and others simply through an email or telephone contact. Some participants I had known and

worked alongside for years, and others I was meeting for the very first time the day of the interview. The interview experiences were often more comfortable with those that I had previously known, and it sometimes took ten or fifteen minutes to develop the amount of openness and conviviality that I hoped for in these interviews with people I was just meeting that saw me more in the essentialized researcher role describe above. The challenge was to step out of this role, to convey that I was interested in their thoughts and feelings, and that every answer was a good answer, rather than participants trying to produce answers and conversation that they thought I would be interested in.

Interview data was supplemented with the results of the 2014 Trees of Philly Story Contest, which was coordinated by TreePhilly, a Philadelphia tree planting program run by the city's department of Parks and Recreation in partnership with local nonprofits and businesses (Treephilly.org.). The tree stories contest was designed to gather stories from Philadelphians about how and why specific trees were significant to them, making it a valuable source of data on the emotional and affective relationships that local residents had with their favorite trees. The nine winning entries out of almost 120 submissions were analyzed textually to provide increased evidence of the influence of trees on environmental identity processes.

Participatory Observation

The participatory observation consisted of engaging in ten neighborhood based environmental stewardship events, including tree plantings and prunings, urban gardening celebrations, and neighborhood cleanups alongside research participants,

working together to co-create knowledge and use our bodies as research instruments (Elden, 2007; Hayes-Conroy, 2010). In other words, this method focused less upon the semistructured nature of the interviews and the emphasis on discourse, instead attending to the interactions of many different human and nonhuman bodies in an attempt to get at the embodied experience of participating in volunteer urban environmental stewardship, although of course the data gathered was still based upon verbal remarks and conversations during the events. The stewardship events ranged in duration from one to six hours and averaged three hours of participation and interaction. There were five different organizations sponsoring the participatory observation activities, including tree tender groups, a neighborhood organization, and an urban farm. Approximately two hundred and forty people participated in these ten events, including some people who participated in multiple events, with my participation in the activities making it impossible to obtain an exact count at some events as some participants arrived late or left early, reflecting both the informal nature of these events, the multitude of differential demands on participants' time, and the differential physical abilities of individuals to participate in what was often strenuous exercise for varying amounts of time. The events, sponsoring organizations, and number of attendees are summarized in Table Three. Similarly to attendance numbers it was not possible to take down precise demographic information on participants, rough estimates based on my observations resulted in slightly more than a third of female participants and a fifth people of color. These percentages varied between events and groups, with some consisting of a majority of women or people of color and others reflecting more male and white participation. In terms of age, participants were mostly in their twenties and thirties, although this also varied between

groups, with one consisting of a strong majority of participants estimated to be above age fifty five. While these demographics are not representative of the population of Philadelphia and it is unknown whether they are representative of the population taking part in neighborhood environmental stewardship activities in Philadelphia, developing a representative sample was not the goal of this research given temporal and financial constraints along with the in depth nature of contact with participants.

Activity	**Group**	**Occurrences**	**Participants***
Pruning Club	Philly Tree People	3	19
Pruning Club	University City Green	2	33
Tree Planting	Oak Lane Tree Tenders	1	17
Tree Planting	Philly Tree People	1	108
Neighborhood Clean Up	South Kensington Community Partners	1	35
Garden Party	La Finquita	2	30
Total		10	240

Table Three: Participatory Observation Events

*= numbers of participants in activities are estimates

While qualitative methodologists have long acknowledged that researchers are research instruments (Hammersley and Atkinson, 1983), participatory observation extends the uses of this instrument from observation and dialogue to emotions, affect, and materiality. By digging, planting, watering, and collecting trash, I attempted to uncover the embodied emotions that these activities create, along with the motivations that stem from them, both within me and my fellow participants in urban environmental stewardship, as detailed below in the descriptions of the data gathered during these

events. Furthermore, understanding how bodies occupy and negotiate space enables understandings of both (Tiwari, 2010). This method supplements the traditional qualitative practice of in-depth interviewing with the intention of having the body talk along with talking about the body (Hayes-Conroy, 2010), and Lefebvre's Rhythmanalysis project (2004) where (using gendered terms) Lefebvre describes the analyst:

> The rhythmanalyst calls on all his senses. He draws on his breathing, the circulation of his blood, the beating of his heart and the delivery of his speech as landmarks. Without privileging any one of those sensations, raised by him in the perception of rhythms, to the detriment of any other. He thinks with his body, not in the abstract, but in lived temporality. (2004, page 21)

Furthermore, the shovels, dirt, and trees themselves involved in these research events affected our bodies and were affected by them, drawing attention to how these various entities participate in the continuous construction of bodies and identities (Latour, 2004). The affective relationships with nonhuman bodies and their influence on identities were gathered as data through observation of both the actions of participants on or towards these entities along with their discussions of them. The performative nature of both environmental practices and qualitative research is emphasized through this method. Finally, this method is an attempt to move beyond traditional participant observation where data is simply collected, instead involving my participation and sharing in the struggles of these groups on the ground, trying to "play a role in actions and share the goals, strategies, and experience of their comrades because of their own committed beliefs and not simply because this conduct was an expedient way to gather data (Ross, 2013, page 8)." This form of participatory observation was also chosen in an attempt to helpfully reduce some of the unequal power relationships between me as a researcher and

the research participants (Ross, 2013) through working alongside them as a co-participant in stewardship rather than just asking them questions as a researcher about their involvement in stewardship, along with developing a richer understanding than that stemming from detached observation (Tiwari, 2010).

As I participated in these events, exploring how these types of everyday, neighborhood environmental practices feel to participants (and myself), and how this informs identity processes, I took care to recognize and remember these feelings, as recording or note taking during the events would have precluded my actual participation in them, bringing me back to that positionality of a detached researcher that I was trying to avoid with this method. Detailed note taking immediately after the events served to minimize the loss of "data". This data included observations centered on the actions and experiences of others, detailing how participants performed the various actions of environmental stewardship. Also included are the many conversations during stewardship events, both between participants (including me) and between participants and non-participants. It would have been helpful to be able to record these conversations, as I was not always able to remember all of them afterwards when taking notes, sometimes just retaining the tenor and atmosphere of participant interactions. However, it would have been intrusive to bring recording equipment into these stewardship events, and the organic and spontaneous aspect of interactions would have been lost. Furthermore, recording the participatory observation events would have either made them into traditional participant observation or required a research addition to record while I participated. Finally, this method of participatory observation was triangulated with

interview results, allowing for a greater understanding of identity processes related to environmental practices than that gained through verbal means alone.

The organization, structure, and overall atmosphere of the participatory observation activities varied depending upon the group and the event. Sometimes I was introduced to the group as a researcher from Temple studying urban environmental stewardship and identity and sometimes my positionality was known only by the leader(s) of the group. I did not find that the acknowledgement (or lack thereof) of my positionality influenced the relations I had with the participants in these urban environmental stewardship events. Both of the tree planting events took longer to arrange given the greater number of materials and people involved, resulting in almost an hour of sitting or milling around after the advertised start date of the event. Some participants were anxious and wanted to get started as soon as possible, while others were okay with slowly getting organized and mobilized. One of the tree pruning clubs where participatory observation events took place was extremely organized and businesslike, with groups splitting up and separately pruning their assigned trees with little to no instruction. The other club, possibly as a function of the much smaller number of participants, often took its time, discussing which trees to prune and how much among the five to eight participants. Some groups clearly all knew each other and had been working together for some time, and some had several new participants at each event. Almost all of the participatory observation events had some sort of food at the end and/or beginning, ranging from coffee and donuts to full buffet meals at the tree planting. This sharing of food served as a reward to affirm the environmental stewardship and identifications of participants while also increasing interactions within the group and the

sociality of the group members. The two garden parties attended were extreme examples here, as the events were focused upon socializing and sharing food and drink rather than work days followed by (and/or sometimes preceded by) refreshments. Both of the garden parties (at the same urban farm) were arranged around a bonfire, with large platters of vegetarian food prepared by the gardeners and alcoholic and non-alcoholic beverages. Gardeners and friends ate, drank, talked, played guitars and sang, and enjoyed each other's' company. Some of the discussions and conversations were focused upon the challenges and rewards of past and future growing seasons, but many quickly moved on to other life topics. The sociality, connection, and sense of community discovered in these events is discussed further in the results and discussion chapter.

Neighborhood Walking Tours

The final research method employed was neighborhood walking tours with participants (Kusenbach, 2003; Jones et al., 2008; Pink, 2008; Carpiano, 2009; Duff, 2010; Evans and Jones, 2011; Bendiner-Viani, 2013), which furthered understanding of how participants make sense of their urban environments and their identities. Ten walking tours were taken with individuals involved in tree care (pruning and planting), gardening, and neighborhood cleanups, with some participants taking part in more than one type of activity. The tours were on average an hour long, with most being recorded and transcribed. It was anticipated correctly that neighborhood noise such as traffic, barking dogs and other interruptions would occasionally render the recording unintelligible, so the recordings were transcribed as soon as possible after the walking

tours so mental audio recordings could serve to augment the limitations in the material tapes. Of the ten tours, half were with participants in neighborhood tree care and half were with urban gardeners. Slightly less than half of the participants in the walking tours were female, and slightly less than a third identified as people of color. As with the other qualitative methods employed, the goal was not to develop a representative sample of people participating in local neighborhood environmental stewardship given the extensive nature of engagement with participants paired with temporal, financial and ease of access limitations, instead the richness of data collected provides understanding of the environmental identification processes of the involved participants

The selection of the walking tour method is inspired by the previous discussions of the importance of the everyday and lived experience in identity formation, and participants were asked to guide the researcher through the local places that are essential to their understanding of the City, its environment, and their place in it. Furthermore, the importance of space and place to environmental identifications also guided the selection and implementation of this method. While Lefebvre (2003) saw the street as an important source the everyday, this analysis also included parks and any other type of neighborhood places participants feel were important. Participants also defined their own neighborhoods, as perceived neighborhood boundaries may differ from those defined by City agencies or nonprofits (Carpiano, 2009). While neighborhood walking tours or mobile interviewing is still in the experimental stage as a research method (Jones et al., 2008), this is seen as a positive aspect to the practice, explicitly allowing for more freedom and play in the research process. Finally, walking allowed me as a researcher to

develop an understanding of participants' descriptions of their neighborhoods in both the interviews and walking tours (Pierce and Lawhon, 2015).

Crucially, individuals are seen to both make these places and be made by them in a continuous, set of co-constitutive, relational processes (Edensor, 2000; Wylie, 2005; Duff, 2010; Bendiner-Viani, 2013). The narrative approach to identity is also revisited here, along with the importance of space to identity (re)construction, following de Certeau (1984), who saw walking as a form of everyday spatial narrative (see also Solnit, 2000; Ingold and Vergunst, 2008; Lund, 2008). This avoids overly structural approaches to the urban where individuals are seen as interpellated (Althusser, 1971; Robbins, 2007) by hegemonic processes and discourses, as the everyday and the local is seen as a site of agency (De Certeau, 1984; Nightingale, 2011). Furthermore, walking tours address the embodied nature of place, space, and identity construction, as the physical negotiation of the everyday by bodies is addressed by this method (Bendiner-Viani, 2013); this embodied negotiation of space brings in all the senses, as it is tactile, aural, and olfactory as well as visual (Lefebvre 2004; Edensor, 2008; Pinder, 2001). However, despite this sensory smorgasbord people are presented with when walking through the city, it can also be a habitual and unreflexive practice for some (Edensor, 2000), structured by the conventions of how and where one can walk (Edensor, 2008). Accounts of the sensory overload of a chaotic urban space and the emphasis on moving as quickly from one destination to the next see the urban walker as "highly regulated, defensive, passive, sensually deprived, performatively inert and, therefore, not conducive to reflexive practices (Edensor 2000, page 85)." This is similar to the views of the Situationists on the spectacle and alienation of modern cities under capitalism (Vaneigem, 1965; Debord,

2002; Willis, 1991; Merrifield, 2012). Of course, these sorts of formulations often oppose the postmodern sensory overload and regimented, codified space of the urban with the tranquility and openness of the rural or the countryside (Edensor, 2000; Middleton, 2010), and while there may be some truth to such claims, I am reacting against them to draw out urban spaces and urban walkers that are engaged, reflexive, and affective. Following Edensor "walking can never be conceived purely as shaped (or constrained and enabled) by performative conventions, ideological and romantic presuppositions or other cultural and social understandings, for this is to abstract walking from the material world (2008, page 131)." Instead of searching for these spaces of engaged and reflective walking in interstitial, liminal, or extraordinary urban sites such as the ruin (Edensor, 2008), they can be found in the everyday urban spaces where daily life is conducted and constructed. Furthermore, there are issues with focusing upon solely upon engaging and reflective walking while devaluing everyday and banal walking. Indeed, "just walking" as Horton et al. (2014) refer to everyday walking or Middelton's formulation of "everyday urban practices (2010)" has been found to matter and be constitutive of identities and geographies. It is important to recognize the different way that differently identified bodies walk (Lefebvre, 2004; Middleton, 2010), as "Clearly there is no such thing as 'walking-in-itself', no certain physical motion which is, as it were, elementary, universal and pure. There are only varieties of walking (Wylie, 2005, page 235)." Attention to these varieties of walking can help to understand how people perceive and negotiate space with their bodies. This attention to different ways of walking also helps to ensure that walking is not overly romanticized as a practice of agency and freedom, as certain bodies are limited in where, when, with whom, and how they can walk (Solnit,

2000). As Nightingale argues “Attention to everyday, seemingly mundane, spatial practices gives insight into how people produce a particular relationship with ‘others’ including their environment (2011, page 154).” Finally, these tours also helped to understand the affective and emotional nature of pace and identity making. Following Duff: “to experience place is to be *affected by place* (2010, page 881, emphasis in original).” Discussions with participants on the walking tours increased understanding of the deep layers of emotion involved in everyday places. While these were intended to be open ended conversations similar to the qualitative interviews, a script was used to help prompt conversation to important theoretical topics when it did not head in that direction organically (see Appendix C). The walking tour prompts are directed towards the important theoretical issues to be covered by this method: the perception of structural forces in neighborhood condition and quality, the affective and emotional responses to these forces performed in the embodied activity of walking and the negotiation of space, and the interactions with other bodies in neighborhood spaces. The tours were audio recorded and transcribed, with notes being taking during them to supplement the data collection and not limit it to audio recording. Photographs were taken on the walks under the direction of participants and discussed afterwards, along with transcripts of the route, allowing them to both generate and interpret “data”, in a matter that “places value on individuals themselves as experts in the processes of making and knowing their everyday (Bendiner-Viani, 2013, page 16).”

Research Questions

The overarching research question for this study broadly interrogates the mutual constitution of environmental identities and urban environmental practices of Philadelphians:

☐ How are the environmental identities of Philadelphians and their participation in urban environmental practices mutually constituted?

Several more focused sub-questions investigate the structural, discursive, and material aspects of the mutual constitution of environmental identities and urban environmental practices of Philadelphians.

Specifically, each research sub-question will be addressed in the following manner:

☐ How do structural forces influence this mutual constitution?

• How does perceived neighborhood environmental quality influence this mutual constitution?

This question is answered through the qualitative interviews. If the question does not arise organically from conversation, the prompts from the interview guide towards perception of the participants' neighborhood environment have been constructed to guide the discussion in that direction. Furthermore, taking part in these stewardship activities alongside the research participants provides another avenue into conversation around structural forces at play in neighborhood environmental quality. Finally, the walking tours may also inform analysis of this research question, as discussion of important

neighborhood places may include the upkeep (or lack thereof) of these places by local agencies.

- How does discourse influence this mutual constitution?

- How do issues of difference influence this mutual constitution?

