Campus Sustainability at the Edges:
Emotions, Relations, and Bio-Cultural Connections

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INTRODUCTION

To what extent do our universities emotionally disconnect us from the natural environment and if so, how and why could this emotional affinity by restored? (David Jones, 2012, p. 643)

In his critique of UK universities' campus sustainability assessment mechanisms, Jones proposes the above question to university actors committed to a "transformative" campus sustainability. He calls on universities to reflect on this question in order to embrace the complexities and the emotional capacities embedded in the mobilizations of and challenges facing ecological sustainability initiatives. Beyond merely serving as an opportunity for academic and institutional reflection, however, Jones' question can also be seen as a rallying call for universities to operationalize sustainability concepts that actively re-connect students to their natural environment at an emotional level and thus inspire new human-environment relationships and narratives, what Jones refers to as "bio-cultural connection."

In this paper, I engage with Jones' question in order to call attention to the importance of emotional (re)connection not only with the "natural" environment, but also with the ecologically-embedded urban environments in which campus sustainability initiatives are often operating. Specifically, I investigate how building relationships across difference (both social and spatial) might be a mechanism for accessing the emotional realm of campus sustainability work. When applied to *spatial* inquiries into campus sustainability initiatives as is done in this paper, Jones' attention to emotions and relationships invites not only a shift in analytical approaches to sustainability, but also a reconceptualization of the spaces and spatial dynamics in which urban universities' campus sustainability initiatives are playing out.

My method for attending to the emotional and relational realms of campus sustainability might be different than initially expected. Rather than identify a university and assess the official sustainability discourses and practices that are developed and enacted within the institutional space of the campus, I instead locate a university's spatial context and investigate the grassroots sustainability work occurring *within* the spatial context but *outside* of the spaces of the institution. My reasoning for this is twofold: 1) it helps me to envision a campus sustainability that extends *conceptually* beyond what Jones summarizes as "prescriptive, short-term techno-fixes" such as recycling competitions, printing quotas, car shares, etc. and 2) it enables me to extend the analysis *spatially* beyond the confines of a university campus and toward its edges, the spaces of encounter where the university interfaces with its urban-ecological context.

Geographers have long theorized edges, borders, and boundaries as both productive and contentious spaces of encounter (Tuan, 1989; Gilmore, 2007; Forsyth et al., 2013). For the purposes of this paper, I am interested in a university's edges as emotion-laden spaces where creative tensions circulate, tensions that have the potential to be put to work in a way that engenders new opportunities for meaningful and beneficial emotional connection between different human beings and between human beings and the nonhuman natures in which they are embedded. I agree with Forsyth et al.'s (2013) notion of interfaces as "productive, enlivening, and enchanting spaces, where diverse materialities meet to produce physical and aesthetic

mixtures, fluidities, turbulence, and movement" (p. 1017) and am endeavoring to think through sustainability initiatives as they operate in these sorts of "edge" spaces. Thus, I see this paper's attention to grassroots sustainability efforts emerging within a university spatial context as a way of operationalizing Jones' call to bring inquiries around emotional affinity/connection into discourses of campus sustainability.

Case Study and Research Questions:

Inquiries into the emotional realm of campus sustainability work are brought together through a case study of a youth-led organization, the Philadelphia Urban Creators (PUC), which operates in the Temple University-North Philadelphia urban spatial context. Located at the interface of Temple and North Philly (one block from Temple's football complex and three blocks from the main campus), PUC describes their sustainability work as a "process of restoring broken relationships" (personal interview). In the analysis that follows, I explore the specific ways in which PUC's sustainability work plays out in their particular socio-spatial context and find that approaching sustainability through the lens of relationship restoration allows them to engage meaningfully with their spatial context to foster emotional connections between participants and their urban ecological environments. From this analysis and the findings that it produces, I ultimately argue that that grassroots organizations like PUC hold some of the keys to understanding how sustainability can be a tool for restoring "emotional affinity" with the environment as well as for enacting transformative social and ecological change in the university context and beyond.

Based on Jones' research inquiry and the PUC case study, the following three research questions were generated:

1. How do PUC members narrate their emotional connections to and/or disconnections from the natural environment and the local communities that comprise the North Philadelphia-Temple context? (eco-narratives)
2. What impacts has PUC's sustainability work had on the community in and for which it operates?
3. What do PUC's narratives and impacts lend to thinking about sustainability more broadly and diversely?

