Intersectionality and Educational Research:

Advancing and Expanding Their Relation

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Abstract

Intersectionality is a theoretical perspective that can be used as an analytical tool to reveal the ways in which social categories and power relations interact in complex ways and at various social, political, and economic levels. In this thesis, I systematically examine intersectionality in the arena of educational research to explore how the analytical potential of this theory can be enhanced and how its theoretical framing in this arena can be broadened. Given a lack of intersectional analyses in educational research that address issues related to nonhuman beings, the environment, and ecological sustainability, I argue that there is good reason to challenge and provoke approaches to educational research that continue to overlook or ignore human-nature interactions. I demonstrate in this study that intersectionality has a great potential to be used by educator-researchers as an analytical tool to address and investigate imbalances of power that affect human-nature-environment relations and the interlocking practices of injustice, domination, and hierarchization among these relations.

Résumé

L'intersectionnalité est une perspective théorique qui peut être utilisée comme un outil d'analyse pour révéler les façons dont les catégories sociales et les relations de pouvoir interagissent de manière complexe et dans divers niveaux sociaux, politiques et économiques. Dans cette thèse, j'examine systématiquement l'intersectionnalité dans le domaine de la recherche pédagogique afin d'explorer comment le potentiel analytique de cette théorie peut être amélioré et comment son cadre théorique peut être élargi dans ce domaine. Compte tenu du manque d'analyses intersectorielles dans la recherche pédagogique qui traitent des problèmes liés aux êtres non humains, à l'environnement et à la durabilité écologique, je soutiens qu'il existe de bonnes raisons de contester et de provoquer des approches de la recherche éducative qui continuent de négliger ou d'ignorer les interactions humain-nature. Je démontre dans cette étude que l'intersectionnalité a un grand potentiel pour être utilisée par les chercheurs éducatifs comme un outil analytique pour aborder et étudier les déséquilibres de pouvoir qui affectent les relations humain-nature-environnement et les pratiques interconnectées d'injustice, de domination et de hiérarchisation entre ces relations.

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CHAPTER ONE

INTRODUCTION: Would You Like to Join the Conversation?

> What comes together more easily than sugar, water, and lemon juice in a big glass pitcher? […] Ingredients come together to form something new. The sugar dissolves in the hot water, creating a simple syrup that, after it cools, is added to the lemon juice and stirred. What is in that pitcher is no longer a separate section of sugar, one of water, and one of juice; it is a drink—a new cohesive entity that is different than any of the single ingredients that made it. By cooking these ingredients, cooling them, and mixing them, a cook has made lemonade; she has combined ingredients in a way that results in the construction of something that did not exist before—an emergent form of food.
>
> *Ken, 2010, p. 79*

In *Digesting Race, Class, and Gender: Sugar as a Metaphor*, sociologist Ivy Ken (2010) provides a useful culinary metaphor to explain the concept of **intersectionality**. In this lemonade metaphor, Ken asks us to imagine race as sugar, gender as lemon juice, and social class as water. Ken's metaphor invites us to pay attention both to the ways these 'ingredients' (i.e. social categories) are intrinsically connected with and influenced by power dynamics and to the processes in which they are combined, and therefore transformed, in so doing producing something different.

Intersectionality is a theoretical perspective that can be used as an analytical tool to reveal the ways in which social categories and power relations interact in complex ways and at various social, political, and economic levels. It assumes that these 'combinations' are capable of transforming the ways people construct their identities, whether they occupy dominant or marginalized social positions, and whether they will

experience inequalities, injustices, discrimination, and oppression in their lives. This theoretical perspective has gained attention in certain approaches to education that focus on the pursuit of social justice, social transformation, and educational equity. Nevertheless, as I show in this chapter, there is little systematic work that explores the nature and importance of intersectionality as an analytical tool for research in education (see e.g. Brunn-Bevel, Davis, & Olive, 2015).

The overarching purpose of the thesis is to provide a clear and explicit rendering of intersectionality to be used as an analytical tool by educator-researchers and scholars who work towards the pursuit of social justice, social transformation, and educational equity. The secondary purpose is to explore possibilities for the advance and development of this theory in the arena of research in education. I do that by providing a structured account of intersectionality's main tenets, meaning the analytical tools employed by intersectional research, and by exploring ways of broadening intersectionality in education. I propose that making intersectionality more explicit and systematic helps educator-researchers employ intersectional analyses more effectively, which in turn enables more criticisms of current practices and/or theories, creates and justifies new theoretical approaches to educational research, and helps scholars and researchers develop analytical tools to address important equity and justice issues in current educational research.

Intersectionality highlights context, history, and positionalities. Therefore, this study will purposefully focus on the educational reality of North America, and more specifically the United States. Given this focus, not all recommendations and ideas discussed here can or should be transferred from one setting to another, as they will not fit the particular

location, time, and context in which the educator-researcher and the students in question are inserted and located. To fit, the recommendations and ideas must reflect a setting's specific concerns, experiences, and educational needs.