This question is answered through the qualitative interviews and walking tours. If the question does not arise organically from conversation, the prompts from the interview guide towards the interaction between identifications have been constructed to guide the discussions in that direction.

- How does materiality influence this mutual constitution?

- How does bodily presence and the negotiation of space influence this mutual constitution?

The main methods in which this research question is addressed are the participatory observation and the walking tours. Observing and participating in embodied local neighborhood environmental stewardship practices enabled me to investigate the influences of environmental practices and their interpretations. The spatial narratives of individuals and the spatial influences on environmental identities gathered through this method will provide insight on the mutually constitutive nature of space and environmental identities. The qualitative interviews will also feature prompts on the influence of space if the topic is not generated organically through conversation.

Analysis

The qualitative interview results were analyzed in depth, with pseudonyms used for individuals to protect their privacy. This analysis was conducted both by hand and through using the qualitative software program AtlasTI. Results were coded for themes, metaphors and tropes. Care was taken not to place too much emphasis on my previous theoretical understanding of the formation of environmental identifications, instead allowing for results to emerge from the interviews themselves, which is an essential challenge of ethical research (Prokkola, 2014). This was also be helped through validation through examination of results by other experienced qualitative researchers and the sharing of results with participants. Similar techniques of analysis were used for the participatory observation and walking tours as well. Results from the three qualitative research methods are first introduced separately before being integrated together to help strengthen the conclusions drawn from them in a process of triangulation (Hammersley and Atkinson, 1983), although of course different results could arise from different methodological techniques, and any such differences found will be respected. Indeed, the differences may be as important and illuminating as the similarities found in results from the three different methods (Hammersley and Atkinson, 1983). While the different methods used have been designed to investigate environmental identification processes through the tripartite conceptual framework (See Table Two), unanticipated results may arise that call this framework into question or necessitate the addition of additional theoretical lenses. Indeed, following Latour (2004), scientific investigations should not only put into question the theory behind, but the actual questions being examined through theory themselves!

CHAPTER 4

RESULTS

Introduction

The three methodological techniques chosen for this study include in depth interviews, participatory observation and neighborhood walking tours, resulting in a great depth and breadth of data describing participant's environmental identifications and the different influences upon them. Participants included Philadelphians involved in the local neighborhood environmental stewardship activities of tree planting and pruning, urban gardening, and neighborhood cleanups. Here, the results are summarized by field (structural, discursive, and material), before they are synthesized in the following discussion sections. As discussed previously, the separation of these fields is largely a heuristic tool, and many of the results fit into more than one of them. Structural results were mixed, with some participants happy with the City's maintenance of the urban environment in their neighborhoods and others unhappy that the City was not doing more. Material results emphasized the emotional and affective connections that participants felt with their communities, fellow participants, and trees and other nonhuman others. Finally, discursive results largely displayed the importance of interactions during volunteer urban environmental stewardship events in influencing participation and reinforcing identities.

Structural Results

Structural results were varied, with some respondents satisfied with the work done by the city and other agencies/organizations involved in urban environments in their neighborhoods and other respondents disappointed and angry that the city was not doing more in their neighborhoods. Some of those who were satisfied with the work of structural actors in their neighborhoods acknowledged that it could be improved, but pointed to current budgetary limitations faced by city and other agencies as a reason for being willing to accept current levels of maintenance. One seventy-two year old white male leader of a tree tender group said:

> I'm encouraged to see that recently in the last year or two the city has, through contractors, we've see a lot of contractor planted trees in our neighborhood. That's good too, we're not proud, we're not, if someone else wants to plant them all the better, there's lots of places to plant trees.

Later, to clarify his position, the same interviewee said

> We're, let's see, the city could be doing more, and it's not direct, it's indirect. The City's funding for tree planting, whenever there's a budget crunch, they cut little bits of money from small programs …. So that's our attitude, the city could be doing more, we're not exactly mad at the city, but as I said recently they have put more trees planted by the city in the neighborhood,

This quote reflects the pragmatic acceptance of the City's limited capacity during economic downturns. Similarly, a mid-twenties white female member of another tree tending groups was happy with the support they received, acknowledging that local government is short staffed and under budgeted, but wished that they did a better job of connecting people who completed the tree tenders courses with the groups in their areas.

Finally, the mid-forties white female leader of another tree tenders group wished that the City could do more in her neighborhood:

> I have to say as we're doing these pruning events and doing all of this work, I do a lot of work! Straight up work and it's like, you know what, the City should be doing this. It's kind of ridiculous that this is reliant on volunteer work to absolutely get this done …. you need to really know what you're doing, and the idea that it's not part of a broader city plan sometimes really does get frustrating. Like, this is the way that this supposed to get done?

The ambivalence towards or acceptance of a reduction in governmental support is in contradiction to much of the current critical geographic literature on urban environmental reproduction, which sees the provision of uneven and inadequate urban environments as stemming from both structural racism and neoliberal austerity policies (e.g. Heynen, 2003; Brownlow, 2006). Approaching this issue, perhaps influenced by the literature on the structural neglect of poorer and less white neighborhoods in terms of urban environments (e.g. Heynen, 2003; Brownlow, 2006), I expected more critiques of the various agencies involved in maintaining urban environmental quality. In other words, one would expect to find more frustration with the withdrawal of support from government and the racialized nature of uneven urban environmental development, which was expressed by one twenty five year old white female of low socioeconomic status urban gardener in explaining why her group attempted to use an urban garden as a tool for political agitation:

> the whole point was that that neighborhood was abandoned by the city government pretty much, the police barely even drive around there, so it was just evidence that they were totally shocked that somebody would be doing something nice for their neighborhood.

Speaking of the ability to work within neoliberal and voluntaristic projects to serve your own goals, one interviewee who was part of a community garden said:

> I think it would be the same thing with like, you know, my argument would be the same thing, they tell you to go plant trees or whatever, but if you start actually doing the thing that they're telling you to do in your own way and with your own politics, you're going to find out pretty quickly that they're not into it anymore.

And later in the same conversation, speaking to the general opposition to civic activism as a form of progressive politics: "I just think that the kind of focus on, I do think that there's a simplistic critique of that civic activism, where it's like it doesn't see the possibilities and completely throws the baby out with the bathwater." Finally, speaking on the perils of foreclosing the terrain of the political, the same interviewee said:

> but I don't think it's like wholly something that I agree with, I think that narrowing the planes of what consists as politics is actually detrimental to like the masses of people and more of a social justice side, because, I don't think that the elites really have the same kind of, you know, they don't berate people for like this isn't politics

This quotation demonstrates that the participant is recognizing the advantage of an expansive approach to politics, or what Gibson-Graham (2006) would term a politics of possibility, rooted in place and open in the here and now.

One affluent white female respondent did suggest that living in a more upscale neighborhood might positively influence her and her neighbor's perceptions of the city's urban environmental maintenance programs and that others in less privileged neighborhoods might have very different perceptions. Of course, it could be argued (as others have (Perkins, 2009a, 2011)) that these perceptions of a lack of structural

marginalization show simply an internalization of neoliberal ideology, a reflection of decreased expectations towards state contributions to urban social and environmental reproduction, almost a Marxist understanding of false consciousness. Similarly, although from a very different viewpoint, Agrawal's idea of imagined autonomy (2005, page 197), where localized management of conservation is used to enact goals constructed by the state could be argued as an alternative and more structural explanation of the acceptance of the removal of state support for urban environmental reproduction. Indeed, neoliberal environmental stewardship projects operate under a similar ideology, laying the responsibility and blame on individuals and neighborhoods rather than recognizing larger structural issues (Harris, 2011). However, as illustrated above, my research found a more muddied situation upon the ground, with participants overall holding a multitude of often ambivalent perceptions of the level of state support for urban environments in their neighborhoods.

The affective and emotional atmospheres created by the presence or absence of trees and other neighborhood environmental amenities and disamenities in the participatory observations events and walking tours often drew to the fore participants' reactions to the structural forces influencing their creation. However, and somewhat surprisingly, these reactions were quite mixed among the participants. While structural critiques of governmental agencies were certainly present among some participants, there were others who instead aimed their critique at either individual homeowners or the neighborhood tree tender group in the area. During a walking tour one mid-fifties white female tree tender goup leader said: "you know you say you want a tree planted, and the old neighbors say no, that's going to be a headache, that's going to grow huge, rip up my

sidewalk", and later on in the same walk: "I mean, there are still holdout neighbors who feel like trees are dirty", referring to the need for environmental education in her neighborhood. This critique of individuals' lack of care for urban environments could be associated with the absorption of neoliberal ideology discussed above, where blame is placed on local neighborhood actors rather than larger structural forces. However, my results speak against this common narrative of cooption by neoliberal ideologies and the transference of blame to individual actors, given the careful consideration and acceptance of state actions discussed above. This clash of identities and emotions surrounding trees, nature, and the proper neighborhood environment allowed me to observe how participants responded to challenges to their identities and goals, as demonstrated by the characterization of neighbors who were against increasing tree coverage in their neighborhoods above. Furthermore, discursively contrasting care for one's neighborhood with neighbors who are against trees provides participants with an other to define themselves against that helps to more strongly position their environmental identities. Discussions of perceptions of neighborhood affective and emotional atmospheres and how they are perceived differently by different residents displays how the structural and discursive realms mutually influence each other, as perceptions of structural support or lack thereof influences discourse around neighborhood environmental quality and vice versa. Participants' understanding of and interaction with structural forces, their perceptions of individual and group agency, and the possibility of these findings to move forward the literature on uneven urban environments past its focus on structures are discussed in depth in the discussion section. Further research could assess quantitatively

the relationships between structural perceptions and neighborhood tree canopy and health levels.

Discursive Results

The discursive findings from the research process serves to add some history and context to the data on environmental identity processes. Specifically, questions surrounding participants' backgrounds in environmental stewardship and the history of their environmental feelings developed an understanding of how environmental identifications can change over one's life course. Many participants had held what they defined as strong environmental values for as long as they could remember, with some attributing this to growing up in rural areas and others to the way they were brought up and the values instilled in them by their parents. For example, a seventy-eight year old white male said

> I've always liked trees. Part of the reason we moved to this neighborhood was because it was a tree lined neighborhood…. So yeah, I've always liked trees, I grew up in a tree shaded neighborhood in Westchester so I think of trees as important thing and natural thing

Others were newer to environmentalism, with various life events leading to this shift in values, such as moving to the city and being faced with what they felt as a lack of nature resulting to a raise in awareness of its importance. Finally, some participants were more interested in what they saw as the radical political potential in volunteer local everyday urban environmental stewardship, as a mid-twenties white female explained to me:

> I'm an environmentalist in the broad sense. But gardening is not really a hobby of mine, I was very interested in the political aspect of it, I wanted, you know. I wanted to organize the people and bring them in and politicize them a bit and the garden was just really a route to that

Along with the telling of personal narratives during the interview practice, the participatory observation events allowed for the collection of data on the discourse between participants during and after these events. The participatory observation events not only inserted me as a researcher among the participants in neighborhood environmental stewardship activities (effectively making me a participant as well), they also allowed for interaction with non-participants. These non-participants included pedestrians, drivers, and homeowners at sights where trees were being planted and pruned or trash being picked up. Depending upon the location, time of day, and weather conditions the neighborhoods and streets where events took place had different levels of occupation, ranging from almost completely deserted to busy and noisy with pedestrians, cars, dogs and cats, and neighborhood residents passing time on porches and front steps (stoops). Interactions with non-participants provided a glimpse into the environmental identifications of those not involved in neighborhood environmental stewardship activities, including those who identified trees as negative. This clash of identities and emotions surrounding trees, nature, and the proper neighborhood environment allowed me to observe how participants responded to challenges to their identities and goals (and of course I was responding as well, sometimes directly communicating with non-participants and sometimes only observing the interactions between participants and neighborhood environmental stewardship activities).

These interactions are interpreted through Deleuze's (1988) reading of Spinoza, where encounters with other bodies produce affects that produce passions of joy or sadness. What we would think of as positive or affirming interactions can be understood as producing affects of joy:

> when we encounter a body that agrees with our nature, one whose relations compounds with ours, we may say that its power is added to ours; the passions that affect us are those of *joy*, and our power of acting is increased or enhanced (Deleuze, 1988, pages 27-28, emphasis in original)

On the other hand, encounters or interactions with those not supportive of urban environmental stewardship (and stewards) can be seen as producing sad passions:

> When we encounter an external body that does not agree with our own (i.e., whose relation does not enter into composition with ours), it is as if the power of that body is opposed to our power, bringing about a subtraction or a fixation; when this occurs, it may be said that our power of acting is diminished or blocked, and that the corresponding passions are those of *sadness* (Deleuze, 1988, page 28, emphasis in original)

What do these interactions producing joyous and sad passions have to do with environmental identities? The role of affects in environmental identity processes and volunteer urban environmental stewardship is expanded upon if Chapter Six, but it should be clear how these affective interactions address the research questions guiding this study. Specifically, the interactions and slippages between the discursive and material realms and their influence on the mutual constitution of environmental identities and environmental practices are evidenced by participants' interactions with other participants and non-participants. Indeed, these interactions are both discursive (as two or more people are communicating verbally) and material (as they are also

communicating nonverbally and producing embodied affects). Furthermore, following Deleuze's (1988) reading of Spinoza, individuals seek to maximize joyous passions, explaining how and why these affirmative interactions with other participants and non-participants can motivate future participation in volunteer stewardship events and identification as an environmentalist and steward. Regarding what would normally be seen as negative and sometimes even hostile interactions that produce sad passions, it follows from above that individuals would seek to minimize these types of interactions, as they reduce one's power to act. However, going back to the logic of identity theory and identifications, these interactions producing sad passions can also be seen as opportunities for disidentifications, for the strengthening of boundaries used to construct identities. Interacting with as an environmental steward with those who do not appreciate your stewardship and maybe do not even want you in the neighborhood provides an other, a them to split off and develop stronger definitions of an us against (Mouffe, 1995).

Overall, there were slightly more joyous interactions (eight) with non-participants than sad ones (six), although of course there were interactions that took place during these events that I was not able to witness due to the splitting up of participants into groups and the resultant spatial separation that occurred during most volunteer local neighborhood environmental stewardship events that I participated in and observed.

Joyous interactions with non-participants ranged from brief fleeting comments and appreciation to longer and more in depth conversations. At most events several non-participants briefly thanked participants for pruning trees, planting trees, or picking up trash, often commenting on how nice the results looked. Other participants asked how

they could get the tree in front of their house pruned or a planting in front of their house. Often the longer conversations with non-participants took place with residents where trees were being pruned or planted. These interactions started with residents thanking participants for their volunteer stewardship and continued with participants instructing residents on how to care for their trees and increase their health and chances of survival. Joyous interactions during the neighborhood environmental stewardship events demonstrate the positive identifications that non-participants had with trees and neighborhood environmental improvements, demonstrating facets of their environmental identities. Included here are the visceral emotional and affective responses to witnessing trees being taken care of and planted or trash being removed, discussed below. Just as importantly (and probably more so), being able to interact in a joyfull manner with neighborhood residents and visitors provided an affirmation of participants' environmental identifications and an emotional reward for their volunteered time and effort. Along with sad and joyous interactions with non-participants, there were those that shifted in nature from sad to joyous. These interactions were also all generated from an intense emotional reaction and connection to trees, where non-participants initially thought that participants were harming trees or should not be pruning them without permission. One white female non-participant came running up to us, asking loudly and agitatedly "what are you doing to my brother's tree?" After the tree tenders group explained who they were and that they were there to perform necessary pruning maintenance on the tree that would increase its health and prolong its life, the interaction became joyful, with the woman thanking us and soliciting information on how her brother could help to care for the tree in the future.