In the following section, I provide a literature review of the current critiques of sustainability and develop a theoretical framework, where I position this paper within Julian Agyeman's "just sustainabilities" research agenda. I then explain the methods that were used to address the research inquiries, which include participant observation, feminist, and activist research methodologies. Following the methods, and after a brief description and history of PUC, I discuss my fieldwork findings. The discussion section focuses on a new restorative justice initiative that PUC implemented in summer 2015, "the Regeneration Project" in order to demonstrate the importance and centrality of emotional connection and relationship cultivation in PUC's sustainability work. The key intervention I aim to make here is to advance a vision of campus sustainability that concerns itself with cultivating emotional affinities with grassroots sustainability actors, and is thus able to cultivate emotional affinities between students, their

"natural" environments, and the broader socio-ecological spatial contexts in which their universities exist.

THEORETICAL FRAMEWORK

The reflection question that Jones proposes to university sustainability actors emerges out of a particular critical analysis of sustainability that he advances, namely his critique of western universities' focus on:

> short-term, top-down, technology focused [initiatives] […] rather than the wider inherent social, environmental and economic stakeholder transitional conflicts and longer term, systemic transdiscplinary engagement challenges of sustainability. (p. 632)

Jones' criticism of the prioritization of short-term techno-fixes over the more long-term systemic questions and challenges of campus sustainability stems from the concern that sustainability initiatives that focus on the former are created and implemented "from an increasingly judgmental, self-righteous perspective" (p. 633). Moreover, and most importantly, he worries that such a perspective is failing to attract meaningful and "pluralistic" participation in campus sustainability initiatives. For Jones, bringing emotional connectivity to the center of a university's sustainability discourses and practices is fundamental to achieving meaningful experiences and outcomes for students, who he calls on stakeholders to see as "pluralistic citizens" to be engaged rather than "customers" to be satisfied by the university (p. 644).

Taking Davis Jones' critical engagement with campus sustainability initiatives as a conceptual point of departure, I explore current debates surrounding the meaning and intent of sustainability such as just sustainabilities, urban political ecology (UPE) concepts, and emerging concerns around "environmental gentrification" in order to construct a theoretical framework for my analysis of PUC and the Temple-North Philadelphia context. The theoretical framework developed below is divided into two sections: 1) conceptualizing sustainability, and 2) conceptualizing university spatialities (in reference to the case study).

Conceptualizing the Meaning of Sustainability: "Joining Up" Emotional Inquiries and "Just Sustainabilities"

A truly sustainable society is one where wider question of social needs and welfare, and economic opportunity are integrally related to environmental limits imposed by supporting ecosystems. (Julian Agyeman et al., 2002, p. 78)

Despite the fact that sustainability and sustainable development have become operative concepts in a variety of different fields, the meanings behind these concepts are multiple and remain contested. Thus, this research takes a critical approach to sustainability, seeing it as a dynamic concept that results in different material manifestations depending on the particular "sustainability actors" enacting them and on the particular spatial contexts in which they are being enacted. Michael Gunder (2006), for example, exposes the problematic consequences of the "fuzziness" of the term sustainability, explaining that "the dominant articulation of this ideal has been captured to maintain business as usual" (p. 218). Along the same vein, Rob Kruger and David Gibbs (2007) comment that "sustainability is so ambiguous that it allows actors from

various backgrounds to proceed without agreeing on a single action" (p. 5). Using a case study of Austin, Texas, Joshua Long (2014) describes a selective engagement with sustainability in the context of purportedly sustainable urban planning, while Jonas and While (2007) find a blurriness in the boundary between urban entrepreneurialism and urban sustainability in the case of Barcelona, another purportedly sustainable city. All of these authors, and many other critical sustainability scholars, agree that there is often an unequal valuation across the three pillar model of sustainable development (Brundtland Commission, 1987), with economic development being most valued, environmental protection coming next, and social equity tending to get sidelined as a distant third.