Specifically, this study will show how educator-researchers can use intersectionality as an analytical tool:

a) To explore the hierarchical power relationships between and among socially constructed categories and economic, political, and social structures to investigate how the systems of power interact, change, and transform one another in the context of education;

b) To critically examine the structural causes of racism, sexism, patriarchy, ableism, classism, and *speciesism* (among other forms of discrimination, oppression, injustice, and inequality), and also to investigate how they are created, maintained, and perpetuated in schooling and other contexts and settings that are relevant to educational research;

c) To investigate how the manifestations of identity, difference, and power dynamics shape students' lives, and influence their chances of experiencing educational equity and positive outcomes in life; and finally,

d) To explore new possibilities for applications of intersectional analyses in educational research and ways of broadening the theoretical framing of intersectionality in the context of education so that educator-researchers become more inclusive and sensitive regarding the intersections of social-ecological-environmental dimensions.

1.1 Advancing Intersectionality in Education

In this thesis, I systematically examine intersectionality in educational research both to explore how the analytical potential of this theory can be enhanced and to better comprehend its potential for future inquiry in this area of research.

Much educational research assumes an understanding of intersectionality as a distinctive analytical approach, without providing a detailed examination or explanation of intersectionality itself–its main tenets, unique characteristics, and fundamental aims and purposes. Indeed, in my search for studies by educator scholars and researchers that not only focus on educational issues but also apply intersectionality as an analytical tool and consider the context of K-12 education, I found only two books that encompass all three of these—although none of these books focus exclusively on K-12 education. One such recent book is titled *Intersectionality in Educational Research* and was edited by educator scholars Davis, Brunn-Bevel, and Olive (2015). The introduction reinforces my point that this type of work is an exception in the area of educational research, and that there is a need for more work about how intersectional analyses can be applied and further developed. The authors note: "our work is unique in that few books to date explicitly focus on how intersectionality theory can be applied to educational experiences and outcomes using appropriate research methods" (Brunn-Bevel, Davis, & Olive, 2015, p. 2). *Intersectionality and Urban Education: Identities, Policies, Spaces & Power* by educator scholars Carl Grant and Elisabeth Zwier (2014) is the other example available in educational research that both uses intersectionality as a major analytical tool to investigate educational issues and social problems and discusses K-12 education—although not exclusively.

According to Hankivsky (2014), "intersectionality is explicitly oriented towards transformation, building coalitions among different groups, and working towards social justice" (p. 3). When we understand more deeply the purpose of intersectionality, we realize that the best way to advance this theory in educational research is by working through areas whose aim is to pursue social justice and social transformation.

Social justice is a form of "transforming the way resources and relationships are produced and distributed so that *all* can live *dignified lives* in a way that is *ecologically sustainable*" (Potts & Brown, 2005, p. 284, emphasis added). And yet: when we say that social justice is about *all* living dignified lives, who does this "all" include (and exclude)? Furthermore, the above quotation calls for us to live our lives in an *ecologically sustainable* way. This means that in our pursuit of social justice and equity we need to understand living beings to include both humans and nonhumans. As Somerville writes: "understand[ing] living needs to encompass *all* of our earth others and everything on which they are dependent for their continued wellbeing" (Somerville, 2017, p. 19, emphasis added). In short, when educator-researchers are working to challenge inequalities and injustices through *and* with education (i.e. working towards social justice), they should be able to address various forms of injustices and inequalities that restrain both human and nonhuman beings from living dignified lives. As well as realizing our interconnection, we must also comprehend that there are many deeply intertwined forms of injustice, oppression, violence, and inequality among human and nonhuman species (Rowe, 2015).

As we look for these understandings and assumptions in the literature on education, unfortunately we find that educator-researchers have been overlooking these

forms of injustices that affect both humans and nonhumans. Here I draw attention once again to the significant gap in the intersectional work in the area of educational research. Neither of the two books I mentioned above explores nature—or environment—related issues. In short, even those few educator-researchers who have been applying intersectional analyses to issues of social justice and educational equity have ignored environmental and ecological dimensions in their investigations of power, inequalities, and inequities within the arena of research in education (see e.g. Rowe, 2015).

Given this significant gap in educational research, besides discussing ways to broaden the use of intersectionality as an analytical tool, in this thesis I also explore ways in which educator-researchers can broaden intersectionality so they can address social justice and equity in ways that go beyond the exclusively human. As we shall see, intersectionality has great potential as an analytical tool to investigate forms of oppression and injustice that also include the nonhuman other, and to investigate interlocking systems of power that create and reinforce inequalities, systems that are relevant to both human and nonhuman beings, and that also affect our environment.

1.2 Defining Important Terms

1.2.1 Contextualization. An intersectional framework assumes that some categories, divisions, and power relations become more salient and operate differently in particular contexts (Guillermo-Wann, 2015), and that categories are given different value depending on various "geographic settings" (Hankivsky, 2014, p. 3). For example, in my home country of Brazil the majority of the population's social location in terms of race is based primarily on physical features such as skin colour. Even though I am

considered a Latina in the United States, in Brazil I am considered a White person. Consequently, while in Brazil I could never apply to enter a university on the basis of racial quotas, in the U.S I would be allowed and even encouraged to do that. The interesting and even contradictory part is that my own brother, who has the same parents as I do, can apply to schools in Brazil and benefit from racial quotas because his skin is darker than mine. In that setting, his darker skin locates him as a person of colour while my lighter skin does not.

Intersectionality also assumes that hierarchization, social distinction, and inequality are dependent on the operations of power in different times and spatial contexts (Anthias, 2013). In light of these different power dynamics, whereas in Brazil the police would never stop me to ask for documents that support my legal status in that country, in some states in the U.S. they might, since racial profiling by law enforcement in the U.S. is, unfortunately, still a reality.