Not all interactions with non-participants were joyous. Sad interactions stemmed from several sources, including negative identifications with trees. Several residents and pedestrians asked us to completely remove trees that we were pruning, some who had issues with a particular tree, and some who for unknown reasons disliked trees in general. Both of the tree plantings attended has individuals who requested trees but changed their minds and no longer wanted trees planted in front of their houses (the request period is several months before the trees are actually planted). Other sad reactions stemmed more from our presence in the neighborhood in general. At one tree pruning the group was setting up tables for equipment, literature, signs, and food in the usual manner and an elderly white women came out of her house and angrily told us to get off of her corner, resisting any explanations of who the group was and why they were there until we began moving our materials across the street. Finally, sad interactions with non-participants also stemmed from concerns over damage to vehicles from falling limbs and chipping of limbs into mulch at the end of prunings. These sad interactions show the negative associations some non-participants had with trees and their maintenance. The emotions of participants were also tested, as one mid-thirties white female participant wanted to prolong the confrontation with the woman kicking us off of her corner, but managed to restrain herself.

Unlike the interactions with non-participants, all of the interactions that I observed and took part in with and between other participants were joyous. However, this does not mean that the interactions did not show a great level of variability between participants and events. As previously discussed, some of the groups were more business-like than others, and this was true for participants as well. One mid-fifties white male

frequent pruner in both locations was very quiet and always went right to work, pruning several trees at each event. Other participants were more social, often keeping up an almost steady stream of conversation while working alongside others. While this certainly might be a function of familiarity with the group and other participants, I was able to develop relationships with other participants, even as a quiet and shy person. At one tree pruning I was split off into a group with two African American males in their twenties that I hadn't met before and we kept a steady conversation for the two hours that we worked, discussing music, sports, life, and urban geography after they learned about my background and project.

Material Results

Along with the emotions revealed through discussions of structural and discursive issues, there were many other research processes which involved the complex and intense emotions involved in urban environmental stewardship and environmental identity processes. The most frequent and obvious of these is the emotional attachments and reactions generated by local environments and local environmental improvements. Participants frequently talked about their favorite trees and how much they meant to them, similarly to Pierce et al.'s (2015) research in Australia: "residents shared stories of how trees in their lives operated as friends, loved ones and teachers, and with whom there were enduring emotional bonds that contributed to a sense of mental well-being (Page 4)." The loss or poor condition of neighborhood trees was also an emotional event often talked about, with one upper middle class mid-fifties African American female

respondent stating that when trees go down it is like “I lost one of my friends.” A mid-forties white female became involved in tree care due to her emotional connections to the trees in front of her house: “The first tree that got planted died so I took the training. It wasn’t about getting involved in the neighborhood; it was about taking care of my tree.” Another participant, a mid-seventies white male, was motivated to start acting as a volunteer local everyday urban environmental steward due to the emotional connection that he had with the trees in his neighborhood:

> And ah, I took the tree tender course in June of 96 because I saw that there were big trees, you know. And I loved the trees, but also that some were dying and needed to be replaced and I found this PHS course and thought that was a good thing

Participation in local neighborhood environmental stewardship activities also produced a strong sense of pride or accomplishment in many of the participants, feeling that their caring for neighborhood trees, urban gardening, or cleaning up their neighborhoods were resulting in immediately noticeable improvements in their communities that benefitted all. Indeed, one mid-forties white female participant stated that the tree care performed by her group, had an “everyday immediate impact”, through shade, beauty, and pollution removal. Of course these emotions where always embodied. This sense of community was also present in the positive emotions generated through interactions with other participants in stewardship activities, with many participants mentioning friends they had made and interactions through the years working together in environmental resulting in other joint activities together.

While the influence of bodies in environmental identification processes and processing came up in the interviews, it probably did so less than in the other two

qualitative methods performed, perhaps illustrating the importance of using the body rather than simply talking about it to generate data about bodies (Hayes-Conroy, 2010). There were two main different types of bodily relations to urban environments and identities expressed through the interviews. While both of these bodily relations recognized the work of bodies in local neighborhood environmental stewardship, they did so in different ways. The first type of relation was from participants who enjoyed the physicality of putting their body to work planting and pruning trees, working in gardens, or cleaning up neighborhood trash. Speaking on this, a mid-twenties white female participant said: "Yes, I did enjoy working in the garden. I think the funnest part was digging up the bricks and planting the vegetables." Later in the same interview

> yeah, I mean there was something sort of primal I think, about like planting stuff and digging in the dirt … Also there was like a boulder in the ground that we had to dig out, which was, I don't know, it was nice to get it all, because you don't normally do that in your everyday life, like actual physical labor…. Yes, yeas. It was like look what we did, we dug a big hole in the earth (laughs). I totally get why little kids just sit there and like dig a hole in the ground, because it's just so nice to see the effect that you have on the world around you I guess. Like in a very direct way

The second type of relation found difficulty and sometimes even frustration with how hard it was for their and other bodies to engage in this kind of labor, sometimes through the recognition of others who would like to participate but were physically unable to do so. A mid-seventies white male expressed this bodily relation to stewardship well:

> We like retired people because they can work on the weekdays too. But on the other hand they get infirm eventually and so the one member who lives up the street is still living in his house and he is not able to walk very well.

These differing perspectives on embodied relations with local neighborhood environmental stewardship reflect the differential ability of different bodies to perform such activities and the influence on environmental identities of this differential ability.

While the interactions with both non-participants and other participants provided insights into the environmental identifications of participants, these were not the only beings that participants were interacting with. Recognizing that nonhuman actors interact with each other and with human actors inside and outside these types of events allows for an exploration of the influences that they hold for the environmental identifications of participants while also serving to recognize that nonhumans such as trees have agency (Jones and Cloke, 2002). Pruning, planting, and removing trees were activities where participants (myself included) felt emotional responses to trees. These emotional responses largely fell into two groups, some type of concern over trees that were in poor condition, and a happiness and sense of fulfillment at trees that were doing well and being able to take better care of trees so that they might improve in condition. Concern for trees that were in poor shape shows the emotional attachment that participants had to trees in general as well as specific trees that they had previously planted or that were landmarks in their neighborhoods. Along with concern, participants also felt sad about trees that were in poor condition, according to one mid-thirties white female participant during a tree planting, describing the emotional impact of seeing a tree in really bad shape “it’s like seeing a hurt animal or small child”. This concern and sadness for damaged and dead trees sometimes led to a sense of frustration around the lack of care that residents were providing for the trees in front of their house and a wish for more volunteers to participate in neighborhood stewardship events. In contrast with this sense

of concern for trees in poor condition was a sense of happiness and fulfilment after taking care of existing trees or planting new ones. At the tree prunings, one of the most common comments towards the end of the events revolved around how much better everything looked in the area where they were, and the improved conditions of neighborhood trees was a sense of pride and fulfillment for participants. At one tree planting event the small group I was participating with blessed the first tree that we planted and took a picture with it, discussing how it would beautify the street and hopefully have a long and happy life while making the lives of residents happier. Finally, as a researcher I felt a different sort of emotion during my first participation at a tree pruning club event. Faced with both unfamiliar people and tools, there was a sense of uncertainty in joining a new group of people as a shy individual, and a sense of risk involved using sharp cutting tools and wearing a hardhat.

Observing and participating directly in neighborhood environmental stewardship events provided an opportunity to gain understanding of the role of the body in (re)constructing environmental identifications. Digging, pruning, planting, watering, and collecting trash was a beginning in attempts to uncover the embodied experiences and emotions that these activities create, along with the motivations that stem from them. One embodied aspect of these activities, especially for newer participants such as myself who were unfamiliar with the tools and techniques was learning how to use the available tools as extensions of the body to interact with nonhuman others such as trees in the most efficient (and safe) manner. Before using the tools, an understanding of tree health and structure was often developed through a brief lecture to the group by a trained arborist or experienced tree care volunteer, enabling a quick evaluation of the health and structure of

a street tree that would guide the choice of branches to prune and branches to retain. I quickly developed an understanding of the different types of clippers, loppers, saws, shovels, and other tools, figuring out how to use my body to manipulate them (and be manipulated by them). Of course, I was working in concert with other bodies, both those of the trees and the other participants in the events. Especially in the tree planting and neighborhood cleanup events, part of the learning involved was how to work in rhythm together to dig holes, plant trees, and collect trash. This brought out the differing abilities possessed by different bodies, as rhythms were altered to create a more synchronized laboring assemblage of bodies. Following Latour (2004), along with other participants new to the activities, I was learning to be affected, extending the skills and abilities of my body through a combination of other bodies (the tools, the other participants, and the trees). Several participants remarked upon this experience of learning how to be affected, of extending bodily skills, abilities and knowledges, recognizing it as an appreciated part of the urban environmental stewardship experience. Furthermore, this process did not end for me when the events did. I carried this new embodied ability with me in my subsequent walks throughout the neighborhoods of Philadelphia, evaluating the condition of the trees that I passed and thinking about which limbs I would remove to improve their health and longevity.

Participants' emotional reactions and attachments to what they defined as their neighborhoods were the strongest results of the walking tour methodology. The emotional reactions and attachments were implicated in embodied, spatial, and structural realms. Participants in neighborhood tree care often focused upon presenting significant trees that they or their groups had planted during the walking tours that they conducted.

As a mid-forties white female participant conducting me on a walking tour in South Passyunk stated:

> with these tree that I'm going to show you around Capitolo Park where it was like a point of pride, like we're going to get these trees and I'm going to go out and water them once a week, and that is, I feel like the three that are still alive, that's how they can be alive.

This pride of accomplishment in planting and sustaining trees in the neighborhood reflects beliefs on the value of trees and their contribution to local neighborhoods, a sense of improving one's community through local neighborhood environmental stewardship. Significant trees in decline or that had been lost were also often emphasized, displaying the painful and sad emotions connected to the loss of significant trees, along with an anger towards the mistreatment that led to the loss or decline of neighborhood trees. One mid-fifties African American Female participant was extremely emotional about the invasive English Ivy in her neighborhood, to the extent of documenting it with large photographs and using them in a presentation at the local library in an attempt to educate neighbors on the importance of its removal.

The embodied nature of everyday spatial neighborhood narratives was also revealed by the results of the neighborhood walking tours. This was most often displayed by the emotional reactions to certain parts of neighborhoods conveyed by participants, the special places where they often went to perform routine activities or interact with others. Parks and squares with ample tree canopy and the resultant shade were frequently the locations where participants felt comfortable, where they chose to spend their time outside. Similarly, tree lined streets and alleys were the ones participants identified as nice, pretty, or beautiful. These types of streets were often the ones chosen by

participants to lead me down when conducting tours, revealing their identifications with them as positive emotional and affective atmospheres, places where it was more comfortable to be embodied, both at rest and in motion. While one participant went as far as to point out the difference in temperatures between streets shaded by trees and those open to the sun's rays, for most this identification with the affective atmospheres afforded by neighborhood trees was, if not unconscious, at least unexpressed. However, she was not the only participant to point out the difference between areas of their neighborhood that they felt were nice and not so nice. While some of the contrasts revolved around the presence of trash, abandoned homes, cracked and missing sidewalks, or other neighborhood features creating uncomfortable affective atmospheres, they often were presented in terms of an absence of trees, green spaces, and other environmental features.

Conclusions

The three qualitative research methods employed in this study: in-depth interviews, participatory observation, and neighborhood walking tours resulted in fifty research events, generating an extensive depth and breadth on the environmental identifications of Philadelphians participating in local neighborhood environmental stewardship activities such as tree planting and care, urban gardening, and neighborhood cleanups. While these results work toward developing an understanding of the constant processes of identification undergone by participants and the influences of the environment and their interactions with it in these processes, it is important to remember that other individuals might be influenced differently. Given the intensive engagement

with participants in the three qualitative methodologies, it was not possible to develop a representative sample of participants in the chosen everyday local neighborhood environmental stewardship activities. Indeed, with the vast multitude of groups involved in these activities makes it hard to even estimate the demographics of participants from which a representative sample would be drawn if that was the intent of a researcher. Moreover, results do not address other types of environmental stewardship activities, especially those that are undertaken on a more individual basis rather than organized through a local neighborhood based group or which might not even be thought of as environmental stewardship activities by individual participants or organized groups. Finally, results do not address how non-participants in environmental stewardship form and reform their environmental identifications. Although it might be difficult to access this population and gather data about how environmental interactions and identifications take place, it is an important area for future research. With the three preceding caveats, results are presented here for the three qualitative research techniques performed in this study.

Results were summarized based loosely on which of the three fields developed in the theoretical framework (structural, material, discursive) that they fit into, recognizing the overlap between the fields. Structural results revealed a divide among participants between an acceptance of the urban environmental reproduction work done by the City, often recognizing funding issues, and disappointment that more was not being done. Material and discursive results highlighted the importance of the emotional and affective connections formed through volunteer urban environmental stewardship events to participants' communities, other participants, and trees and other nonhuman others.

While each of the three qualitative methods used in this study developed data surrounding the influence of structures, discourses and materialities on urban environmental identities and the interactions between these fields, each method does so in a different way and provides its own unique insight into the issues. Specifically, the interviews allowed for deeper discussions of structural influences on neighborhood environments and participants' historical environmental identifications, the participatory observation provided more data on the role of embodiment and the interactions between different types of human and non-human bodies, while the walking tours emphasized the spatiality of urban environments and urban environmental identities. The following discussion sections expand upon the findings and brings them into conversation with the theoretical framework developed in the literature review.

CHAPTER 5

DISCUSSION CHAPTER ONE: EVERDAY VOLUNTEER LOCAL URBAN ENVIRONMENTAL STEWARDSHIP AS AN EMOTIONAL ECONOMY OF CARE

Introduction

The following discussion chapter synthesizes the results from the three methodological research experiences of this study and begins to bring them into conversation with the tripartite theoretical framework developed earlier, a process that is continued in the second discussion chapter and conclusion. In this chapter, the main argument is that my participants volunteered their labor and time as everyday local urban environmental stewards due to the deep emotional and affective connections they had to their neighborhoods, other participants, and non-human others.

The extended discussions of emotional economies of care (this chapter) and multiplicities (the following discussion chapter) might seem overly abstract and removed from the research questions motivating this study, but here I will demonstrate how these two conceptual approaches provide concrete insight into the mutual constitution of environmental practices and identities among my participants along with the utility of the theoretical framework developed for this research.

The discussion of emotional economies of care and multiplicities largely serves to address the third research sub-question, which asks how materiality influences the mutual constitution of the environmental identities and urban environmental practices of my

research participants. Specifically, it asks: How do bodily presence, emotions and affects, and the negotiation of space influence this mutual constitution? My results found that the intense emotional attachments that participants formed with their neighborhoods, other participants, and non-human others often motivated continued participation in volunteer local everyday urban environmental stewardship, revealing the important influences of material embodied emotions and affects on environmental identifications and practices. Furthermore the attachment to community as a motivation to participate also highlights the importance of the materiality of space and the affective atmospheres that it produces. Participants were often reacting to structural forces which resulted in degraded urban environments in attempts to enact what they viewed as improvements to their communities, neighborhoods, and affective atmospheres, all of which they experienced in their daily spatial narratives and practices.

The second research sub-question, which asks: how does discourse influence the mutual constitution of environmental identities and practices, is also addressed by the following two discussion chapters. Discourse influences environmental practices and identifications in two ways here. First, and more simply, the connections between participants (and non-participants), while embodied and spatial interactions, are also discursive. The conversations, whether producing joyous or sad passions, proved to provide further motivation for participation in volunteer local everyday environmental stewardship practices. Secondly, specific discourses circulated more than others and acquired increased affective value through this circulation (Ahmed, 2004). The prime example of the power of increased circulation of signs and the resultant loading of such signs with “value” in my research was the discourse surrounding community, often cited

as a prime motivation for participation. The agency displayed by participants reacting in the discursive and material realms to outside structural constraints would have been missed without the tripartite theoretical framework developed here that allows for the interactions, overlaps, and intersections of the three fields, demonstrating how this framework allows for new insights in the field of environmental identities.