What the [unequally weighted] three pillar model and other institutional sustainability models do not allow are the more existential and complex inquiries into environment-society relations, such as the one being asked by David Jones about the role of emotional affinity, as well as those being asked by urban political ecologist Erik Swyngedouw: "What kinds of socioenvironmental arrangements do we wish to produce, how can this be achieved, and what sorts of natures do we wish to inhabit?" (2007; p. 9). What Jones' and Swyngedouw's research inquiries are suggesting here is that there is room for a whole other perspective to what Michael Gunder is calling the "fuzziness" of the meaning of sustainability. While the ambiguity of the term certainly engenders a proneness to cooptation/business as usual politics, it also gives it an ability to be "transcendental," pluralistic, and potentially transformative. Gunder argues that sustainability is a transcendental concept because it is not fully knowable or definable but, symbolically, it has claimed an inherent sense of goodness. He believes that this inherent sense of goodness has the capacity to unite people around a sustainability mission capable of generating structural and emancipatory change, but simultaneously, runs the risk of being "used as a blunt ideological instrument perpetrating social injustice and the neoliberal values of globalization, particularly as deployed under the rubric sustainable development" (p. 218). In this sense, concepts of sustainability and sustainable development are at once meaningful and meaningless, transcendental and pernicious, depending on how they are (or how they are not) operationalized. From Gunder's argument we can infer that sustainability will not orient itself automatically toward transcendental social change, it must be explicitly and actively applied toward such goals through critical reflection and political engagement.

Despite the confusions, co-optations, and contentions around sustainability theory and practice, grassroots movements have shown an ability to utilize sustainability and sustainability-related concepts in their social change missions and models, indicating its politically useful potential (Evans, 2002; Seyfang & Haxeltine, 2012; Ghai & Vivian, 2014). Julian Agyeman's "just sustainabilities" provides a framework for understanding this potential for sustainability to be employed meaningfully in social change and social justice contexts by theorizing sustainability in a way that links it inextricably to quality of life, equity, and justice. Agyeman's notion of just sustainabilities seeks to combats sustainability's "equity deficit" (2005, p. 44) and lack of attention to "current or intra-generational inequalities and injustice" (2013, p. 5), while also reflecting the multiplicity embedded in its "relative, culturally and place-bound nature" (2013, p. 5). Agyeman's acknowledgement of multiple sustainabilities brings us back to Jones, who claims that the reflection question he is proposing is designed to generate "multiple interpretations around university actors' emotional engagement with nature" (p. 643). Taken together, Agyeman's "just sustainabilities" and Jones' inquiries into emotional connection in the context of university sustainability provide a framework for envisioning campus sustainability as something that is multiple, justice-oriented, affective, and potentially transformative. I see this

paper's discussion of PUC's grassroots approach to sustainability work as providing what Jones calls "defamiliarizing narratives around fostering a greater bio-cultural connection which are more inclusive, non-instrumental, contextual and experiential" (p. 643) and what Agyeman calls "positive, inclusive narratives of change in which the entire system is reimagined" (p. 168).

Conceptualizing the Space of Sustainability: Temple University-North Philadelphia as Urban Ecological Mosaic

Cities are dense networks of interwoven sociospatial processes that are simultaneously local and global, human and physical, cultural and organic. (Nik Heynen et al., 2006, p. 1)

To explore David Jones' question in a way that is meaningful to a "just sustainabilities" framework, it is important to conceptualize the particular "natural environment" in which PUC conducts its sustainability work. To do this, I employ concepts from feminist theorist Donna Haraway, who advances a vision of nature as a *process* that is both social and physical and is produced through political power and cultural meaning (1991), as well as from Marxian urban political ecology (UPE) which has theorized urbanized nature in particular as a "highly contested and contestable terrain" (Heynen et al., 2006, p. 13). Conceptualizing nature and by extension the "natural environment" as something that is socially produced, politically contentious, as well as embedded in urban spaces and processes, allows me to theorize the North Philadelphia-Temple University spatial context as an interconnected (yet multiple), "ever-shifting" urban ecological mosaic (Heynen et al., 2006, p. 9). As a result, Jones' question about emotional disconnection and reconnection in the context of campus sustainability gets directed not only at the "natural" components of Temple-North Philadelphia's ever-shifting urban ecological system, but also the ecologically-embedded social components, which necessarily bring social justice issues to the forefront. Additionally, since I am conceptualizing Temple University as part of the North Philadelphia neighborhood and thus embedded in the same ecological space, Jones' notion of "sustainability actors" extends to include all people engaging in sustainability in the broader North Philadelphia-Temple University context. This re-framing of the natural environment as the entire urban ecological system and sustainability actors as all people doing sustainability work within this spatial system is strategic in that it allows me to envision a campus sustainability model in which grassroots movements play an integral role.