1.2.2 Power. Intersectionality always emphasizes the analysis of power (Cho, Crenshaw, & McCall, 2013; Dill, 2009) to illuminate the ways in which social categories and divisions interact within broader power structures and contexts, and also to reveal the ways in which various parts and factors combine to create hierarchization and stratification that limit people's [and also nonhumans'] experiences of equity and just social relationships (see Anthias, 2013).

In this intersectional framework, two particularly important ideas related to power are the relationship between *privilege and oppression*, and the notion of the *interlocking systems of power* (see Collins, 2000).

1.2.2.1 Privilege and oppression*.* An intersectional framework illuminates the

ways in which multiple locations interact with one another in complex ways and also

with power relations that operate unevenly in our societies by oppressing some groups

while privileging others. Indeed, "intersectionality is a dynamic approach to

understanding how identity, privilege, and power operate in the world" (Rowe, 2015, p.

38).

Oppression can be understood as a systematic mistreatment of people [and

nonhuman beings] solely based on group membership (Cheney, LaFrance, &

Quinteros, 2006). Social institutions support and enforce this systematic mistreatment,

which is based on unequal power dynamics that manifest in our society as complex

systems and structures such as racism, sexism, ableism, capitalism, heteronormativity,

and *speciesism*. In practice, the way these power imbalances manifest in students' lives

is, among other things, by limiting their access to equal education, the job market, equal

pay, and legislative equality based on their memberships in targeted social identity

groups (Annamma, Connor, & Ferri, 2013). The inequality and oppression that

marginalized groups experience in their everyday lives are related to repressions that

are social, political, cultural, and economic, and all those things reinforce hierarchies of

dominance, including those between humans and nonhumans, and give privilege to one

group while oppressing and discriminating against others.

Educator philosopher Bradley Rowe (2011) ably explains these dominant

practices and processes that privilege some while oppressing others. He writes,

"difference and inferiority are normalized, institutionalized, and, in time, transpire into

dominant practices that privilege and give power to some groups (whites, men, humans)

while silencing and disempowering others (people of color, women, animals)" (p. 5).

When difference is normalized and institutionalized, dominant practices will locate one

group in a privileged position (though this privilege is totally unearned) and another

group in a marginalized social position, because otherwise the privileged position would

not exist in the first place. For instance, a group of men, historically privileged simply

because of their gender, will have power over others who are dominated and oppressed

simply because of their gender (i.e. cisgender women, along with gender fluid, queer,

transgender, agender, bigender, and non-binary persons, etc). With respect to privilege

and oppression within groups, we could say that these factors can be seen

metaphorically as two sides of the same coin: if someone is privileged, someone else is

necessarily oppressed to allow for that privilege.

Nevertheless, intersectionality also assumes that a single individual can

experience both privilege and oppression: "people can experience privilege and

oppression simultaneously. This depends on what situation or specific context they are

in" (Hankivsky, 2014, p. 3). In my own life, intersectionality allowed me to better

understand these simultaneities of oppression and privilege and how these dynamics

can shape and affect my own lived experiences with inequalities and discrimination (see

Grant & Zwier, 2014).

Dominant practices have given me both certain unearned privileges and

marginalized positions in both Brazil and North America. For example, in Brazil I am

located as White; I am a member of a (Christian) religious group that is a majority in the

country. I have never been identified as having a disability. I can hold hands with my

partner and get married to him without being discriminated against. In North America, in

addition to all these privileges (i.e. heterosexual privilege, religious privilege, and ability-based privilege), I also have legal status. An important aspect about changing contexts and diverse manifestations of power is that I occupy more marginalized positions in the United States than in Brazil. That is, in Brazil I am mostly oppressed by my gender, whereas in the United States I am in addition oppressed for being a person of colour, a person who speaks English as a second language and will always have an accent, and a person who has legal documents to study but is, for example, not allowed to work.

These factors are fundamental to help us better comprehend how difference is normalized and institutionalized, how power is manifested at various levels and in mutual and complex ways, and even to help us make meaning and sense of the shifting sites of privilege and oppression that are produced within and across geographic, discursive, political, cultural, and personal borders that we all cross (see Asher, 2003).

1.2.2.2 Interlocking systems of power. There is an important concept in intersectionality called *interlocking systems of power* that assumes that structures of power do not manifest alone. In particular, this concept conveys how these structures can influence lived experiences in terms of inequalities and injustices (see Collins, 2000). Through the notion of the interlocking systems of power, an intersectional framing assumes that a single factor cannot explain the dynamics of power, especially because "according to an intersectionality perspective, *inequities* are never the result of single, distinct factors" (Hankivsky, 2014, p. 2, emphasis added). By not investigating the ways the systems interact—or become interlocked—we ignore other structures of power that limit groups' access to equity, equality, and just relations.

The notion of interlocking systems of power assumes that experiences with privilege, oppression, discrimination, inequality, and injustice depend on many and variable factors, not just on one (Collins, 2000). The idea of the 'interlocking systems' involves several dimensions and multiple social, political, and economic levels, and it also refers to the ways in which the structures of power connect and rely on one another (Hankivsky, 2014). That the systems of power rely upon one another means that they come into existence in and through one another and manifest themselves in our lives in simultaneous, complex, and mutual ways (Fellows & Razack, 1998).