Emotional and Affective Economies of Care

Despite the utility of neoliberal environmentality approaches that take into account the critiques surrounding the need for individual and group agencies in explaining volunteer participation in urban environmental stewardship, there is still something missing in their application to my results. Even if urban residents are trapped between a neoliberalized rock and a hard place, how does that make them feel? How do their emotions and affects guide their responses to the removal of state support for urban environmental and social reproduction? Why do they choose to volunteer to take over the labor of urban environmental and social reproduction from the state?

The three qualitative research methods performed: in depth interviews, participatory observation, and neighborhood walking tours all highlighted the emotional and affective aspects of local urban environmental stewardship practices. Unfortunately environmental politics and identities research has often missed connecting with theories of emotion and affect (Harris, 2014), perhaps due to their emphasis on environmentality and neoliberalism. The larger field of social movement theory has begun to investigate the role of emotions and affect in political participation and outcomes, but largely with a focus on protests and other extreme events (Roelvink, 2010; Clough, 2012; Routledge,

2012, Haberlen and Spinney, 2014), rather than the realms of everyday life and volunteer stewardship focused upon in my research.

Attending to emotions and affects in local everyday urban environmental stewardship and its influences upon environmental identifications recognizes their power in the mutual constitution of practices and identities. Following Ahmed (2004), "emotions *do things*, and they align individuals with communities – or bodily space with social space – through the very intensity of their attachments (page 119, emphasis in original)." For me, this intensity of attachment, to participants' neighborhoods, between participants, and between participants and the trees that they were planting or caring for, provides the explanation for their participation and environmental identification processes that is lacking in environmentality and neoliberal natures approaches. Volunteers were assisting in urban environmental reproduction because they *cared* intensely, emotionally, and affectively about their neighborhoods, their neighbors, and trees as nonhuman others, rather than being duped or coopted by the state and/or the market. As discussed above, while this simple binary between cooptation and resistance helps to define political action, it is often far messier on the ground, with groups often doing both, sometimes even simultaneously (Elwood, 2015). Recognizing the exclusions created by a simple dichotomous conceptualization of politics and activism allows for a much more expansive and creative approach to the political (De Vries and Rosenow, 2015).

Participants often invoked concepts of community to explain why they were involved in everyday local urban environmental stewardship, and what they got out of it. Recognizing the often problematic and exclusionary usages of conceptions of community

(Young, 1990; Agrawal and Gibson, 1999; Hardt and Negri, 2000; Rose, 2000; Joseph, 2002; Gibson-Graham, 2003; Martin, 2003; Li, 2007*a*, *b*; Watts, 2007), I am using the concept here in terms of emotional attachment to neighbors and neighborhoods resulting in urban environmental stewardship and urban environmental identity formation. This sense of community was described by a mid-forties white female: "Well, I mean, doing these kind of things, is community building, to have planting events, to have pruning events, to do all that kind of stuff, is great." Explaining her reasons for joining a community gardening group, one twenty-five year old white female of low socioeconomic status participant said "I never got … like my mom would garden when I was little but I never really got into it. I don't know I just really wanted to support the cause because the neighborhood looked like shit and we tried to make it look nicer", and later on, the same participant framed her working in the garden as an attempt to spread the new sense of hopefulness that she felt in her life for the first time:

> Honestly, no I was always ahh, I mean like, most of my life I went through this really nihilistic, I had this really nihilistic ideology where everything was pointless and blah, blah, blah, and then I realized that like no, it's not, and there's a way to make your life matter and I started being involved in the garden because I wanted to do something good, I wanted to help people, to show people that there's hope. I wanted other people to feel the hope that I feel now.

Similar to the results of Gibson-Graham (2003) in Australia, for this participant, working in the garden was more about growing community than growing vegetables. Future research should examine the scalar effects of these invocations of community and how they shifted material and discursive urban environmental conditions, and on the ground work to create community "that need not be a parochial enclave but can be instead a

place where we exercise our responsibility to the Other, understood as unassimilable, as absolute alterity (Gibson-Graham, 2003)", but that was not the goal here. Instead, participation in local neighborhood environmental stewardship activities often produced a strong sense of pride or accomplishment in many of the participants, feeling that their caring for neighborhood trees, urban gardening, or cleaning up their neighborhoods were resulting in immediately noticeable improvements in their communities that benefitted all. Indeed, one participant stated that the tree care performed by her group, had an "everyday immediate impact", through shade, beauty, and pollution removal. A mid-forties white female participant conducting me on a walking tour in South Passyunk stated:

> with these tree that I'm going to show you around Capitolo Park where it was like a point of pride, like we're going to get these trees and I'm going to go out and water them once a week, and that is, I feel like the three that are still alive, that's how they can be alive.

This pride of accomplishment in planting and sustaining trees in the neighborhood reflects beliefs on the value of trees and their contribution to local neighborhoods, a sense of improving one's community through local neighborhood environmental stewardship. Furthermore, similar to the findings of Woods et al. (2012) in rural England, attempts to build and improve community through urban environmental volunteerism can also be conceptualized as emotional responses to perceived threats to a landscape (here urban rather than rural), as shown by the first quote above. Indeed, these emotions dedicated to improving or preserving communities highlight the influence of a sense of place on environmental practices and identities (Nast and Pile, 1998; Casey, 2001; Anderson, 2004). Following Woods et al. (2012), "emotions of place-attachment are entangled with

individuals' feelings of security, belonging, worth, freedom and so on … (page 568)." In my participants, these emotions of place attachment served to influence participation in volunteer urban stewardship and the assertion of agency in the face of structural neglect

The interactions between the participants in local urban environmental stewardship provide further understanding of the emotional attachments formed and their influence on participation and environmental identity (re)formations. A sense of community was also present in the positive emotions generated through interactions with other participants in stewardship activities, with many participants mentioning friends they had made and interactions through the years working together in environmental stewardship resulting in other joint activities together. Neves (2009) found this to be true in her study of urban gardening practices in Montreal, arguing that "it is paramount to consider that the human-nature connections that people develop in the garden are to a great extent made possible, and sustained by, social relations with family and friends (page 150)", and that this socializing with other individuals is essential in her participants' commitment to environmental goals and values. Speaking about her time spent working in a community garden, a twenty five year old white female of low socioeconomic status participant said "So you just go all out and the time spent with my comrades was really fun, you know, all working together, it was kind of beautiful in a way", working together as beautiful speaks to the joy of encountering other bodies, entering into composition with them in affective laboring relations, and increasing individual and collective capacities to act (Deleuze, 1988).

Not only did the participatory observation events expose me to participants in neighborhood environmental stewardship activities (effectively making me a participant

as well), they also allowed for interaction with non-participants. This clash of identities and emotions surrounding trees, nature, and the proper neighborhood environment allowed me to observe how participants responded to challenges to their identities and goals (and of course I was responding as well, sometimes directly communicating with non-participants and sometimes only observing the interactions between participants and neighborhood environmental stewardship activities). Included here are the visceral emotional and affective responses to witnessing trees being taken care of and planted or trash being removed. Just as importantly (and probably more so), being able to interact positively with neighborhood residents and visitors provided an affirmation of participants' environmental identifications and an emotional reward for their volunteered time and effort, speaking once again to the positive sense of community invoked by many of the participants. The intense emotional attachment formed with specific trees among non-participants was demonstrated by one white female non-participant who came running up to us, asking loudly and agitatedly "what are you doing to my brother's tree?" After the tree tenders group explained who they were and that they were there to perform necessary pruning maintenance on the tree that would increase its health and prolong its life, the interaction became positive, with the woman thanking us and soliciting information on how her brother could help to care for the tree in the future.

Similarly, recognizing that we define ourselves through the other (Taylor, 1989; Perinbanayagam, 2000; Alcoff, 2006), encounters with non-participants who were not supportive or even openly hostile provided an opposite figure for participants to emotionally define themselves against. Following Ruddick (2010), it is essential to interrogate these affective encounters with alterity, these destabilizing moments that

might shape a new subject, rather than simply celebrating joyful encounters of affirmation. These uncomfortable encounters of difference are what cause us to challenge our ways of thinking and doing, to spontaneously and creatively respond to different types of human and nonhuman bodies. Specifically regarding social movements, protests and activism, Chatterton (2006) refers to these encounters of difference as uncommon ground, finding it to be "a site brimming with affect, emotions and ethical interplay (page 268)" that holds much potential for increasing counter-hegemonic power through the finding of commonalities between previously antagonistic others. Groups involved in local everyday urban environmental stewardship should stretch outside of their comfort zones and facilitate encounters with new spaces, places, and bodies.

Finally, the interactions between participants and trees as nonhuman others displayed the emotional attachments they had formed both with specific trees and trees in general. Recognizing that nonhuman actors interact with each other and with human actors inside and outside these types of events allows for an exploration of the influences that they hold for the environmental identifications of participants while also serving to recognize that nonhumans such as trees have agency (Jones and Cloke, 2002; Perkins, 2007). The agency of trees and other nonhuman others is expressed in the examples below in which trees have an active role in the affective capacities of participants. Following Singh (2013) "It needs to be recognized that the 'self' is not 'closed-in' but 'opened-out', formed through active engagement with other human and non-human bodies (page 197)." During the tree plantings and prunings, it was common to see and hear participants having strong negative reactions to trees in poor shape, feeling both sad that the trees were in such poor shape, but also sometimes mad that people were not

taking care of them. One mid-thirties white female participant, talking about the emotional impact of seeing a tree in really bad shape said: “it’s like seeing a hurt animal or small child.” Another mid-fifties African American female participant was extremely emotional about the invasive English Ivy in her neighborhood, to the extent of documenting it with large photographs and using them in a presentation at the local library in an attempt to educate neighbors on the importance of its removal. As the tree prunings were targeted to areas in poor condition that needed lots of tree care, it is not surprising that strong emotional responses to the poor conditions often arose, indeed several participants at different events remarked upon how frustrating it was to continuously go out to the parts of their neighborhoods that were in the worst conditions. Interviewees also mentioned the loss or poor condition of neighborhood trees as emotionally traumatic events, with the same respondent concerned about the English Ivy stating that when trees go down it is like “I lost one of my friends.” During a walking tour, describing one of the participants in her neighborhood tree care group, one mid-forties female participant said:

> he likes more interesting trees, he’s a real gardening guy, and he’ll get trees not approved by the city and get em on in there, which, if you don’t know he’s doing it you can’t stop him. But there have been incidents where he’s had to take out trees but the city will come around and say this not appropriate for this site and there have been tearful digging up sessions.

Later in the walking tour, describing the same individual, she said: “And then like Peter who are so enthusiastic who would tie himself to his tree.” The first quote illustrates the emotional attachment to trees, how their loss can move individuals to tears. It also illustrates the ability to subtly subvert neoliberal doctrines imposed by the state shown by

others (Blomley, 2007; Elwood, 2015), even if it is only occasionally being able to successfully plant the desired trees rather than the imposed trees. Attempting to circumvent governmental limitations on the types of trees planted can be seen as an attempt to plant the species that produces the most joy, that have the highest affective capacity. The second quote once again illustrates the intensities of emotional attachments, the enthusiasm and love felt for specific, individual trees. The emotional attachments to trees and their status as significant actors in the lives of participants found is this research is similar to the results of Pearce et al. (2015) in Australia:

> residents most often articulated their experience of trees through the ways in which trees were encountered as participants in the fabric of their lives: that is, rather than talking about trees as passive background objects, trees were described as active in affecting the experiences and actions of the interviewees. (page 3)

Yet, despite the emotional turmoil produced by repeatedly interacting with neglected and damaged trees, participants kept coming back. Some had been doing so since the 1990s. The intense emotional attachments to specific trees helps to explain why, along with the emotional importance of and sense of accomplishment participants associated with improving their communities through urban environmental reproduction. Participants often expressed feelings of happiness and fulfilment after taking care of existing trees or planting new ones. Indeed, we can see the material effects of improving urban environments as increasing the capacity of affective atmospheres (Anderson, 2012; Simpson, 2013), where residents feel more at ease in their communities due to increased shade and aesthetics along with the sense of community produced via the social interactions involved in volunteering together. Increasing the affective capacities of the

individual participants and overall neighborhood produces a sense of joy that motivates further participation (Ruddick, 2010). At the tree prunings, one of the most common comments towards the end of the events revolved around how much better everything looked in the area where they were, and the improved conditions of neighborhood trees was a sense of pride and fulfillment for participants, demonstrating how participation produces the sense of joy due to increased affective capacities described above. At one tree planting event the small group I was participating with blessed the first tree that we planted and took a picture with it, discussing how it would beautify the street and hopefully have a long and happy life while making the lives of residents happier.

TreePhilly, a Philadelphia tree planting program run by the city's department of Parks and Recreation in partnership with local nonprofits and businesses, ran a Trees of Philly Story Contest for the first time in 2014, soliciting stories from individuals describing their relationships with trees that were significant to them, that serves to demonstrate the emotional attachment of individuals to specific trees, supplementing the data from the three qualitative research methods performed in this study (Treephilly.org.). The winning entries (out of almost 120 submissions), revealed the intense attachments that individuals shared with specific trees. Furthermore, specific trees were related to significant times, places, and people in the lives of participants in the contests. Pearce et al. (2015) documented this strong influence that trees can hold on people's sense of self and pace in Australia: "loss of trees in people's lives signified a loss of a particular time, life stage or story that that the tree represented (page 4)." Elissa's tree story captures this relational unfolding associated with attachments between trees, people, places, and emotions: "Each new woody life takes on the story of the day it was planted – the sun,

the laughter, the hope, the camaraderie (Treephilly.org.)." Speaking of a long established tree rather than planting new trees, Katherine's tree story illuminates how trees can create and represent intense emotional attachments to place:

> when I left for college for the first time, I took one of my magnolia tree's blooms with me. My first night of college – when I was beginning to feel upset about being far from home – I had my magnolia bloom to help me feel better about the distance. (Treephilly.org)

Others have recognized this connection between emotional attachments and environmental stewardship (Milton, 2002; Neves 2009). The research here extends this previous work, which argued that emotional connections were necessary for environmental commitments and led to the performance of environmental practices. Instead, similar to environmentality (Agrawal, 2005), practices here were shown to produce emotions, beliefs, and identities. However, this linear relationship between practices, emotions, and identities should be replaced by a relational understanding, where emotions circulate and do things (Harris et al., 2013). Indeed, it is not that my participants did not have emotional attachments to their neighborhoods, neighbors, and nonhuman others before participating in everyday local urban environmental stewardship activities, rather, the emotions that they brought to the activities were influenced by the circulation of emotions between the bodies involved in stewardship (including nonhuman bodies). In other words, practices, identities, emotions, and affects are here seen as mutually constitutive, and similar to many other facets of identification establishing a temporality of which came first or produced the other is counterproductive (Butler, 1993, 1997*b*, Althusser, 1989).