Conceptualizing Spatial Dynamics of Temple University-North Philadelphia Sustainability: Race, Class, and Environmental Gentrification

While urban farming as an urban sustainability practice forms only part of PUC's mission, the majority of their sustainability work takes place within the space of the Life Do Grow urban farm. This urban farm and community space is located three blocks from Temple University's main campus and within North Philadelphia's 22nd Police District, a section of the city that, like many other post-industrial urban neighborhoods across the United States, has faced decades of disinvestment. What is now the site of a thriving agro-ecological system containing diverse species of plants and animals, was very recently considered a "vacant lot," one of many in a neighborhood that consists of 30 percent vacant land (Phila2035.org). The EPA's definition and description of a vacant lot is:

[A] neglected parcel of property that has no buildings on it. […] Vacant lots are an issue of concern because they tend to attract or be subjected to illegal dumping of litter and other solid wastes. […] These vacant lots are not just unsightly blights on the urban landscape, and breeding grounds for rats, they are a wasted resource. They disrupt a neighborhood's sense of community and lower property values. Vacant lots are also an environmental justice issue since there are significantly more vacant lots in the city's poorer neighborhoods. (EPA, 2015)

While the definition correctly identifies vacant lots as an environmental justice issue, what it neglects to include is the fact that these vacant lots also function as spaces for North Philadelphia's (and other inner city urban neighborhoods') survival economies, which one PUC member describes as "by far the biggest employer here" (personal interview).

While the cessation of illegal activities via vacant lot revitalization is often applauded by urban sustainability theorists and practitioners as improving inner city urban conditions, the process also has the effect of destabilizing the most dependable employment option for a city's most socioeconomically marginalized populations. An ethical question emerges out of such a dilemma: Don't urban sustainability practitioners who support the practice of turning inner city vacant lots into gardens owe residents who once utilized these spaces alternative employment options? The discussion section takes up this question in detail, exploring the ways that PUC's sustainability work seeks to address this ethical dilemma through a restorative justice program called the "Regeneration Project."

The justice concerns related to transitioning inner city vacant lots into urban farms extends beyond the case of the Philadelphia Urban Creators and the North Philadelphia neighborhood in which the organization conducts their work. While it is true that blighted urban areas require both ecological and socioeconomic attention, a potential problem arises when sustainability actors view blighted inner city areas as "blank slates" upon which any manner of sustainability experimentation can take place. In her study of contemporary discourses around Detroit's urban "renewal," anthropologist Siobhan Gregory finds the repeated use of the term "blank slate" in the media and among urban entrepreneurs and argues that:

The constructions of Detroit as a *blank slate,* a *vast, enormous canvas, a frontier,* or *the land of opportunity* serve to devalue and/or negate existing people, structures, and artifacts while glorifying the new. (2012, p. 223)

Gregory goes on to explain that viewing Detroit's inner city spaces as "blank slates" reflects a gentrifier's gaze, a gaze which refuses to acknowledge the presence and the agency of the predominately low-income African American residents who are already living there. For Gregory, this tendency exposes "how deeply engrained biases of race and class are placed, consciously or otherwise, in the construction of urban renewal" (p. 221). This analysis has implications for the current study because North Philadelphia, like Detroit, is populated by predominantly low income communities of color and is undergoing a process of gentrification, in which Temple University's expansion is playing a central role.

While Gregory's discursive analysis of gentrification in Detroit is concerned mostly with the language of the media and of practitioners of urban entrepreneurship/renewal, her critiques apply to urban sustainability practitioners as well and are reflected in the rapidly growing

literature on environmental/ecological gentrification. Dooling (2009) defines ecological gentrification as:

> The implementation of an environmental planning agenda related to public green spaces that leads to the displacement or exclusion of the most economically vulnerable human population while espousing an environmental ethic. (p. 630)

Instances of ecological gentrification have been exposed and expanded upon in a variety of empirical studies (e.g. Pearsall, 2010; 2012, Gamper-Rabindran & Timmons, 2011; Hamilton & Curran, 2012; Anguelovski, 2015). In the context of food-related urban sustainability efforts specifically, Anguelovski (2015) cautions against the potential production of "food privilege" when alternative, organic, and sustainable food chains open in low income, multi-racial neighborhoods, while Brandon Hoover (2013) asserts a need to look into urban agriculture from a critical race theory perspective, aptly noting that "urban agriculture generally creates white spaces in otherwise black or Latino places" (p. 109). It is important to note that food justice activists working on the ground are expressing similar concerns, such as well-known urban farmer and food justice activist Karen Washington's rejection of the term "food desert" because of its erroneous, de-historicized, and normalized portrayal of urban neighborhoods as places that have always been devoid of fresh and nutritious food.