For instance, recent statistics indicate that a growing number of students who report a disability are enrolling in a 4-year educational institution (Hendersen, 2001). If our investigation were to emphasize only the category of dis/ability within the context of school, we would conclude that these statistics have only positive outcomes as they indicate that students who are labeled as having disabilities are increasingly enrolling in college. Yet a look at the bigger picture, we realize we need to investigate the ways in which the categories of race and socioeconomic status interact with the category of dis/ability.

On the one hand, most students who report a disability and are enrolled in a 4-year college are "White, upper-middle class" students (Reid & Knight, 2006, p. 20). On the other hand, students of colour who are labeled as having disabilities not only are *unable* to enroll in college, but even worse, their likelihood of graduating from high school is very small compared to their "White, upper-middle class" peers. Regarding the dropout rates of high school students labeled with disabilities, the *highest* rate is among the students who are socially located as American Indian and Alaska Native, followed

by students who are socially located as Black and then Hispanic (U.S. Commission on Civil Rights, 2009).

The point here is that the structural power of ableism interacts with other systems of power to create interlocking systems, and they manifest themselves by adding important barriers for equity and justice. Specifically, the structural power of racism and the socioeconomic status that students occupy interact with the category of dis/ability in such a way that this 'combination' (recall Ken's culinary metaphor) is capable of transforming and greatly affecting the lives and educational opportunities of students *of colour* who are labeled with disabilities. While 'White, upper-middle class' students labeled with disabilities are increasingly enrolling in college, their peers who are located as people of colour and are also labeled as having disabilities are not even able to graduate from high school.

1.3 Organization of Chapters

In Chapter 2, I explore forms of enhancing the analytical potential of intersectionality in today's educational research. I discuss the need for educator-researchers who employ intersectionality in their work to move beyond analyses of power that focus *only* on the level of positionalities, and instead start looking also at the various and intertwined mechanisms that create and reinforce inequalities and inequities in educational contexts and settings. I also explore ways to link individual and structural analyses to enhance the analytical potential of intersectionality within educational research. The discussion in this chapter creates a basis for the reader to comprehend in a systematic way how intersectionality can be applied as an analytical tool in educational research.

With those pieces in place, in Chapter 3 I begin to explore ways to broaden intersectionality in educational research and I also discuss possibilities for future inquiry in this area. I explore why it is important for educator-researchers to include the environmental and ecological dimensions in their interrogations of power to address inequalities, inequities, oppression, and discrimination in a more sensitive and comprehensive way. I suggest that intersectionality can help educator-researchers to re-think human-nature-environment relations within educational contexts. I show how intersectional analyses can be used to explore the interdependencies of the human and more-than-human dimensions, and also the injustices and inequalities that intertwine within these relations.

CHAPTER TWO

Exploring Ways of Enhancing the Analytical Potential of Intersectionality

in Today's Educational Research Arena

Injustice anywhere is a threat to justice everywhere

Dr. Martin Luther King Jr., 2000

In this chapter I explore how the potential of intersectionality as an analytical tool in the arena of educational research can be enhanced to advance educator-researchers' understandings both of equity and justice issues regarding students' educational needs and opportunities, and of institutionalized educational contexts (i.e. schools and school systems). Intersectionality's main purpose is to reveal inequalities, oppression, and injustices through an analysis of the mechanisms of power (Hankivsky, 2014). With that in mind, in this chapter I explore specific instances of social inequalitiy and injustice in educational settings. To discuss ways to enhance the use of intersectional analysis in education I divide the chapter into two main sections. In the first part I discuss how important it is for educator-researchers to emphasize the intertwined mechanisms that create and reinforce injustices and inequalities in their interrogations of power, especially through the analysis of the 'interlocking systems of power'. In the second part I explore ways to link various levels of intersectional analysis, in particular through the 'multilevel model of intersectionality.'

2.1 Enhancing the Analytical Potential of Intersectionality: Part One

There are two levels at which intersectional analyses work: the micro (individual) and the macro-levels of analysis (see e.g., Collins et al., 1995). Both of these levels

emphasize an analysis of power (Cho, Crenshaw, & McCall, 2013) to challenge social

inequalities and inequities (Hankivsky, 2014). As power relationships operate somewhat

independently and differently at each level, the micro-level of intersectional analysis

focuses on the individuals and their social positions, while the macro-level is more

focused on how the systems of power create these social positions and reinforce

inequalities (Anthias, 2013; Collins et al., 1995; Hankivsky, 2014).

More specifically, the *micro*-level of intersectional analysis allows the

investigation of the individual dimension by considering the formation of identities and

different social locations, as well as experiences related to dominant or marginalized

social positions (Collins et al., 1995). Via structural analysis and the investigation of

broader systems and institutional frameworks, the *macro*-level of analysis enable

educator-researchers to investigate how the systems of power interconnect, modify, and

reinforce one another, and how these systems define and affect the social structures

that create social positions (Collins, 2000; Collins et al., 1995; Hankivsky, 2014).