Participating in these local neighborhood environmental stewardship activities exposed bodies to affective atmospheres (Anderson, 2012; Simpson, 2013). Indeed, I would argue that people are always exposed to affective atmospheres, if they are thought of as the precognitive sensations derived from (and with) one's surroundings. However, the concept might be of particular salience here, given that bodies were working together in an external environment over which they had little to no control, namely the streets and parks of Philadelphia. The differing temperatures, light levels, shade, precipitation, presence of vehicular and pedestrian traffic, condition of sidewalks, and many other factors that participants continually negotiate work together to create these affective atmospheres that help to shape how they experienced and remembered the events. Perhaps due to my chosen methods of in depth interviews, participatory observation, and neighborhood walking tours, and perhaps also due to the difficulty of capturing and representing affects if they are thought of as pre-cognitive (Woods et al., 2012), I feel much more comfortable describing the emotional than affective responses to participation in local everyday urban environmental stewardship, and their influences upon environmental identity processes. This is not my taking a stance in the ongoing debates between scholars of emotion and affect (Thien, 2005; Anderson and Harrison, 2006; Pile, 2010, 2011; Bondi and Davidson, 2011), but rather a reflection of my methods and results. Future research should strive to develop and incorporate new experimental and creative methods that can draw out the deeply affective nature of participating in everyday local urban environmental stewardship and the effects of these affects upon participation and environmental identification processes.

Alternate Alternatives to Environmentality and Green Neoliberalisms

While I have argued that emotional and affective economies of care provide a compelling alternative understanding of urban environmental volunteerism that allows for a less structural interpretation than those provided by environmentality and neoliberal natures research, there are other theoretical approaches that also allow for recognizing urban environmental volunteers as agents rather than subjects. Insurgent and performative citizenships (Holston, 1998; Gilbert and Phillips, 2003; Brownlow, 2011), Henri Lefebvre's right to the city (2007, see also Harvey, 2003; Mitchell, 2003; Marcuse, 2009) and Autogestion (2009), and the diverse economies of J.K. Gibson-Graham (1996, 2006) are among the alternate alternatives to environmentality and neoliberal natures and are discussed here in hopes of finding some common ground for synthesis with and improvement of theories of emotional and affective economies of care.

Insurgent and performative citizenships involve "practices that engage the problematic nature of belonging to society (Holston, 1998, page 49)", recognizing citizenship as a practice and a process. This occurs when volunteers maintain or enhance their urban environments, expressing and drawing attention to the constant marginalization of certain urban environments, which calls into question the assumed equality of individual citizens (Gilbert and Phillips, 2003). This was the goal of one of the community gardens that I worked with, described by a working class twenty two year old white female participant in an urban garden as:

> Essentially we went in there, in a sense we were trying to agitate the people into thinking about how the city is not taking care of them, but we can go in there and do this for free. We were also kind of hoping the city would come out and shut us down because we got such a positive response

> from the neighborhood because that would just help agitate. You know they were doing something good and you're not doing anything, you're just going to tear what they built down and it's just going to turn into a vacant where people smoke crack (laughs) again.

This quote also illustrates the aleatory nature of encounters discussed above, as the gardeners were hoping for a negative encounter with the state to catalyze activism in the neighborhood which never took place. The uncertainty involved in urban environmental encounters is one of the factors that highlights the importance of increasing the number and size of creative encounters.

Unfortunately few scholars have examined insurgent and performative citizenships in terms of environmental stewardship (Gilbert and Phillips, 2003), yet the concepts translate well, as Holston sees insurgent citizenship as "sites of insurgence because they introduce to the cities new identities and practices that disturb established histories (1998, page 48)." Brownlow (2011) uses insurgent citizenship well to explain volunteer stewardship in Cobb's Creek Park, Philadelphia. He found that volunteer participation enabled members of the neighborhood that had been marginalized for decades in: "(1) exposing the injustices of state neglect; (2) challenging hegemonic narratives of community indifference and irresponsibility; (3) stimulating the revival of a local responsibility ethic; and (4) shoring up political and spatial identities in the wake of encroaching gentrification (page 1269)." Decisions to volunteer or not were based upon localized and historicized constructions of community, place, and identity, rather than those imposed from outside and above. However, Brand's (2007) portrayal of a neoliberal citizen as a position to be achieved through practice provides a note of caution against a full scale acceptance of performative or insurgent citizenships: "this idea of the

transformation of citizenship from a right or possession to something which has to be worked for and attained, is a central theme in critical reflections on neoliberal governance (page 626).” This calls into question the progressive nature of performative citizenships, can neoliberal urban environmental citizenships also be performative? If performative citizenship is read as a practice and process based attainment of citizenship it certainly seems possible for performative citizens to be working for or against neoliberalization, although recognizing the problematization of this binary of cooptation or resistance discussed earlier (Elwood, 2015) might suggest that they are doing both at the same time. So what about insurgent citizenships then? Holston (1999) acknowledges that insurgent citizenship can be performed by both subaltern and elite individuals and groups, acting as a progressive or regressive urban force. Finally, what about those citizens who are not insurgent or performative? Neoliberal framings of citizenship focus upon individual responsibility and blame those who are not willing or able to care for themselves and their neighborhoods (Harris, 2011). This ambiguity in the results of performative and/or insurgent citizenships suggests that they should be investigated critically rather than universally celebrated. There is certainly the possibility for neoliberalism’s focus on individual and local self-reliance and responsibility to backfire and enable progressive politics, and it is important to recognize and increase this possibility, but there are also many other darker possibilities present that need to be avoided.

“Lefebvre conceives the right to the city as a space for the reappropriation of everyday life by social and political actions against the contradictions of urban development and the deterioration of everyday life (Gilbert and Phillips, 2003, page 316).” Understood alongside Lefebvre’s (2009) concept of Autogestion, “with the loose

translation as democratic self-management (Chmara-Huff, 2014, page 8)", we can see similarities with insurgent and performative citizenships which call the necessity of the state and market into question. If neighborhoods realize that they have the desire and will to manage urban environmental reproduction on their own, they may seek to expand this sphere of self-management to other areas, redeveloping and reimagining the city in a manner responsive to their needs, desires, and pleasures (Mitchell, 2003). However, like socialism or communism, it is questionable whether you can have Autogestion in one sphere of one neighborhood, never mind one city or one country. Indeed, Lefebvre (2009) held that Autogestion was destined for failure without its globalization. Further research is needed to see how (and if) these small and modest practices of urban environmental self-management could pose a real, rather than theoretical, challenge to the state and the market. Finally, there are questions concerning to what extent collaboration with the state can truly be considered Autogestion, given the politics of Autogestion as an attempt to realize socialist collectivities without the state (Dean, 2015). The tree plantings and prunings and neighborhood park cleanups were sponsored by nonprofits subsidized by the City of Philadelphia. While it is certainly true, following Ferguson (2010), that neoliberal policies can be translated on the ground to progressive outcomes, recognizing this transformation as Autogestion is questionable at best.

Diverse economies, through a feminist reading for difference, seek to locate and expand actually existing non-capitalist alternatives that have been hidden by hegemonic, capitalocentric readings of the economy. While acknowledging the presence of structural forces, such a reading: "simply encourages us to deny these forces a fundamental, structural, or universal reality and to instead identify them as contingent outcomes …

(Gibson-Graham, 2006, page xxxi).” A diverse economies reading would see urban environmental volunteerism as one of these exceptions to neoliberalism, a non-capitalist economic practice, or a technology of the self, rather than a neoliberalization of urban citizens in the name of the market. There are synergies here with both insurgent citizenship and Autogestion, as recognizing the diversity of economies calls into question the centrality of capitalism and the state. Furthermore, there are connections between diverse economies and emotional economies of care. Both are attempts to think of actually existing non-capitalist economies and alternatives, sometimes careful and sometimes playful explorations and experiments in thinking and finding different ways to think about and exchange value. Finally, diverse economies work to connect emotional and affective economies of care with processes of identification, recognizing the constitutive role of desire in subjecting one’s self to capitalist or non-capitalist economies (Gibson-Graham, 2006), opening up the realm of possible economic identifications.

Each of the alternate alternatives to environmentality and neoliberal natures offers possibilities for synthesis with theorizing local everyday neighborhood urban environmental stewardship as emotional economies of care. As a first pass, and fully recognizing the need for further theoretical and empirical engagement with these bodies of research to fully recognize how they can complement and enrich each other, it seems immediately obvious that insurgent and performative citizenships, Autogestion and the right to the city, and diverse economies are all highly emotionally charged concepts and processes. While theories of performative and insurgent citizenship have not explicitly engaged with emotions and affects, the connections are clear. Using Brownlow’s (2011) work in Philadelphia as an example, the socially and environmentally marginalized

Cobb's Creek residents he worked with used volunteer urban environmental stewardship to challenge narratives around their indifference to the conditions of the park. This can be read as not an only an emotional response to the way they had been portrayed by the local media and government, but an affective response to the atmosphere of the park and an attempt to transform that affective atmosphere in a manner more in line with their desires.

As Lefebvre (2007) famously wrote "the *right to the city* is like a cry and a demand (page 374, emphasis in original)." This cry and demand for the ability to construct urban life in a manner consistent with individual and group desires and dreams is nothing if not emotional and affective, and emotional and affective atmospheres are the ways in which individuals sense the incompleteness of current urban societies and the reasons why they instead attempt to realize "the floating and dispersed elements of the possible (Lefebvre, 2007, page 372)."

Finally, the diverse economies literature explicitly recognizes care for the other as arising from subjection to the economy with a "big E" and providing potential for performing the economy differently. While this recognition that insurgent and performative citizenships, Autogestion and the right to the city, and diverse economies are emotional may seem too simple and obvious for any real synthesis with emotional economies of care, like an attempt to make emotions and affects an all-encompassing theory of everything, instead I would like to suggest that in future research and theorizing we attend to the specific, contingent, and conjunctural ways in which emotional economies of care matter (structurally, discursively, and materially) in all of these theories, and how they help to explain the agency and potentiality that individuals find in the face of attempts to subjectivate them in projects of neoliberal environmentality.

Conclusions

The recent increased engagement with theories of the self and identity in critical nature-society research is to be commended and provides opportunities to enrich and expand the field. Unfortunately these opportunities have been constrained as many explanations of environmental identity formation have applied overly structural and totalizing theorizations of environmentality and neoliberal natures, especially when considering volunteer environmental stewardship. Here, emotional economies of care are offered as an alternative explanation for everyday local urban environmental volunteer stewardship in Philadelphia. My research with volunteer urban environmental stewards revealed how emotional attachments to place and human and non-human others motivated their continued participation in these activities. Realizing the influence of intense emotional and affective attachments rather than the disciplinary power of neoliberal environmentalities allows for the agency of participants to be considered and serves to further blur the line between cooptation and resistance in struggles over material, affective, and discursive urban environments. Furthermore, embodied affective labor opens up possibilities for the fostering of new individual and collective subjectivities and new ways of being, becoming, and relating to others, the "sense of connectedness of community (Hardt, 1999, page 96)" that motivated continued participation in urban environmental volunteerism in my research. This connectedness to community is joined by the intense attachments to and circulation of affects with trees and other nonhuman others in providing an expanded understanding of the self that challenges modernist conceptions of individuality (Singh, 2013). Rather than unified, coherent, and stable identities formed alone in a vacuum, the affective labor of urban

environmental volunteers in Philadelphia reveals that environmental identities are emergent and influenced by embodied interaction with human and nonhuman others.

Along with affective and emotional economies of care, other theoretical approaches that provide possible explanations for participation *as agents* include insurgent and performative citizenships, Autogestion and the right to the city, and diverse economies. A brief connection with the emotional and affective aspects of these theories and emotional economies of care is offered, with the hope of further theorization and research that seeks to deepen understanding of the relationships between these explanations of urban environmental identities.

Despite the engagement with insurgent and performative citizenships, Autogestion and the right to the city, and diverse economies, there remain other alternative explanations to urban environmental volunteerism that should be considered for synthesis for emotional and affective economies of care. Chief among these is the rich feminist literature on emotional economies of care (Vaughan, 1997; Singh, 2013) and affective labor (Hardt, 1999). Future research should seek to synthesize the new understanding developed here of urban environmental economies of care with previous feminist theories of emotional labor. Furthermore, indigenous ontologies have resulted in emotional economies and ecologies of care (Jackson and Palmer, 2015), and care should be taken to engage with these rather than ignore and Orientalize (Said, 1994) this history, recognizing that affective and emotional economies and ecologies have long been present in the cosmologies of the nonwestern world (Singh, 2015). However, care should also be taken to not fetishize nonwestern and precapitalist (or gift-giving) ways of being and others (Moore, 2011), in effect an extreme position in the opposite direction.

CHAPTER 6

DISCUSSION CHAPTER TWO: MULTIPLICITIES OF VALUE

Introduction

This second discussion chapter builds upon the first, extending the argument to put forth emotional economies of care as multiplicities and offering the circulation of emotions and affects within and between these multiplicities as an alternative measure of value. Framing volunteer urban environmental reproduction as emotional economies of care serves to contest the hegemony of the market as the proper value form for these activities. Ethical and empirical critiques of market valuation of urban environments and urban environmental reproduction are presented, and then an attempt is made to go beyond critique, thinking through how they could be valued outside of the market. Emotional economies of care are thought of as multiplicities and becomings in the style of Deleuze and Guattari (1987), allowing us to think of them as a composition of multiple human and nonhuman bodies joined by their increased capacity to act (their affects). The circulation of affects and emotions in these multiplicities are what bring them into being. Valuing this circulation as the impetus behind increased urban environmental reproduction is offered as a counter to the hegemonic value form of the market, recognizing that multiple value forms often and almost always exist alongside each other (Mauss 2002[1925]; Gidwani, 2013; Li, 2014). Finally, given the constant shifting within and between multiplicities, there is concern surrounding their becoming and persistence. Several potential ways are suggested to think through how emotional economies of care

as multiplicities can be fostered, namely: through the multiplication of diverse, creative, and spontaneous encounters, the desire to increase the joy found in the increased affects of multiplicities, and finally the sense of hope provided by the presence of multiplicities.

Emotional Economies of Care and Value

It has been made clear that participants cared for trees due to their deep, intense emotional attachments, but how were they participating in emotional *economies* of care? What is the significance of framing their actions in such a manner? First (and perhaps most significantly), like the diverse economies approach discussed in greater detail in the previous discussion chapter, such a framing works against hegemonic framings that envision urban (and rural) environments as realized through traditional economic values and logics that often silence other ways of valuing environments (Guattari, 1989; Milton, 2002; Ernstson and Sorlin, 2013; Gidwani, 2013). Indeed, conceptualizing environmental reproduction as ecosystem services valued through the market erases any ability to value it as emotional economies of care due to the framing of "the society-nature relationship into one of utility and exchange prefiguring commodification as a reasonable response (Kallis et al., 2013, page 99)." The Western separation of rationality and emotion, with rationality seen as the objective way to make difficult decisions, serves to devalue emotion as a source of value and a reason for preserving or increasing environmental amenities (Milton, 2002). These market values and logics are exemplified through the widespread attempts to quantify in dollars and cents the urban environmental reproductive services (often termed ecosystem services) provided by urban forests, parks,

and other “natural” features discussed earlier. In rural areas, especially in the Global South, such strategies have been extended to actually paying for ecosystem services (Kallis et al., 2013; Jackson and Palmer, 2015).

Pricing strategies for previously nonmarket environmental (and other) benefits (and costs) are an attempt to internalize these benefits that had previously not been regulated by the market (Tietenberg, 2000; Kallis et al., 2013). The guiding assumption behind such assumptions to internalize environmental externalities is similar to that developed in Hardin’s (1968) (in)famous tragedy of the commons thesis. Homo Economicus is the model for human individuals (Singh, 2015), where people are self-interested rational actors seeking to maximize personal utility, “free-riding” off benefits produced (or costs born) by others. The marginal cost (spread throughout society) of increased environmental degradation is less than the marginal benefit (which is individualized), so of course a rational economic actor would pollute/consume/otherwise degrade common pool or sink resources. The only solution based off of these assumptions is to provide economic incentives for environmental stewardship (Singh, 2015). Neoliberal environmentality approaches argue that pricing strategies are also an attempt to create a certain kind of person, a certain kind of subject that internalizes these market strategies when thinking about their relationships to other human and nonhuman bodies (Brand, 2007; Perkins, 2009*a*, *b*).