This paper's conceptualization of Temple University-North Philadelphia spaces as intertwined in a shared urban ecological system, and its attention to emerging environmental gentrification concerns produces a broader, more complex, and more critical view of what campus sustainability is or ought to be when it operates in an inner city urban context, as Temple does. In the discussion section, I explore the ways in which PUC engages the emotional realm of ecological sustainability while privileging the social justice dimensions of urban sustainability work in the inner city context and, more specifically, at the Temple University-North Philadelphia interface. This exploration is divided into three subsections through which I: 1) locate the role of emotion/socio-spatial justice in PUC's history and their most recent urban sustainability initiative, the "Regeneration Project," 2) explore the ways in which the emotional realm of sustainability is accessed through the process of *becoming* an urban creator, and 3) discuss the power of relationship building as a mechanism for fostering emotional connection in sustainability and for assembling a broader, more diverse, and more meaningful campus sustainability *network*.

METHODS

To address the above research questions, I conducted fieldwork with PUC for 5 months, from May 2015 to October 2015. Developing appropriate, context-specific, and self-reflective fieldwork methods was a crucial component of the research with PUC. Before starting the official fieldwork period, I had visited PUC's farms as a volunteer on three occasions and participated in one of their town hall meetings. These four pre-fieldwork visits allowed me to meet the organization's leadership, explain the intentions, questions, and goals of my research, and establish a system and schedule that worked for both myself and the group. To formulate the fieldwork system and schedule with PUC, I utilized three interrelated methodological approaches:

Participant Observation:(citations)
In order to understand PUC members' eco-narratives as well as the organization's impacts in context (RQ1 and RQ2), data was co-created and chronicled using a participant observation methodology. By being at the Life Do Grow urban farm (the site of PUC's day-to-day activities) consistently during the summer months, I was able to immerse myself in the events and the interactions playing out across space and time. I tended to arrive when staff would arrive and could thus observe the organization's daily operations from start to finish. The hands on component inherent in participant observation was crucial to addressing research inquiries around the role of relationships and emotions in sustainability work because it allowed me to get a feel for the connections, disconnections, and reconnections being formed with and between the plants, water, dirt, food, people, and emotions in the particular spatial context of PUC. Harvesting the day's crops, participating in morning meditations, engaging in workshops about the school to prison pipeline, and even reflecting on the fieldwork experience while weeding alone, all played important roles in gaining an understanding of PUC's sustainability narratives and impacts.

Feminist and Activist Research Methods (citations):
Feminist and activist methods enabled me to reflect upon, critique, and address the power dynamics that I and my research were creating, while also providing a platform for affirming my political commitments to transformative sustainability and emancipatory social justice work. Self-reflection around privilege and positionality were central to this process. Since my privileges as a Temple student, a funded researcher, and a white woman were used to gain access to fieldwork research in a predominately African American and historically marginalized space, I intentionally leveraged such privilege to contribute to the activist mission of PUC. This leveraging was used to contribute to PUC's activist mission in a very specific way, by helping them create and implement a program evaluation for a major new initiative, a restorative justice pilot program. In addition to contributing to an activist methodology, the program evaluation experience also wound up connecting up with my personal research in interesting ways, which will be discussed later in this paper.

Feminist methods also provided a framework for approaching fieldwork research as a production of a story of which the researcher is a part and is influencing, an approach that Hayes-Conroy (2015) describes as "co-creating" data, rather than extracting it.

DISCUSSION

The Urban Creators is a youth and community driven organization that inspires inner-city neighborhoods to transform neglected landscapes into food hubs, social enterprises, and models of urban sustainability. They are change makers; story-tellers, urban farmers, dot connectors, movement builders, and innovators, cultivating knowledge, skills, and local resources to take the health of our communities into their own hands.

1. A Brief History of PUC and the Development of the "Regeneration Project"

The founding members of the Philadelphia Urban Creators reflect the diversity of the North Philadelphia-Temple University spatial context. The leadership is comprised of three North Philadelphia residents, two Temple University students, and one person from California who came to settle in North Philadelphia through her participation in the local arts and music scene. They came together to start PUC after three of them went on a service trip to post-Katrina New Orleans and observed similarities between what they saw there and the challenges facing their own North Philadelphia neighborhoods. Upon returning to North Philadelphia, they walked around the neighborhood and dialogued with people about the greatest challenges that North Philly residents face. When neighbors overwhelmingly responded that there was limited access to food, the group decided on an urban farm as their first urban creation initiative. The name of the farm was coined when a PUC member, upon seeing one of the first seedlings sprout from the ground, exclaimed that "life DO grow."