As the major aim of intersectionality is to interrogate power dynamics and unveil

power imbalances and the operations of inequality, violence, and the social landscape

of hierarchy in which economic, political, and other interests are shaped and

operationalized (Anthias, 2013; Case, 2016), when intersectionality is not applied with

this purpose its tenets are threatened by ineffective, confusing, or even distorting

applications (Guidroz & Berger, 2009; May, 2015). Some educator-researchers have

been applying intersectionality as an analytical tool merely to investigate or describe

students' multiple identities (see e.g. Case, 2016; Cole, 2016). By overlooking or

ignoring various and intertwined mechanisms that explain inequality and inequities

when applying intersectionality, scholars and researchers diminish the importance of this theory, rendering it simply descriptive (Cole, 2016) and diluting its key features (Rios, Bowling, & Harris, 2016).

Investigations at the micro/individual level often do not explain fully how the production and reproduction of discrimination, oppression, and inequalities take place (Anthias, 2013). For instance, the American sociologist and educator scholar Tukufu Zuberi (2001, as cited in Núñez, 2014) explains that when focusing solely on the level of identity "it becomes all too easy to ascribe educational inequities to perceived characteristics and (in)abilities of marginalized individuals or groups, rather than the economic, social, and political practices that perpetuate these inequities" (p. 88). Educational and academic barriers are often the consequences of institutional problems and structural aspects of schooling, rather than primarily characteristics of students (Sleeter, 2013; Young, 2016).

For instance, the assumptions regarding students "dropping out" versus being "pushed out" of school (see Hankivsky & Grace, 2016) can vary significantly. On the one hand, when educator-researchers investigate only at the individual level, they tend to assume that it is the student's *choice* to drop out. On the other hand, when educator-researchers examine institutional practices (education as institutionalized structures) they perceive that certain processes and mechanisms (e.g. processes such as laws, institutional practices, and public policies that define systems of social inequality) create difficult situations and barriers for students that make it difficult or impossible for them to stay in school: they are "pushed out" rather than "dropping out" (Hankivsky & Grace, 2016).

Educator-researchers who engage with intersectional analyses *only* through the individual level may wrongly link educational inequities exclusively to students' characteristics or perceived in/abilities, as mentioned in this example above. It is fundamental, therefore, that educator-researchers do not stop at the individual level of analysis when addressing and challenging inequalities and injustices within educational contexts. The analytical potential of intersectionality is actually *enhanced* when researchers are able to move beyond simple individual-level considerations of positionalities and descriptions of multiple identities and instead start emphasizing power structures and institutions that create and reinforce social inequalities and hierarchization (Núñez, 2014). Indeed, the central idea of intersectionality is built around the need to analyze the intertwined mechanisms of power that create and reinforce inequality and injustices (Cole, 2016). As educator Bonnie Dill (2009) puts it: "power is at the heart of intersectional thinking" (p. 240).

More specifically, for educator-researchers who are employing intersectional analytical tools to comprehend and investigate how power is produced, shaped and reinforced they need to identify relationships among the systems and look for patterns and commonalities (Kaijser & Kronsell, 2014). When they emphasize the interconnectedness of social categories and social, political, and economic processes, and then investigate the ways the systems are mutually-reinforcing each other, meaning relying upon and modifying one another to function, they are allowed to investigate the *interlocking systems of power* (Collins, 2000; Hankivsky, 2014). No analysis of the structures, processes, and practices that create barriers to educational equity and just relations is adequate if it relies on a single, fundamental causal force as the 'lever' of

structural power. An example is classical Marxism, which views all social and political inequalities and oppressions simply as an 'epiphenomenon' of underlying economic relationships. Thus, by exploring the interlocking systems of power, educator-researchers begin to comprehend how the interplay of power and social locations relates to educational settings. In particular, such exploration helps them to understand how power relations affect and influence students' options and opportunities in employment, political and civic participation, and access to schooling and higher education (Zambrana & Dill, 2009).

2.1.1 Analyzing the 'interlocking systems of power' through the intersections of race and dis/ability. To illustrate how educator-researchers can use intersectionality as an analytical tool to investigate the 'interlocking systems of power', I explore the specific intersections of *racism and ableism* and how these structural systems of power co-construct and rely upon one another. I focus on demonstrating how intersectional analysis enables educator-researchers to complicate the notions of race and dis/ability and also to investigate the ways those notions "can mesh, blur, overlap, and interact" (Annamma, Connor, & Ferri, 2013, p. 5). In addition, I build upon the understanding that the embodiment and positioning of students of colour who are labeled with disabilities expose the ways in which the structural power of racism and ableism interact and rely upon one another in mutual forms and elaborated ways (Annamma, Connor, & Ferri, 2013). From that, we can explore the ways in which social constructions of race and dis/ability, as socially and culturally constructed categories that are used to perpetuate oppression and discrimination, privilege some groups while oppressing and discriminating against others, and also how these categories and

processes limit students' access to educational equity and their possibilities in life (Erevelles & Minear, 2010; Parrish, 2002; Young, 2016).

An intersectional analysis of the categories of race and dis/ability is important for three core reasons: First, it helps me demonstrate the applicability of intersectionality as an analytical tool that allows educator-researchers to investigate the ways in which these categories overlap and interact in mutual and complex ways. That is, it foregrounds the structural context where the social categories of race and dis/ability are (re)constituted (Erevelles & Minear, 2010). Second, an intersectional analysis yields nuanced readings of the ways in which these categories are positioned in schools and influence students' lives (Annamma, Connor, & Ferri, 2013). Third and finally, interrogating the categories of race and dis/ability simultaneously is important because several political opportunities for transformative action and various aspects of students' experiences are missed when educator-researchers overlook central structural forces that place less value (in social, political, and economic terms) on students of colour who are labeled with disabilities (Erevelles & Minear, 2010; Young, 2016).