Along with the critiques of attempts to marketize nature as part of the project of neoliberalization discussed earlier, empirical critiques have demonstrated the success of actually existing commons, some of which have survived for centuries (Ostrom, 1990, Dietz et al., 2003; Ostrom, 2010; Singh, 2015). While predictions of rational self-interest

were found to hold true in cases where individuals did not know each other and could not communicate, other situations found resource users acting successfully in common together as effective managers (Ostrom, 2010). Furthermore, recent research has demonstrated that volunteers act as stewards for urban and rural environments without considering economic values (Brownlow, 2011; Singh, 2013). Finally, the commodification of urban environments through the application of market values is seen as a Polanyian (2001) disembedding of people from nature that further widens the divide between nature and society (Sullivan, 2010). Following Sullivan, "the construction of nature as service-provider to humans begins the discursive and conceptual transformation of earth into a corporation, providing goods and services that can be quantified, priced and traded as commodities (Page 116)." Along with ethical concerns surrounding the buying and selling of environmental amenities and hazards, how could monetary values be established for the emotional and affective relationships between humans and nonhumans?

While establishing both practical and ethical reasons against estimating market values for urban and rural environmental reproduction, hopefully it should be clear that the argument is not against the value of these activities. Rather, what follows is an attempt to think through how they could be valued outside of the market, as Guattari argued "a thousand revolutions in value-systems are within reach; it is up to the new ecologies to define their co-ordinates and to make their weight tell within the political and social balance of forces (1989, page 146)". Essential to this attempt is an embrace of relational thinking, an emphasis on becoming rather than being, enabling us to envision urban environments as flows instead of stocks (Jackson and Palmer, 2105). As

demonstrated, the everyday local urban environmental stewards that I worked with participated due to the intense emotional and affective attachments that they formed with their neighborhoods, other participants, and nonhuman others. The first two attachments serve to demonstrate the coexistence or coproduction of environmental and social reproduction (Guattari, 1989; Jackson and Palmer, 2015), working to dispel the split between nature and society that is widened by monetizing urban environmental reproduction (Sullivan, 2010) and other forms of neoliberalizing nature (Heynen and Robbins, 2005). The third attachment speaks to the power of emotional and affective relationships between humans and nonhuman others. Indeed, we can think about these relationships as circulating value, perhaps even as transactions between human and nonhumans where value is exchanged.

Thinking through the three attachments simultaneously is even more productive towards theorizing the constitution of emotional economies of care. Indeed, there is a nice symmetry with both the tripartite theoretical framework (structural, discursive, and material) developed earlier and Felix Guattari's (1989) *The Three Ecologies*, which he termed mental, social, and ecological. The three intense emotional attachments discussed above could be neatly mapped onto the three fields - structural, discursive, and material – of my theoretical framework. Care for one's neighborhood and community seems to be a reaction against structural conditions imposed from without. Care for one's neighbors and fellow participants in local everyday neighborhood environmental stewardship could be situated in the discourse between these individuals. Finally, care for trees and other nonhuman others could be located in both the materiality and spatiality of these others and the embodied nature of the affects and emotions that they produce. Situating the three

intense emotional attachments thusly in the three fields of my (or Guattari's) theoretical framework seems to make sense, but it also seems too easy, simple, and straightforward. Something messier must surely be going on. The first intense emotional attachment of caring for one's neighborhood and community could also be located discursively in the way individual and group senses of and pride over place are discussed and written about. Alternatively, this concern surrounding community and neighborhood vitality could be situated in the material realm through the embodied emotions and affects produced by daily spatial practices and narratives. This concern over a neat partitioning of the three frames and the three intense emotional attachments is strengthened by arguments that the discursive, structural, and material can be co-present, and indeed, co-constitutive of, objects and actions (Montag, 1995; Butler, 2003, 2010; Kooy, 2008; Nightingale, 2011). Similarly, Guattari (1989) argues that it is wrong to regard action on any of the three ecologies as separate from the others.

Emotional Economies of Care as Multiplicities

So how might we think the three emotional attachments (to neighborhoods, neighbors, and nonhuman others) and the three fields (structural, material, and discursive), and/or the three ecologies (mental, social, and ecological) together? There are many possibilities for such a holistic approach, but I find Deleuze and Gauttari's (1987) concept of multiplicities to be the most productive. Multiplicities are becomings of heterogeneous bodies (understanding bodies in the widest possible sense, with their characteristics emergent rather than innate): "each multiplicity is symbiotic; its becoming

ties together animals, plants microorganism, mad particles, a whole galaxy (Deleuze and Guattari, 1987, page 250).” These becomings of heterogeneous bodies are guided by the power of affects and intensities. Becomings focus upon the constant processes of difference, flux and change that Deleuze and Guattari (1987) use as a counter to traditional philosophical concepts of being, essence, and identity, indeed we might think of them as “becoming different (Stagoll, 2010, page 26)”. Importantly here Deleuze and Gauttari are not just talking about bodies in relation to each other in a becoming, but bodies actually becoming each other, or becoming together.

> We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body, either to destroy that body or be destroyed by it, either to exchange actions and passions with it or to join with it in composing a more powerful body. (Deleuze and Guattari, 1987, page 257)

Emotional economies of care can be theorized as a multiplicity, a becoming. The affects of local everyday urban environmental stewards enter into composition with the affects of trees and other nonhuman others, pedestrians and other nonparticipants in the stewardship areas, the saws, clippers, shovels, and other tools of stewardship, the dirt, cement, concrete, asphalt and other surfaces, the sun, wind, clouds, and rain, and many other bodies. Multiplicities are also composed of enunciations, both plans and legal documents along with statements, bringing in the realm of the discursive to immanent becomings (Li, 2007*b*; Anderson, 2014). What residents and nonresidents say about neighborhoods and urban environments can add to or subtract from the affects and emotions involved in emotional economies of care. Indeed, if we follow Deleuze and Guattari’s reading of Spinoza, we can think of these bodies as not only entering into composition, but joining

with these other bodies to form a more powerful one. Thus, “two individuals (or more) who come together to enhance their potential collectively constitute a new individual (Ruddick, 2008, page 2594).” They speak of many types of becomings: “becoming-woman, becoming-child; becoming-animal, -vegetable, or -mineral; becomings-molecular of all kinds, becomings-particles (Deleuze and Guattari, 1987, page 272).” Nilan and Wibawanto (2015) theorized becoming-environmentalists in Indonesia. Perhaps the urban environmental stewardship multiplicity(ies) could be thought of as a becoming-emotional-ecologies?

Becoming-emotional-ecologies share some similarities with Ahmed’s (2004) affective economies that help us to understand how they are emotional *economies* of care. For her, as with Deleuze and Guattari (1987), affects and emotions do not reside in individual bodies or objects; rather they circulate, similar to capital in a market economy. As with multiplicities, “it is the very failure of affect to be located in a subject or object that allows it to generate the surface of collective bodies (Ahmed, 2004, page 129).” Emotional economies of care as becoming-emotional-ecologies function through the circulation of emotions and affects between human and nonhuman participants that generates new collective bodies. Indeed, the circulation of emotions and affects increases or diminishes the value of particular emotions. Thus, “some signs, that is, increase in affective value as an effect of the movement between signs: the more they circulate, the more affective they become, and the more they appear to ‘contain’ affect (Ahmed, 2004, page 120).” In my research, the constant discourse surrounding community is one of those signs that has increased in affective value and meaning to participants through its increased circulation. So increasing the size and number of becoming-emotional-

ecologies could serve to increase the circulation of affects and emotions, strengthening their power and ability to struggle against dominant market based forms of valuing urban environmental stewardship.

Becoming-emotional-ecologies are processes of becoming-minoritarian, indeed, "all becoming is becoming-minoritarian (Deleuze and Guattari, 1987, page 291)." The process of becoming minoritarian implies a deterritorialization of an area, a freeing of an area previously dominated by a majoritan party or institution such as the state, religion, or the market (Deleuze and Guattari, 1987). Major and minor are here defined in terms of power relations rather than numerical quantities (Bogue, 2010; Watson, 2010). The hegemonic nature of market valuation for environmental services and other neoliberalizations of nature (Guattari, 1989; Milton, 2002; Enstson and Sorlin, 2013; Gidwani, 2013) certainly makes them a majoritarian institution, while valuing environments instead for the emotional attachments to them and the multiplicities these attachments bring into being is a becoming-minoritarian that values urban environments and their stewardship outside of the market. However, as discussed previously in relation to cooptation and resistance, a simple opposition between major and minor is not appropriate here either. Following Katz, "the minor is so much a part of the major that its deployment completely reworks the major *from within* (1996, page 491, emphasis in original)." This imbrication of the major and the minor in terms of economic regimes is reinforced by feminist economists and diverse economy theorists who have shown how non-capitalist economic practices are essential for the functioning of capitalism (Gibson-Graham, 1996, 2006; Vaughan, 1999). Similarly, in Deleuze and Guattari (1987) there is

interplay between de and re territorialization, indeed “there is no deterritorialization without a special reterritorialization (Page 303).”

Hegemony and Plural Value Forms

Recognizing market relations as the hegemonic form of valuing urban environmental reproduction has some essential ramifications when a deep engagement with the term is undertaken. First, occasions of hegemony are seen as rare and temporary, rather than persisting in perpetuity (Hall, 1986). This means there is an opportunity for other forms of value to become hegemonic, or for a mixed system of values where none are hegemonic. Second, hegemonies require active maintenance (Williams, 1977; Laclau and Mouffe, 1985). Thus, “there is nothing automatic about them. They have to be actively constructed and positively maintained (Hall, 1986, page 15) and “it [hegemony] does not just passively exist as a form of dominance. It has continually to be renewed, recreated, defended, and modified (Williams, 1977, page 112.)” In terms of the hegemony of market rationalities as the means of defining the value of urban environmental reproduction, this means that new work is constantly needed to prop up the dominance of measuring via the dollar. Expanding market estimation to new urban environmental benefits or new geographical locations are examples of this maintenance of hegemony. The pedagogical portion of hegemony highlighted by Perkins (2011) in education surrounding the monetary benefits of Milwaukee’s urban forest is a strong example of the active construction of hegemonies pointed out by Hall (1986). Crucially, this recognition of the struggles to maintain the market’s hegemonic position in valuing

urban environmental reproduction reveals ecosystem services as a social process of value articulation, rather than the rational and objective solution they are portrayed as (Ernstson and Sorlin, 2013). Following Gidwani, "capitalist value constantly battles to assert its *normative* superiority over and autonomy from other forms of value production that interweaves with it (2013, page 773, emphasis added)." Third, and most important for this research, there is a difference between hegemony and a totality (Williams, 1977; Torfing, 1999). What this means is that even in a situation where hegemony is present, the field of the social remains heterogeneous. In other words, although marketization is the dominant form of valuing urban environmental reproduction, other value forms persist alongside it. Indeed, following Williams (1977), alternatives do more than simply persist, hegemony is "continually resisted, limited, altered, challenged by pressures not at all its own (page 112)." Finally, if marketization and payment for ecosystem services is thought of as the hegemonic mode of production of urban environments, this does not mean that other modes of production cannot (and do not) exist in the current conjuncture: "*no mode of production and therefore no dominant social order and therefore no dominant culture ever in reality includes or exhausts all human practice, human energy, and human intention* (Williams, 1977, page 125, emphasis in original)."

Anthropologists have long recognized this plurality of value forms, often inspired by the work of Marcel Mauss (2002[1925]). His influential essay on the gift argues for an exchange system of reciprocity that fosters collectivity rather than individualism while also recognizing that these reciprocal exchange systems still existed alongside capitalist values. This argument was picked up by the Situationists, who further politicized systems of exchange and consumption (Vaneigem, 1965; Debord, 2002; Martin, 2012). Martin

(2012) argues that: “for the Situationists, the gift functioned simultaneously as a message from humanity’s past, a visions of its future once a society of material plenty was freed from the yoke of economic rationalism and, most crucially, *a tool to be used to remove that yoke in the present* (page 130, emphasis added).” This politicization, arguing for the role of alternate systems of value as tools of freeing society from the hegemonic yoke of economic rationalism and calculability, brings us back to becoming-emotional-ecologies as minoritarian becomings or minoritarian forms of value struggling to deterritorialize regimes of value. This means that “value pluralism is not only an ethical but also a political stance, which requires political action to oppose undesirable commodification and make sure that plural values and institutions exist and proliferate (Kallis et al., 2013, page 100)”. Following the arguments of Mauss (2002[1925]) and others (Gidwani, 2013; Li, 2014), alongside Gramci’s (1971) conception of hegemony, plural values will always exist. What remains is the need to maximize their proliferation if one believes that “there are intrinsic qualities in human relations such as love, friendship or hospitality, and in contacts with the non-human world, that deteriorate when these are mediated by – and assumed as substitutable by –money (Kallis et al., 2013, page 100).” Becoming-emotional-ecologies can be seen as a means of this proliferation of plural values, as they offer an alternative logic of valuing urban environmental reproduction through emotional attachments rather than market values. Indeed, similar to the arguments of the diverse economy literature discussed above (Gibson-Graham, 1996; 2006), simply getting people to recognize the presence of diverse forms of value helps to empower counterhegemonic forms through letting people know that there is an already existing alternative out there

and providing hope and something specific to fight for (for the same logic applied to globalization discourses, see Gibson-Graham, 2003).

Shifting Multiplicities

Multiplicities, however, are seen as constantly, evolving, shifting, and changing:

> Since its variations and dimensions are immanent to it, *it amounts to the same thing to say that each multiplicity is already composed of heterogeneous terms in symbiosis, and that a multiplicity is continually transforming itself into a string of other multiplicities, according to its thresholds and doors* (Deleuze and Guattari, 1987, page 249 emphasis in original)

Indeed, multiplicities should be seen as processes rather than things, which is a powerful lens through which to view the shifting nature of the relationships, the emotions and affects of the different participants (human and nonhuman) in emotional economies of care, recognizing that although it may be the same individuals and even groups involved in urban environmental stewardship, there is still a continuous shifting play of affects and intensities. Deleuze and Guattari and other vitalists have often been critiqued for the lack of structure in their ontologies (Braun, 2006). This lack of structure is understandable, given the structuralist norms in Marxism and the wider academy that vitalists, feminists, and affect theorists are reacting against. Anderson (2014) argues that this has been taken too far, missing an analysis of how affective life is ordered. However, as detailed above, there is interplay between permanence and contingency, what Deleuze and Guattari (1987) called molar and molecular forms, opening up a space for understanding order in vitalist ontologies. Following Braun (2006) on Deleuzian ontologies:

> This is not to say that there is no organization to the world and that everything happens in a chaotic manner, nor that bodies have no permanence, only that there is no *pre-existing* order that defines the earth's socio-ecological organization in advance (Page 204, emphasis in original),

or as Massumi (1996) argues "an open system is not one that sets closure entirely aside as its other, as a closed system purports to do with openness. An open system is open even to closure (page 402)." And finally in the words of Doel, "A smooth space is therefore not simply chaos. It is a *composed* chaos, a chaotic variability rendered *consistent*; it is a chaosmos (chaos + cosmos) (1996, page 431, emphasis in original)." In other words, staging a stark contrast and sharp divide between becoming and being simply serves to create another other (De Vries and Rosenow, 2015). The shift from things to processes (similar to the shift from stocks to flows when conceptualizing urban environments discussed earlier, and in line with Deleuze's conceptualization of philosophy as a process (Massumi, 1996)) makes the normative question: how can processes of urban environmental stewardship and flows of urban environmental amenities be directed in more progressive ways? Recognizing the constant movement and change of multiplicities, how can they be brought into being, how can they be sustained, how can their movement and change positively impact urban environments and their residents? If, as Stagoll argues: "each change or becoming has its own duration, a measure of the relative stability of the construct, and the relationship between forces at work in defining it (2010, page 27)", how can we increase its stability, maybe even rearrange the relationship of forces to do so?