In recent years, PUC has expanded their community-based urban sustainability vision from urban farming, to include sustainable urban development, an anti-gentrification intentional housing program, social entrepreneurship, natural healing, and outdoor music/arts festivals. Through these broad community-based sustainability activities, and as a result of living in the neighborhood, PUC's founding members came to realize that when doing urban sustainability work in North Philadelphia, the criminal justice system and more specifically, racialized mass incarceration, cannot be ignored. Since PUC's sustainability ethic is about (re)connecting to both nonhuman nature and human communities, engagement with North Philly youth who have become involved with the criminal justice system has become a priority of their overall mission. As a result, PUC piloted a restorative justice program from May-October 2015 that was funded by the U.S. Department of Justice. PUC's restorative justice program, which they call the "Regeneration Project," employed 10 individuals who committed Part 1 offenses in the 22nd district (which is where the farm is located) to work as urban creators for the 2015 season. The creation of the Regeneration Project reflects PUC's explicit engagement with social justice issues, namely through their desire to offer employment options to neighbors who utilize blighted urban space for their work in North Philly's survival economies. In this sense, rather than treating North Philadelphia's blighted urban landscape as a "blank slate" and excluding the neighborhood's most marginalized residents, PUC's Regeneration Project indicates a desire to engage with the people, the issues, and the spatial dynamics that currently exist in North Philly neighborhoods.

Moreover, in contrast to many other restorative justice programs operating in Philadelphia and other cities were participants are engaged as workers, PUC's Regeneration Project asks participants to become agents of urban creation in the neighborhoods in which they live. To operationalize this, in addition to the daily farming, carpentry, and landscaping tasks, participants create business plans and discuss their ideas for ending mass incarceration and institutionalized racism in their city, which were presented to the public as well as city officials over the course of the program. As the program brochure states, the Regeneration Project is "designed to reduce youth violence and recidivism by engaging formerly incarcerated youth as pioneers in the revitalization of their communities." In this context, the urban farm becomes a symbol for what urban creation could look like, as well as a laboratory for continued re-imagining of urban spaces. And beyond the farm, as PUC explains, "the neighborhood becomes our classroom, the streets become our canvass, and our hands & minds become the tools we use to uplift our neighborhoods at the grass-roots level" (Regeneration Project brochure, 2015).

Since the Regeneration Project was implemented at the exact time as the fieldwork period of my research and since conducting an evaluation of this program was my way of operationalizing a participant action research method, the narratives and experiences of Regeneration participants became the main focus of my fieldwork. In addition to allowing me to contribute to PUC's grassroots sustainability mission, working on the program evaluation availed me the unique opportunity of being able to observe the process by which new members *become* urban creators through participation in PUC's sustainability pedagogies and projects. This emotions and relationships produced through this process is precisely what I explore in the following sections.

2. The Emotional Realm of Becoming Urban Creators: Feeling Ecological Connection

During the 2015 Regeneration Project, PUC employed their conceptualization of urban sustainability as "a process of restoring broken relationships with oneself, with one's community, and with one's natural environment" (personal interview) in working with formerly incarcerated youth. Operationalizing sustainability as a process of relationship restoration (at multiple scales) through which participants become urban creators involves both teaching the skills for doing urban creation, such as carpentry, painting, farming, social justice dialogue, market research, business plan presentation, as well as the more affective emotional work of reconnection to self and surroundings. Within PUC's sustainability approach, urban farming becomes a tool through which program participants are invited to organize, mobilize, and re-envision their own North Philadelphia neighborhoods at the material level, as well as a space through which to access sensations of (re)connection (to self, community, and environment) at the emotional level. Many Regeneration participants talked about experiencing enlivening feelings or "vibes" while being at the Life Do Grow farm. One participant, for example, talked about his emotional reaction to the colors present at the farm:

> It's a relief, like a breath of fresh air. Like colors. The colors and everything going on right now. [One of the program facilitators] was saying colors, they do something, like they have an affect on a person. Stuff we don't even know about.

This participant's association of the colors of the farm with feeling a sense of "relief" and a "breath of fresh air" indicates a visceral sense of connectedness to the urban natures that surround him. His mentioning of "everything going on right now" [presumably at the farm] in addition to the colors, as well as well as his framing of the color-emotion connection as "stuff we don't even know about" suggests a sense of wonder and mystery that he appears to be locating in the natural (urban ecological) environment. This participant's emotional reactions to the space and the components of Life Do Grow farm can be seen as signaling an instance of what Jones refers to as "fostering a greater bio-cultural connection," which, according to Jones, is crucial for generating "more inclusive, non-instrumental, contextual and experiential" participation in sustainability initiatives (p. 643)

This same participant goes on to explain that "when I come here I do feel a little joyful sometimes. I don't know how, it's psychological, its like a vibe or something. It's good to be out in the environment and not always be isolated." His association of feelings (or vibes) of joyfulness with being "out in the environment" illustrates not just a connection to joyful emotional sensations, but also an emotional connection to place, which reveals Life Do Grow

farm as an affective, emotion-laden space that has an enlivening effect on this particular participant.