In their study "Dis/ability Critical Race Studies (DisCrit): Theorizing at The Intersections of Race and Dis/ability," Annamma, Connor, and Ferri (2013) examine the ways in which race and disability were co-constructed historically. For instance, in his essay *Racial Intelligence*, Du Bois (1920, as cited in Annamma, Connor, & Ferri, 2013) discusses scientists' attempts to align ability with racial classification. That is, these scientists attempted to "'prove' [that] people of African descent possessed limited intelligence and were therefore not quite fully human" (Annamma, Connor, & Ferri, 2013, p. 2). The legacy of historical beliefs about race and dis/ability not only shapes

the experiences of students of colour who are labeled with disabilities, it also

demonstrates how racism and ableism have become intertwined in complex ways in

educational settings today.

Students of colour are disproportionately labeled with disabilities and are also

over-represented in special education (see e.g., Blanchett, 2006; De Valenzuela,

Copeland, Qi, & Park, 2006; Reid & Knight, 2006; Young, 2016). To say that a group of

students is disproportionately labeled is to say that this group's representation in special

education exceeds their proportional enrollment in the general school population. For

example, the U.S. Department of Education (2016) reports that in 2014 while Black

students from age 6 to 21 represented 14.11 percent of the total enrolment in the U.S.

schools, this same group constituted 18.83 percent of the students receiving special

education services. Even worse, American Indian or Alaska Native students are 1.7

times more likely to receive special education services than all the other groups

combined, followed by Native Hawaiian or other Pacific Islander students who are 1.6

times more likely to receive these services (U.S. Department of Education, 2016).

The *labeling* of students "with disabilities" itself contributes to creating even more

barriers for students of colour to succeed academically and professionally (see e.g.

Gillborn, 2012; Young, 2016). The labeling process plays an important role in

reproducing and intensifying racism and ableism within schools. Students of colour who

are already historically marginalized on the basis of race are further perceived to be

failing and judged as at-risk when labeled 'disabled' (Annamma, Connor & Ferri, 2013).

For instance, the U.S. Commission on Civil Rights (2009) reported that in the school

years of 2002 and 2003 Black students labeled as having disabilities had the lowest

high school graduation rate (36.2 percent) of *all* student groups. In a similar way, compared to other students within their own racial group, American Indian and Alaska Native students labeled with disabilities had the highest dropout (or pushed out) rate at 48.4 percent of all students in the same racial category, followed by Black (41.7 percent) and Hispanic (38.9 percent) students with disabilities (U.S. Commission on Civil Rights, 2009).

Thus, the structural power and interaction of racism and of ableism exacerbates the problem. The interaction of disability and race is regarded as a structural issue because neither factor – disability nor race – is understood merely as an aspect of personal identity. Unlike older models of disability, which viewed disability as a medical condition whose cause was located in a biological impairment in the individual body, here disability is understood as a social phenomenon, reflecting unequal social and political relations of power such that the disadvantaging effects of disability cannot be adequately understood apart from the effects of broader structural racism. In this way, we can see that through the impact that the structural power of racism has in the lives of students of colour, certain situations and practices are created in which these students will be disproportionately labeled with disabilities only because they are socially located as people of colour (Annamma, Connor, & Ferri, 2013; Parrish, 2002).

2.2 Enhancing the Analytical Potential of Intersectionality: Part Two

In the previous section I demonstrated how important it is for educator-researchers to engage with a structural level of intersectional analysis and the 'interlocking systems of power' as a way to enhance the analytical potential of intersectionality. In this section I emphasize that while stopping at the individual-/micro-

level without moving towards the structural-/macro-level opposes the central idea of intersectionality (Cole, 2016), nevertheless, it is *also* problematic to disregard completely the importance of the individual level of positionings and identities. Thus, another important way of enhancing the analytical potential of intersectionality is by engaging with *both* micro and macro levels of analysis during our investigations of power.

I proposed earlier that educator-researchers should not treat disability *merely* as an individualistic phenomenon. Yet this does not mean that individual factors are irrelevant to the analysis of disability and oppression. Indeed, *individual* factors influence the perpetuation and intensification of oppression and discrimination on the lives of students of colour who are labeled with disabilities through teachers' and school personnel's biased evaluations of students of colour for special education services (Elhoweris, Mutua, Alsheikh, & Holloway, 2005), through damaging misinterpretations of their behaviour (Hosp & Hosp, 2001), and through negative perceptions and stereotyping. At the same time, political, social, and economic *structures* influence both public fundings that schools receive, and also the level of preparation of teachers to do their job. For example, many schools that are predominantly attended by students of colour often receive less public funding than schools predominantly attended by White students (Brantlinger, 2003; Kozol, 2004). Also, teachers in these schools are more likely to not to hold credentials or to be only provisionally licensed (Chamberlain, 2005; Darling-Hammond, 2004). Thus, both individual and structural factors greatly affect whether students of colour will be misdiagnosed or inappropriately placed in special

education for lack of teacher preparation, biases, stereotypes, lack of resources, and/or

low quality of education (Blanchett, 2006; Young, 2016).