Multiplicitous Encounters

One encouraging prospect for the becomings of emotional economies of care is found in Althusser's (2006, see also Merrifield, 2012) aleatory materialism of the encounter. Similar to Deleuze and Guattari (1987), Althusser here is heavily influenced by Spinoza. What he adds is the necessity of encounters taking place for the existence of beings, thus, "for a being (a body, and animal, a man, state or Prince) to be, an encounter has to have taken place (past infinitive). ….. an encounter has to have taken place between beings with affinities (2006, page 192-3)." Despite the strong (and often negative) association in the academy of Althusser with rigid structuralism (Merrifield, 2012), his philosophy of the encounter is completely based upon contingency, without a hint of prefiguration: "Every encounter is aleatory, not only in its origins (nothing ever guarantees an encounter), but also in its effects. …. nothing in the elements of the encounter prefigures, before the actual encounter, the contours and determinations of the being that will emerge from it (Althusser, 2006, page 193)." Given the mutual influence of Spinoza, it is not surprising that Deleuze's (and Guattari's) philosophy of the encounter also has indeterminate outcomes that cannot be given in advance (Doel, 1996; Roffe, 2010; De Vries and Rosenow, 2015).

While Althusser's (2006) philosophy of the encounter is at a very high level of abstraction, it is possible to bring it down to the concrete in terms of emotional economies of care as multiplicities and becomings. At the most basic level, encounters between different bodies need to happen for emotional economies of care to begin, persist, and grow; for affects to be exchanged between bodies. The intense emotional attachments that participants had to their neighborhoods, neighbors, and trees and other

nonhuman others grew out of a variety of encounters with people, places, and things (recognizing the discursive and non-discursive nature of encounters (Anderson, 2014)). Furthermore, if we think of emotion as circulating and creating value, it is apparent that there needs to be an ongoing series of encounters for these emotions to circulate between more and more participants to enable the growth of emotional economies of care and the accumulation of value. However, there is a tension between reading aleatory materialism as completely up to chance and recognizing the effects of previous encounters (Lordon, 2014; Pedwell, 2014). What bringing in this sense of history helps to retain is the balance between pure prefiguration and pure contingency, acknowledging that "the present encounter reopens past encounters (Ahmed, 2000, page 53)". Furthermore, it allows for a recognition of the importance of openness to becoming other through encounters that enables them to create greater change (De Vries and Rosenow, 2015). One of my participants for the garden illustrated the power of encounter in meeting one of the neighbors near the garden who later ended up painting a mural sign for the garden and helping to coordinate a neighborhood block party at the site:

> Cesar was really like our first strong neighborhood contact, he was walking his dog, and he kept walking his dog by the lot, and just kind of like stopping and looking at us for long periods of time. So finally we went up to him and talked and he was really interested in the idea and found out that he was an artist and he really wanted to, he had all these ideas for it.

The example of community gardeners bringing Cesar into their emotional economy of care (or their multiplicity) shows the power of history and repeated emotional and affective encounters, recognizing that multiple encounters can work to foster trust among diverse participants (Gibson-Graham, 2003). The Philadelphia Tree

Stories also illustrate the influence that histories of emotional encounter can hold over emotions and affects, where repeated encounters with specific trees cause them to hold emotional value and even represent specific places and temporalities. Thinking about how to facilitate and increase encounters seems like an urgent task for those who wish to foster the growth of becoming-emotional-ecologies and alternative forms of value. While it might seem most productive to seek to foster encounters among similar bodies to encourage their composition, following Ruddick (2010), it is important to also work towards encounters across difference (see also Barnett, 2005*b*). These uncomfortable encounters of difference are what cause us to challenge our ways of thinking and doing, to spontaneously and creatively respond to different types of human and nonhuman bodies. Specifically regarding social movements, protests and activism, Chatterton (2006) refers to these encounters of difference as uncommon ground, finding it to be "a site brimming with affect, emotions and ethical interplay (page 268)" that holds much potential for increasing counter-hegemonic power through the finding of commonalities between previously antagonistic others. Groups involved in local everyday urban environmental stewardship should stretch outside of their comfort zones and facilitate encounters with new spaces, places, and bodies.

The inability to be certain in advance of the outcomes of these encounters along with the instability even after an encounter has taken place (Althusser, 2006) necessitates that as many as possible occur so that the maximum amount of progressive results can be achieved. Furthermore, these encounters allow for creativity and spontaneity, in fact, not knowing the outcomes ahead of time necessitates this willingness for a flexible and adaptive politics of urban environmental reproduction. Thus, "it [vitalism] reminds us

that our politics of nature must invariably be a kind of active experimentation (Braun, 2008, page 676)", and Guattari argues for the need to expand the realm of creative practice "not only is it necessary to *not* homogenize the various levels of practice – *not* to join them under the aegis of some transcendent instance; we have also to engage them in processes of *heterogenesis* (1989, page 139, emphasis in original)." This creativity and spontaneity of encounters brings us back to the level of everyday life, as Vaneigem (1965) and Lefebvre (2014) argued for the necessity of creative praxis to transform everyday life, and the spontaneity of everyday encounters is what allows becomings of emotional economies of care to come into being, persist, and grow. Finally, this call for an increase in creative, spontaneous encounters across differences heeds Valentine's (2008) call to not romanticize encounters and their ability to increase the understanding and acceptance of difference. The example of Cesar becoming interested in the garden in his neighborhood could easily be contrasted with the many others who passed by repeatedly and did not get involved or even interested. Valentine's (2008) research found that encounters can actually serve to harden prejudices and disdain for others, and care will have to be taken to try to minimize this result of encounters, instead fostering the unsettling and uncomfortable encounters (Ruddick, 2010) that can lead to a change in emotions and affects.

Persistent Multiplicities

Once emotional economies of care have been brought into becoming through diverse, everyday encounters, how can we work to increase the possibilities of their

persistence and growth? Given the constant shifting and mixing of intensities and flows in multiplicities (Deleuze and Guattari, 1987), this seems like a Sisyphean task. However, we must also remember that multiplicities and assemblages are flexible enough to allow for some persistence, if not permanence (Braun, 2006). Taking that into account, there are several possibilities in Spinozan inspired ontologies that provide some hope for the persistence and growth of emotional economies of care. The first of these is his treatment of the philosophical concept of *conatus*, which can be interpreted as an innate tendency towards self-preservation (Deleuze, 1988; Ruddick, 2010; Lordon, 2014; Singh, 2015), or "the tendency of each thing to strive to enhance its capacity to act, its potential (Ruddick, 2008, page 2593)." Recognizing that bodies and multiplicities strive towards preserving themselves helps to understand how some of the contingent and conjunctural emotional economies of were able to persist despite structural pressures from without, with some of them having been around for almost twenty years despite reductions in funding and the aging of members. The second interpretation, centered around the tendency of bodies (singular and plural) to strive to enhance their capacity to act (their affects) is even more promising. As discussed previously, similar and dissimilar bodies join together in a multiplicity to increase their affects, their capacities to act (Deleuze and Guattari, 1987). In terms of emotional economies of care, individuals join with stewardship groups; enter into becomings with other humans and nonhuman others, to multiply the effects (and affects) that they can have on their neighborhoods. Furthermore, it is the desire for the joy that comes with an increase in affects that often drives the persistence and growth in multiplicities. "We experience *joy* when a body encounters ours and enters into composition with it (Deleuze, 1988, page 19, emphasis in original)." Thus, "the motive

for collaboration arises from a desire to reproduce the joy that accompanies our enhanced capacity to act (Ruddick, 2010, page 30).” This joy was evidenced in my fieldwork through the sense of pride and accomplishment after urban environmental stewardship events, along with comments regarding the power of the impact that participation had on the quality of neighborhoods. The intense emotional attachments that participants formed with their neighborhoods, neighbors, and nonhuman others all revolved around joy in one way or another. Joy at increasing urban environmental reproduction in one’s neighborhood, and over convivial encounters with one’s human and nonhuman others often served as the driving factor in participation in urban environmental stewardship and emotional economies of care. “Working in the garden or in the bush, or going for a walk in the park, gives us joy, and we seek to reproduce this affect (Singh, 2015, page 59).” Finally, hope is an affect along with joy that can lead to the becoming of emotional economies of care, as evidenced by the quote from one of the gardeners discussed previously: “I started being involved in the garden because I wanted to do something good, I wanted to help people, to show people that there’s hope.”

Conclusion

Based upon the critiques developed of environmentality and green neoliberalism as too rigid and structuralizing concepts to build an understanding of volunteer urban environmental reproduction, the previous section offered emotional economies of care as an alternative explanation of these processes. Fieldwork revealed that participants

developed intense emotional attachments (Ahmed, 2004) to their neighborhoods, neighbors, and nonhuman others which influenced their participation.

Recognizing everyday local urban environmental stewardship in Philadelphia as an emotional economy of care rather than another instance of neoliberal environmentality opens up the theoretical terrain, but what are the material affects upon the ground? How does this shift in understandings *matter*? How can they influence urban environmental policy and practice? How do they highlight the ability for individuals to take action in environmental identification processes? These questions are essential in understanding the results of urban environmental stewardship in Philadelphia and elsewhere. My results could be interpreted as supporting neoliberalizing projects of devolving urban environmental reproduction to community groups and individuals. Indeed, why would neoliberals be interested in why individuals are volunteering to provide urban environmental reproduction that was formerly the province of the state, as long as the work is getting done? Concerns such as these are why I have tried to incorporate insurgent and performative citizenships, Autogestion and the right to the city, and diverse economies, as these theories are more explicit about their challenge to state logics of exclusion and marginalization. However, the exploration of emotional economies of care as multiplicities, as becoming-emotional-ecologies, also offers up some hope for volunteer urban environmental stewardship as a progressive counter to neoliberalized environmentalities through their affective capacities acting as alternatives to the currently hegemonic marketized value form. This section argues that the attachments motivating participation can be seen as creating multiplicities (Deleuze and Guattari, 1987), where bodies (human and nonhuman) enter into composition through increasing their capacity

to affect and be affected. Valuing these multiplicities and their affective capacity is a possible alternative to the currently hegemonic market valuation of urban environmental reproduction.

However, if we follow the philosophy of Deleuze and Guattari (1987), multiplicities and their affective capacities are always shifting and in flux. Given their possible engendering of alternative and progressive ways of being and becoming, how can multiplicities be brought into being and given some hope of persisting? Several potential ways are suggested to think through how emotional economies of care as multiplicities can be fostered, namely: through the multiplication of diverse, creative, and spontaneous encounters, the desire to increase the joy found in the increased affects of multiplicities, and finally the sense of hope provided by the presence of multiplicities.

Attention to the specificities of the relationships between these theories and the emotional economies of care detailed here could help understand whether participants are stabilizing or de-stabilizing neoliberal regimes, in oppressive or progressive fashions. Furthermore, longitudinal and scalar studies could help to develop connections between emotional economies of care and larger structures of power, showing how neighborhoods and individuals change over time and in relation to other neighborhoods and individuals.

CHAPTER 7

CONCLUSIONS

This research project sought to develop greater understanding of the environmental identity processes of volunteer local everyday urban environmental stewards in Philadelphia, Pennsylvania. Results speak to and inform the three major previous areas of findings in political ecology centered research on environmental identifications: the importance of practices to environmental identities (Darier, 1996; Agrawal, 2005; Birkenholtz, 2008; Nightingale, 2011; Singh, 2013), the debates over structure (Agrawal, 2005; Birkenholtz, 2008) and agency (Sletto, 2005; Li, 2007; Jepson et al., 2012; Nightingale, 2011; Singh, 2013) in identification processes, and the importance of the influence of nonhuman others on environmental identities and practices (Jones and Cloke, 2002; Harris et al., 2013; Pearce et al., 2015).

Practices were found to influence environmental identity processes. Similar to Agrawal's (2005) findings from rural India, my results found practices to wield more influence upon environmental identities than traditional social markers such a gender, "race", education, or class. Recognizing the importance of practices rather than such essentialized categories helps to dispel arguments theorizing environmental stewardship as an elitist practice predicated upon affluence and whiteness (Rosenbaum, 2014). Importantly, such findings also display how practices influence beliefs, rather than the traditional approach that has argued for beliefs informing practices. I would argue, along with others (Nightingale, 2011; Singh, 2013) that the influence goes both ways, with both

practices informing beliefs and beliefs informing practices. The idea of a value-action gap (Hards, 2012), where environmental theorists try to understand why individuals do not perform environmental actions and stewardship consonant with their professed environmental values is dispensed with upon realization that the relationship between beliefs and practices works in both directions. The mutually constitutive and ongoing relationship between beliefs and practices corresponds to the processual approach to identity discussed in the literature review. Indeed, recognizing the constant interplay between practices and beliefs and its influence on identity makes it extremely hard (if not impossible) to hold on to modernist, enlightenment, and rationalist stable and/or inherent conceptions of identity. This shifting sense of identity, beliefs, and practices is perhaps best illustrated by this quote from a twenty five year old white female urban gardener who started working in the garden as an attempt to spread the new sense of hopefulness that she felt in her life for the first time (although it could be argued that in this particular case actions followed beliefs, what is important is recognizing the ongoing relationship between the two and going further to blur the boundaries between beliefs and practices):

> Honestly, no I was always ahh, I mean like, most of my life I went through this really nihilistic, I had this really nihilistic ideology where everything was pointless and blah, blah, blah, and then I realized that like no, it's not, and there's a way to make your life matter and I started being involved in the garden because I wanted to do something good, I wanted to help people, to show people that there's hope. I wanted other people to feel the hope that I feel now.

As addressed in the literature review and discussion sections, debates over the influence of structure versus agency on the (re)formation of environmental identities by both individuals and groups have been extensive (Agrawal, 2005; Sletto, 2005; Li, 2007;

Birkenholtz, 2008; Brownlow, 2011; Jepson et al., 2012; Nightingale, 2011; Singh, 2013), similar to such debates in the wider identity and social science literature (Gilbert, 1998, 2010; Holston, 1998; Holstein and Gubrium, 2000; Perinbanayagam, 2000; Vila, 2000; 2005). Explanations of volunteer environmental stewardship as performed by the participants in my study have largely focused upon top down structural power imposed by the state and/or the market influencing environmental practices and identities through theorizations of environmentality or neoliberal urban environmental governance (Agrawal, 2005; Birkenholtz, 2008; Perkins, 2009*a*, 2011).