 Similar to feelings of "relief," other participants talked about the farm as offering a "peace of mind" or a space that is somehow "different" from other spaces in their lives. One participant, for example, explained that "there's a peace of mind. You can sit here and think. There's different things you can do at that farm that you can't do in other places." Contrasting the "peace" and "joyful[ness]" of the farm with other places that do not evoke such emotions came up frequently in both day-to-day conversations and more formal interviews. During a conversation with a participant after the program, at the clothing store where he now works, he noted that "it was like coming onto the farm was a whole different environment. Everything back there is different, there's nothing that you would see out here back there because everything is different." It is clear in his description that "back there" (the farm) and "out here" (the clothing store/therest of the city) evoke qualitatively different feelings and experiences, reminding us of Jones call for "defamiliarizing narratives" of sustainability. Both participants' statements indicate an ability to access emotions and activities at the farm that they feel are unavailable in other places.

 Emotional descriptions tended to dominate responses to questions about the farm as well as about "environmentalism" or "nature" more broadly. When asked at the end of the program about what environmentalism meant to him, another participant went into detail about the desire to "brighten up" environments:

> I feel like my environment has been the same for over 20 years and it's time for a change. Like to brighten up. Brighten the whole environment I hang around. Wherever I am at just brighten it up and show people you still care about where you're from, brighten everything up and show people you can do right for once and its not just all wrong.

For this participant, environmentalism is an active, participatory process, a process that he wants to take beyond the space of Life Do Grow farm and into other environments that he frequents. Perhaps the most important commentary that emerged out of these interviews and conversations was the perception that the colorful, peaceful, joyful, and "brightened up" space of PUC was something that these participants created themselves. The same participant who talked about the colors of the farm also stated that "when I come here it is a connection that we've built and I like coming here, its fun here. It's a peace of mind you get out of it." While echoing previous comments about the farm offering a "peace of mind," most notable here is the idea that beyond being a place to access already existing enlivening, connective sensations, the farm was a place where the connections that they felt with the environment were something that they themselves built collectively through daily emotional, relational, and physical work. Building emotional affinity with the natural environment in this type of sustainability context thus becomes a co-constitutive process involving both the human actors and the nonhuman "natural" components/spaces, where relationality rather than causality generate "bio-cultural connection." In the next and concluding section, I build upon this discussion of the role of relational-emotional connection in PUC's sustainability to discuss relationships as a mechanism for both accessing the emotional realm of sustainability work as well as assembling urban creation into a broader sustainability network.

3. The Emotional Realm of Becoming Urban Creators: Affective Socio-Ecological Relationship Networks

I'm not going anywhere 'cause this is beautiful to me. (Regeneration Project participant, personal interview)

The word relationship came up 27 times in the one set of formal interviews that I conducted with the urban creators (both Regeneration participants and PUC's founding members). Relationships were mentioned in reference to relating both with other human beings as well as with nonhuman natures. While several participants had experience with gardening and landscaping prior to the program, many talked about the urban sustainability work being new and unfamiliar to them, or as one participant remarks, "I wouldn't have seen myself doing half this stuff… planting flowers, building this, building that." He then adds that while disorienting at first, the urban farming became "the perfect adventure," namely because of the new varieties of produce he tasted throughout the program. Another participant talked about the visceral contact with plants translating into knowledge about them, stating that, "I think I have a good relationship with the natural environment. Certain plants when I see them I know what they are just from being around them. I know what certain ones are." A third participant went into more detail about his specific relationship with the plants he was cultivating, explaining that "those plants know my name, they're my homies. I ask them if they're hot and then give them some water." This same participant went on to say "there's really a farm in the hood, you won't see this anywhere else!" For this participant, working at a farm in the inner city evoked a particular thrill that resulted from experiencing the interface of "nature" and "city." These participants' stories of their human-nature relationships point to Forsyth et al.'s portrayal of interfaces as "productive, enlivening, and enchanting spaces, where diverse materialities meet" (p. 1017). In the case of the Regeneration Project, the city-nature interface becomes a productive and affective space for new relationships and new bio-cultural connection to thrive.