With this in mind I ask: *How is it possible to employ both micro- and macro-level*

analyses simultaneously, or at least in conjunction with each other? One way

intersectional theorists have proposed to address this complexity in conducting research

is to engage in *multi-level analyses.* Multi-level analyses are important because

inequalities, injustices, and multiple forms of oppression and discrimination are

produced and reproduced through *multiple* and often *simultaneous* levels (Young,

2016). As such, understanding these phenomena requires engaging with the various

levels on which they are constructed and stabilized because power relations are

reproduced and experienced in complex ways and through *various societal levels.*

Those levels include structures and institutions, normative expressions, material

conditions, and also social practices (Kaijser & Kronsell 2014). In addition, "multi-level

analyses *that link* individual experiences to broader structures and systems are crucial

for revealing how power relations are shaped and experienced" (Hankivsky, 2014, p. 3,

emphasis added). In practice, that means that multi-level intersectional analyses enable

educator-researchers to investigate both how power is shaped, created, and produced

(the macro level), and also how power is manifested through social practices and

experienced in students' everyday lives (the micro level).

A specific way educator-researchers can engage with multi-level analyses is

through a model that was created by Anne-Marie Núñez (2014), which is called

multilevel model of intersectionality. Núñez draws on the work of sociologist Floya

Anthias (2013) to advance a conceptual model of intersectionality for educational

research. This multilevel model of intersectionality involves examining multiple *arenas of influence* that address 'embodied practices' within specific domains of society and also investigating the formation of complex inequalities found in relations of hierarchization, stratification, and positionality. These arenas include: the organizational, representational, intersubjective, and the experiential arenas.

This model assumes that one of the ways in which educator-researchers can increase the efficacy of intersectionality as an analytical tool is by "[examining] how one's multiple identities intersect with other micro-, meso-, and macro-levels of analysis" (Núñez, 2014, p. 87). In particular, this model proposes ways for educator-researchers to address inequalities and inequities by considering students' experiences, relationships, and narratives *in connection with* the processes and mechanisms by which institutions and structures create and reinforce oppression, stratification, and discrimination regarding educational settings and contexts.

There are four particular reasons that this model is valuable for educational research. First, it extends the employment of intersectionality in educational research and allows educator-researchers to enhance the potential of intersectional analysis in this area. Second, this model enables educator-researchers not only to move effectively from considering the individual to considering structural levels, but also to link one level to another and when possible analyze several levels simultaneously. Third, this model's diverse levels of analysis allow educator-researchers to organize the type of issues they want to emphasize and enables different foci to be investigated (Anthias, 2013). Finally, it emphasizes how students are affected by public policies, social norms, mechanisms and practices that reinforce existing systems of inequality, therefore enabling the

investigation of the ways structures of power are created, manifested, embodied, *and* experienced.

2.2.1 Applying the multilevel model of intersectionality. In a recent report, Crenshaw, Ocen, and Nanda (2015) describe the experiences of girls of colour with violence, discrimination, and inequalities. I use various pieces of this report to demonstrate the value of this model of intersectionality in allowing educator-researchers to examine, through linking analytical levels, the injustices that are embedded in these students' lives and embodied in their lived experiences and bodies. In addition, the report helps me demonstrate how intersectionality can be a valuable analytical tool to be used not only by educator-researchers but also by policy makers, advocates, and stakeholders, because it reveals the practices of zero-tolerance policies[1], school discipline, push-out, and the pathways to incarceration, poverty, and low-wage jobs (Crenshaw, Ocen, & Nanda, 2015).

The participants in this report are school-age female students of colour from Boston and New York City's public schools. According to The Bureau of Justice Statistics, these girls are the fastest growing population in the juvenile justice system (see Harlow, 2003, as cited in Crenshaw, Ocen, & Nanda, 2015). The report "highlights the educational, social, and economic factors that funnel Black girls and other girls of color onto pathways to nowhere and render their academic and professional

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[1] "Zero tolerance polices refer to school or district-wide policies that mandate predetermined, typically harsh consequences or punishments (such as suspension and expulsion) for a wide degree of rule violation" (Crenshaw, Ocen, & Nanda, 2015, pp. 48-49).

vulnerabilities invisible" (p. 14). Through this report, I can investigate the operations of power that are, in this specific case, manifested in the lives of these female students of colour.

Let us imagine four concentric circles of different sizes that share a common centre (see Figure 1). We are imagining these arenas from outside in (from the macro- to the micro-level of analysis): the organizational, representational, intersubjective, and experiential arenas in turn.
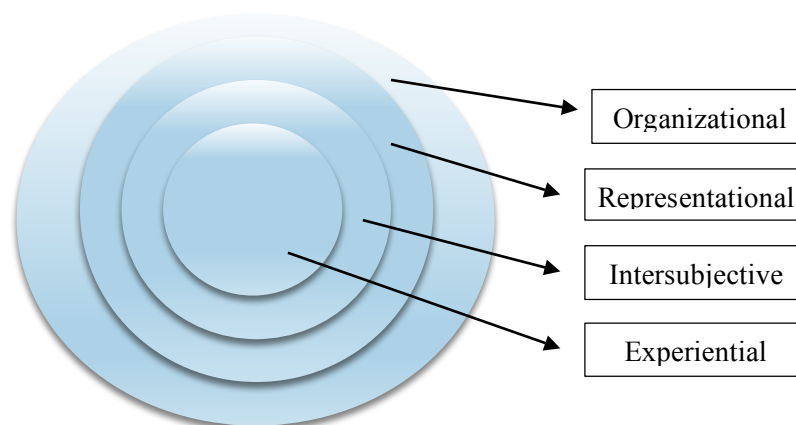
Figure 1. Representation of Multilevel Model of Intersectionality's Arenas

Starting from the broadest level of analysis, we have the large outside circle that represents the **organizational arena**. In this arena, the multilevel model of analysis interrogates how students are "channeled into educational opportunities" (Núñez, 2014, p. 89), in particular by enabling the examination of how policies, laws, and certain systems and institutions might constrain students' educational opportunities.