My results intervene in this debate on the side of agency, revealing that rather than being duped or coopted by the state (Agrawal, 2005; Birkenholtz, 2008; Perkins, 2009*a*, 2011), the participants I worked with were instead volunteering to improve urban environmental reproduction in their neighborhoods due to the intense emotional attachments (Ahmed, 2004) they had with their neighborhoods, fellow participants, and trees and other nonhuman others. Realizing the influence of intense emotional and affective attachments rather than the disciplinary power of neoliberal environmentalities allows for the agency of participants to be considered and serves to further blur the line between cooptation and resistance in struggles over material, affective, and discursive urban environments. Furthermore, embodied affective labor opens up possibilities for the fostering of new individual and collective subjectivities and new ways of being, becoming, and relating to others, the "sense of connectedness of community (Hardt, 1999, page 96)" that motivated continued participation in urban environmental volunteerism in my research. While it is important to not fetishize emotions and affects, instead recognizing that they can be part of the creation of neoliberal subjects (Lordon,

2014), my empirical results found this not to be the case among my participants. Finally, this recognition of spaces and places for agency in urban environmental volunteerism and urban environmental identity processes provides an alternative to the top down conceptions of power found often in neoliberal environmentalities research. These alternate styles of power are similar to Spinoza's potestas, or the power to "dominate, or to separate something from what it can do, from its capacity to act in its own interest (Ruddick, 2008, page 2589)" and potentia "translated roughly as empowerment, the impulse to increase our power to act (Ruddick, 2008, page 2589)." There are also similarities with Foucault's (1988*a*, *b*, 1990*b*, 1993; see also Lemke, 2001) distinction between techniques of domination and techniques of the self. While neoliberal environmentality scholars have largely focused upon techniques of domination, volunteer urban environmental stewardship here was also shown to be a technology of the self, one that:

> which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality. (Foucault, 1988*b*, page 18)

Finally, drawing heavily on Spinoza and Foucault, Negri's distinction between biopower as biopotere (power creating the *bios*) and biopotenza (*bios* creating power (Casarino and Negri, 2004)) is another illuminating method of nuancing and contextualizing questions of structure and agency. Recognizing the copresence of potestas and potentia and related concepts in volunteer urban environmental stewardship allows for creative, inventive

struggles to tilt the balance more towards potentia, to refuse potestas and reproduce urban environments that more suit our own collective hopes and dreams.

Theorizing volunteer urban environmental reproduction as emotional economies of care provides an alternative to the currently hegemonic market form of valuation for these activities. I presented ethical and empirical critiques of market valuation of urban environments and urban environmental reproduction, and then attempted to go beyond critique, thinking through how they could be valued outside of the market. Emotional economies of care are thought of as multiplicities and becomings in the style of Deleuze and Guattari (1987), allowing us to think of them as a composition of multiple human and nonhuman bodies joined by their increased capacity to act (their affects). The circulation of affects and emotions in these multiplicities are what bring them into being. Valuing this circulation as the impetus behind increased urban environmental reproduction is offered as a counter to the hegemonic value for of the market, recognizing that multiple value forms often, and maybe even always, exist alongside each other (Mauss 2002[1925]; Gidwani, 2013; Li, 2014). Finally, given the constant shifting within and between multiplicities, there is concern surrounding their becoming and persistence. Several potential ways are suggested to think through how emotional economies of care as multiplicities can be brought into being and sustained, namely: through the multiplication of diverse, creative, and spontaneous encounters, the desire to increase the joy found in the increased affects of multiplicities (the increase in their powers to act), and finally the sense of hope provided by the presence of multiplicities.

Finally, results also suggested the influence of nonhuman others on environmental identity processes (Jones and Cloke, 2002; Harris et al., 2013; Pearce et al., 2015). The

emotional responses of participants revealed this influence and often motivated their continued donation of their volunteer labor and time to urban environmental stewardship activities. During the tree plantings and prunings, in-depth interviews, and neighborhood walking tours it was common to see and hear participants having strong negative reactions to trees in poor shape. Describing the emotional impact of encountering trees that were in poor shape, one mid-thirties white female participant in a pruning event said: "it's like seeing a hurt animal or small child." During an interview with another frequent participant in tree plantings and prunings, the mid-fifties African American female interviewee said that when trees are cut down, "it's like I lost one of my friends." Later on in the same interview, the participant talked about how she had documented the invasive English Ivy in her neighborhood that was killing trees with large photographs and used them in a presentation at the local library in an attempt to educate neighbors on the importance of its removal, revealing the lengths that she was willing to go to avoid losing one of her friends. The emotional attachments to trees and their status as significant actors in the lives of participants found is this research is similar to the results of Pearce et al. (2015) in Australia:

> residents most often articulated their experience of trees through the ways in which trees were encountered as participants in the fabric of their lives: that is, rather than talking about trees as passive background objects, trees were described as active in affecting the experiences and actions of the interviewees. (page 3)

Recognizing the influence of nonhuman others on identity processes and participation in volunteer urban environmental stewardship further supports arguments developed above that assert the agency of participants and urban residents (and even nonhumans). My

participants were often volunteering their time and labor due to the influence of nonhuman others, the emotional and affective connections that they experienced with them, rather than due to the pressures of vertical structural forces pressing upon them as in environmentality and neoliberal environmental governance approaches.

The three major findings discussed above were all uncovered due to the hybrid tripartite theoretical framework adapted from the political ecology of the body developed by Hayes-Conroy and Hayes-Conroy (2013 for this study, which examines structural, discursive, and material influences upon environmental identities simultaneously while grounding them in the lived experience of everyday life and recognizing the intersections, overlaps, and feedbacks between the three fields that exist. The advantage offered by the framework is most clear regarding the second major finding concerning the complicated relationship between structure and agency. Previous research into environmental identities and urban environmental volunteerism has largely fallen on the two ends of the structure/agency continuum, presenting either a dominance of structural forces (Agrawal, 2005; Birkenholtz, 2008; Perkins, 2009; 2011) or the ability of individual and group agency to transcend societal structures (Nightingale, 2011; Singh, 2013). While the balance between the two should always be determined based upon situated empirical case studies, my framework provides the opportunity to see both the influence of structural forces and the abilities for agency against them provided by the discursive and material realms, opening up the results of case studies to actual situations on the ground rather than preconceived conceptions of identity processes. Or, following Lefebvre "the critique of everyday life proposes a different route: to take lived experience as the starting point, and elucidate it in order to transform it – instead of starting from the conceived in order

to impose it (2003, page 99).” Among my participants, it was the discourse of community and the emotional and affective attachments to neighborhoods, neighbors and fellow participants, and nonhuman others that led them to plant and prune trees, grow vegetables, and clean up their neighborhoods, rather than the top down power of the state and/or the market. Furthermore, the tripartite theoretical framework, in allowing for feedback loops between the three fields, is well suited to capture the fluid, constantly shifting nature of identities (Haraway, 1991; Lemert, 1994; Knowles, 1997; Hall, 2000; Brubaker and Cooper, 2000; Nightingale, 2011) discussed previously.

While this research helped further our understanding of urban environmental identifications, revealing the influences of environmental practices, the assertion of agency by individuals and groups, and the role of non-human others, it also held several limitations which should be acknowledged and addressed in future research. Limitations are existent in three different areas: the participants and locations chosen for research, the lack of consideration of the long term material urban environmental results of volunteer stewardship in Philadelphia, and the three qualitative methodological techniques performed in this research. Each is detailed below, with some suggestions for future research directions and projects.

The first limitation is centered on the participants recruited for this study. Timing and access issues led to only individuals who participated in everyday volunteer local neighborhood urban environmental stewardship. Furthermore, stewardship activities were limited to tree plantings and prunings, urban gardening, and neighborhood cleanups. This limits the results and misses addressing individuals who participate in other types of stewardship events, especially those pursued on an individual basis rather than organized

through local neighborhood based groups. Limiting what counts as stewardship and how it is performed was necessary due to temporal and financial restrictions, but further research should address other types of stewardship, including that undertaken alone rather than in groups. However, the small sample of everyday volunteer local neighborhood urban environmental stewards serves to provide an in depth, rich portrait of the environmental practices and identities of these individuals, an important contribution to urban environmental scholarship given the increased dependence upon volunteers for urban environmental reproduction (Perkins, 2009, 2011; Brownlow, 2011). Given the focus on the importance of practices in environmental identity formation, it would be illuminating to see if the intense emotional and affective connections to participants' neighborhoods and neighbors that played such a large part in my results would hold for such a different style of stewardship not pursued in the company of one's neighbors. Even more importantly, following Kooy (2008), everyone is environmentalized. In other words, everyone has an environmental identity, regardless of whether they participate (or wish to participate) in any sort of environmental stewardship practices. Thinking in terms of identifications, everyone has identified or disidentified with what they think of as the environment at different levels and due to different lived experiences, in other words, people have defined themselves through their relationships with what the define as the environment, whether that is a relationship that they see as caring for the environment or one of disinterest (regardless of their actual actions towards the environment). Future research should look at the mutually constitutive relationship between environmental identities and environmental practices among those who have disidentified with the environment to develop an understanding of the influences that produce different types of

environmental behaviors such as littering and even vandalizing or removing street trees. Finally, also due to temporal and financial restrictions, this research only focused upon volunteer urban environmental stewards in Philadelphia. This single city focus is in contradiction with recent calls for increasing studies of comparative urbanism, which exhort urbanists to develop research projects and programs that compare cities and study the diverse tactics of everyday life across the world (Luke, 2003; Robinson, 2004). There have been very few studies of environmental identities in urban areas (but see: Robbins, 2007; Mawdsley, 2009; Gabriel, 2011; Leffers and Ballamingie, 2013), especially in the Global North. It would be presumptive to assume that the results of this research are transferable to the rural or urban Global South (Schroeder et al., 2006), and comparative research would help understandings of different environmental identity processes among different locations and social groups. Given that Philadelphia is far from alone among cities in the United States and the Global North more generally in pursuing urban sustainability projects that rely on volunteer urban environmental stewardship, comparative research in such locations would draw out the similarities and differences between the interactions between sustainability programs in different Northern cities and residents' environmental practices and identities.

The second limitation of this research is the lack of consideration given to the long term material effects of local everyday volunteer urban environmental stewardship, once again due to temporal and financial constraints. Given the concerns surrounding the possibility of the neoliberal dependence on volunteerism for social and environmental reproduction instead of the state maintaining and even increasing uneven development due to correspondences between uneven development and uneven voluntary sector

capacity or interest (Fyfe and Milligan, 2003; Pincetl, 2003; Perkins, 2009*a*, *b)*, the relationships between urban environmental stewardship and long term material urban environmental changes remains an important area for future research. Conway et al. (2011) found that resident associations were drivers of uneven urban forest canopy cover in Toronto and Heynen and Perkins (2006) found that reliance on private production of trees in Milwaukee increased inequities in urban forest distribution, supporting the concerns surrounding uneven urban environmental conditions and uneven volunteer sector capacity or interest. Contrarily, Brownlow (2011) reveals that urban environmental volunteerism is not necessarily undertaken at lower levels in unevenly developed and socioeconomically marginalized areas of Philadelphia. Future research should work towards developing a better understanding of the correspondences between urban environmental stewardship acts and urban environmental change (Svendson and Campbell, 2008) in both privileged and marginalized neighborhoods. This work could be both qualitative and quantitative, exploring how urban environmental quality (through measures such as tree canopy change, number of urban gardens, urban air quality, and others) is influenced by volunteer stewardship levels in different neighborhoods and how this makes residents feel about themselves, their neighborhoods, and the environment in general.

The third and final limitation discussed here involves the choice of methods. The three qualitative methodological procedures conducted for this study: in-depth interviews, participatory observation, and neighborhood walking tours were chosen to address all of the different theoretical concerns expressed previously surrounding environmental identity (re)formation: Structural (environmentality), Discursive (discourse, narrative,

performativity), and Material (embodiment, affect and emotions, and space). The choice of methods was also influenced by critiques such as Latham's (2003) of human and cultural geography's lack of creative, experimental, and playful engagement with empirical work that attempts to "enliven more positively our vision of what human-geography methodologies might be (page 1994)" after the poststructural turn and critiques of traditional social scientific methods. However, the poststrucural turn also makes it essential to recognize that methods are (at least) to some degree constitutive of the world that they describe (Atkinson and Coffey, 2003; Cameron and Gibson, 2005; Charmaz, 2006). So to what degree did my methods help to produce my interpretation of the environmental identity processes of Philadelphians performing volunteer local everyday urban environmental stewardship? How might my interpretations be different after the performance of a different set of methodological techniques?

The largest possible difference that I see is the emphasis on emotion rather than affect in my results and discussion. This is not my taking a stance in the ongoing debates between scholars of emotion and affect (Thien, 2005; Anderson and Harrison, 2006; Pile, 2010, 2011; Bondi and Davidson, 2011), but rather a reflection of my methods and results. Indeed, participating in local neighborhood environmental stewardship activities exposed bodies to affective atmospheres (Anderson, 2012; Simpson, 2013), and I would argue that people are always exposed to affective atmospheres, if they are thought of as the precognitive sensations derived from (and with) one's surroundings. Perhaps due to my chosen methods of in depth interviews, participatory observation, and neighborhood walking tours, and perhaps also due to the difficulty of capturing and representing affects if they are thought of as pre-cognitive (Woods et al., 2012), I feel much more comfortable

describing the emotional than affective responses to participation in local everyday urban environmental stewardship, and their influences upon environmental identity processes. Future research should strive to develop and incorporate new experimental and creative methods that can draw out the deeply affective nature of participating in everyday local urban environmental stewardship and the effects of these affects upon participation and environmental identification processes. New methodological approaches that I would like to include in my future research include: cognitive mapping, photography and other visual methods (Rose, 2005), reflexive journaling (with both researchers and research participants) (Latham, 2003), combinations of these such as Latham's (2003) diary-photograph, diary-interview method, and other experiential methods. Finally, there is also great potential for the type of mixed methods research described when discussing the previous limitation that could use land use and land cover change quantitative data along with qualitative data to develop better understandings of the relationships between urban environmental change, urban environmental volunteerism, and urban environmental identities.

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APPENDIX A

RECRUITMENT SCRIPT

Hello,

My name is Alec Foster and with Mindy Maslin's support I am contacting targeted tree tenders groups in Philadelphia seeking their participation in my dissertation research. The study seeks understanding of how participation in tree planting activities influences people's feelings about themselves or their communities. Participation is voluntary and there is no obligation to take part in this study. Options to participate include interviews and walking tours, each of which will take approximately an hour of your time. I am also interested in participants who are not leaders of tree tenders groups, so if there is anyone you think might be interested, please let me know. Please contact me if you have any questions or would like to participate in this study at: alec.foster@temple.edu or (813)-731-6917.

Thanks,

Alec

APPENDIX B

QUALITATIVE INTERVIEW GUIDE

Interview Guide:

How long have you been participating in local tree plantings (and/or park cleanups)?

Why did you start participating in these activities?

Could you describe what you do during one of these activities (tree plantings and/or park cleanups)?

Do you do any other types of environmental activities, such as protests, letter writing campaigns to elected officials, recycling, gardening, purchasing environmentally friendly products, or anything else that you consider environmental?

Why did you start participating in these activities?

Why do you participate in the type of environmental stewardship activities that you do and not others? (Local versus global environmental concerns, or different environmental issues have salience for different people).

Prompts towards structural issues:

How would you rate the environmental conditions in your neighborhood?

Who do you think is responsible for these environmental conditions?

Prompts towards discursive issues:

How does who you are influence your thoughts about your neighborhood environment? Your actions towards it? (give examples: your identity as a mother, retiree, student, immigrant, woman, etc.)

How does the way people talk about your neighborhood influence your thoughts and perceptions about it?

How do your relationships with others participating in environmental activities influence your continuing participation in these activities?

Prompts towards material issues:

How does taking part in environmental activities make you feel?

What are your favorite and least favorite parts about it?

Do you enjoy being outside taking part in in environmental issues and the physical nature of it?

Does the environment of your neighborhood and Philadelphia influence the paths you take to walk around it?

APPENDIX C

WALKING TOUR SCRIPT

I would like for you to lead me around what you consider your neighborhood and point out the important places there. We can also discuss them when the tour is complete.

Questions During the Tour:

Do you often walk around your neighborhood?

How does walking around your neighborhood make you feel?

What changes would make you more or less comfortable walking around your neighborhood?

Why do you take this route rather than another one?

Questions at Significant Places:

Why is this place important to you?

What do you do here?

Who do you interact with here?