In addition to the relationships between participants and nonhuman natures, relationships between between different human beings are crucial to PUC's conceptualization of sustainability. Restoring broken relationships (to use PUC's language) in their particular spatial context requires the navigation of multiple interfaces, both the interface of Temple and North Philadelphia, as well as the different neighborhood interfaces within North Philadelphia. When asked about what it meant to him to restore, one participant described it as a process that occurred through the program, of creating "good attitudes with different people" when everyone is "from different little hoods." Multiple participants cited the relationships that they built with one another and with the other urban creators as a main incentive for staying involved with PUC after the program ends. Three participants described their new PUC network as a "brotherhood" and as "family," indicating that the relationships that were cultivated are relationships of care and affection. These particular findings around affectionate and *affective* relationships (both between humans and between humans and nature) as a motivating factor for participation in PUC's sustainability mission may be useful to Jones and others interested in building campus sustainability initiatives that focus on emotional affinities and bio-cultural connections, while also contributing to ongoing research that inquires into the factors that inspire interest and participation in movements for social change (Hayes-Conroy et al., 2010).

CONCLUSION: Re-envisioning Campus Sustainability, Assembling Urban Creation

I feel as though this would be a good spot for the Temple students too, to get out and get some good relationships with people. You gotta know some people sometimes because you never know who's gonna really like you, who's gonna care for you. It's crazy sometimes- you never know who's watching out for you and if somebody sees something happen to you. So if you're isolated from people, you'll never know that. Just come out of your house and say a regular 'hi how are you,' just speaking. If somebody sees something happen to you, they'll say 'no he's cool.' But if you're walking around with your head up or something like that, that's not good. We're all people at the end of the day. (Regeneration Project participant, personal interview)

The above quotation is part of a Regeneration participant's response when asked about his vision for the Philadelphia Urban Creators. As a North Philadelphia resident, he feels that there are opportunities for relationship restoration in the North Philadelphia-Temple University interface while also noting the very real obstacles that have historically resulted in turning potentially productive edges into divisive borders.

My goal for this paper was, following David Jones' inquiry, to attend to the emotional connections involved in engagement with campus sustainability through an analysis of a grassroots sustainability movement operating in a university context. I see the fieldwork experience and the findings co-created with the Philadelphia Urban Creators as offering three new inquiries for researchers, practitioners, and participants interested in broadening visions of campus sustainability and enhancing participation in campus sustainability movements:

First, how might we envision campus sustainability initiatives as an opportunity for assembling affective networks of relationships and bio-cultural connections spanning beyond a university's walls and into the "local" context in which it is socially and ecologically embedded? Might this type of gesture, if enacted nonhierarchically, allow us to see sustainability as a concept that has the capacity to be open to change and contextually responsive, operating, as affect theorists Seigworth & Gregg describe, "with a certain modest methodological vitality rather than impressing itself upon a wiggling world like a snap-on grid of shape-setting interpretability" (2010; p. 4)?

Second, how might building and cultivating these sorts of networks allow a university's campus sustainability mission and the sustainability movement in general to address the multiple social crises that are happening concurrently with ecological crises, thereby combatting sustainability's "equity deficit?" Can campus sustainability initiatives, particularly in urban spatial contexts, find creative ways to contribute to contemporary movements seeking to end racism, gentrification, and mass incarceration of people of color, thereby forming part of what Hardt & Negri (2005) refer to as "the multitude," an "irreducible multiplicity" working toward social change (p. 105).

Lastly, and related to the two other inquiries, how might attending to the emotional and justice-oriented spheres of campus sustainability engender opportunities for both deeper and more experiential bio-cultural connection, as well as a deeper sense of what transnational feminist Chandra Talpade Mohanty calls "coimplication," a pedagogical framework for initiating dynamic, dialogical, and dialectical conversations between students of different identities, histories, and backgrounds that have the capacity to evolve toward "an active, oppositional, and collective voice" (2003; p. 217)?

My hope, as I mentioned in the introduction, is that this paper contributes to the "just sustainabilities" research agenda by providing a campus sustainability narrative "in which the entire system is reimagined [and] in which just sustainabilities are understood as a basis for security and interdependence" (Agyeman, p. 168) In laying out these new research inquiries, I also hope to spur further research on the intersecting roles of emotional connection, affective networks, social justice, and coimplication in cultivating deeper and more meaningful campus sustainability initiatives.