Increasingly, Black girls are subjected to punitive, disciplinary, zero-tolerance policies which lead to violence perpetrated against them, and/or to their arrest, suspension and/or expulsion from school. How do policies *constrain* the educational

opportunities of these girls of colour? (see Núñez, 2014). When we examine the zero-

tolerance policies and other related factors in their context, we realize that those policies

seriously impact their lives undermining their achievement and well-being. For instance,

certain practices related to these policies "lead to low achievement, system

involvement, and other negative outcomes" (Crenshaw, Ocen, & Nanda, 2015, p. 5).

Zero-tolerance policies construct unsafe environments that are also not conductive to

learning, and they also lead students to become disengaged from school. Moreover,

many of the students feel less likely to attend school because of the increased levels of

security force and law enforcement within schools.

The second circle represents the **representational arena**. It highlights how

students are "cast in negative stereotypes" (Núñez, 2014, p. 89). In this arena educator-

researchers can analyze *discourses and discursive processes* such as are found in

media, newspapers, images and texts, and documents (Núñez, 2014). An assumption

about this arena is that discursive practices are related to constructions of boundaries

that *allocate value* (Anthias, 2013).

The existing research data as well as public policy debates have failed to

address the risks that girls of colour face, risks that are both similar to and different from

those that boys of colour face, and that are multidimensional and cross-institutional

(Crenshaw, Ocen, & Nanda, 2015). The authors of the report write that "much of the

existing *research literature* excludes girls from the analysis" (p. 5, emphasis added), and

also that "there is very little *research* highlighting the short and long term effects of

overdiscipline and push-out on girls of color" (p. 6, emphasis added). By examining

these discursive processes (i.e. the research literature) we can investigate how texts

and discourses contribute to shape teachers and scholars' perceptions of students'

abilities in negative ways, as well as how they perpetuate discrimination. Research on

zero-tolerance and push-out policies often fail to include how girls of colour experience

violence, suspension, arrest and even incarceration, and what challenges they face with

regard to expulsion and other disciplinary practices. This lack of investigation illustrates

how the research literature assigns the lives of these girls *less value.* This also

perpetuates discrimination.

It is important to pay special attention to the exclusion of these girls' lives from

the literature because this omission can also shape stakeholders' perceptions in

negative ways, in particular by "[leading] many stakeholders to infer that girls of color

are not also at risk" (Crenshaw, Ocen, & Nanda, 2015, p. 5). Here, we can focus on

investigating "who is included or excluded from [educational] opportunities" (Núñez,

2014, p. 89). That is, stakeholder inferences about these girls of colour can not only

undermine their educational opportunities by ignoring (i.e. excluding) their lived

experiences, but also be inaccurate and misleading: "the suspension and expulsion

rates for Black girls far outpace the rate for other girls—and in some places, they

outpace the rates of most boys" (Crenshaw, Ocen, & Nanda, 2015, p. 14).

The multilevel model of intersectionality's arenas can be analyzed by comparing

one arena to another, which is valuable in allowing educator-researchers to examine

many levels simultaneously. Such a simultaneous examination of various levels is

possible because this model's arenas can overlap, enabling educator-researchers to

examine how the different arenas of influence function at the same time, but also how

they have different degrees of impact depending on the context (Núñez, 2014).

"Societal arenas are different for the purposes of analysis", Anthias (2013) writes, "but are interrelated aspects of social relations and can be analysed in relation to one another" (p. 11). In fact, the overlapping of the arenas reveals how the processes and structures intersect and shape students' experiences.

By focusing our investigation on the educational underachievement of these female students of colour, we can make this link between one level to another. Among the dynamics that may contribute to underachievement and dropout rates for girls of colour may be "the *message* girls receive about the importance of their education at home" (Crenshaw, Ocen, & Nanda, 2015, p. 25, emphasis added). Received messages are better analyzed through the representational arena, because it focuses on discursive processes. In addition, the underachievement and dropout rates of these girls are highly correlated with "the quality of their *relationships* with peers" (Crenshaw, Ocen, & Nanda, 2015, p. 25, emphasis added). Personal relationships are better analyzed through the intersubjective arena, which I will discuss next, because this level of analysis is particularly concerned about relationships. Here we see the potential of this model to allow the simultaneous investigation of diverse levels of analysis. To better examine the underachievement in school and the dropout rates of these girls, we do well to investigate both discourses (that is, received messages—a structural level of analysis) and their personal relationships (a more individual level of analysis).

We next move a step closer to the centre of the circles. This third level is called the **intersubjective arena**. This arena calls for examining *relationships* between individuals and members of groups in order to investigate "how people and groups relate to one another and influence educational opportunities" (Núñez, 2014, p. 89). It

also includes the examination of relationship practices that involve non-person actors such as the police (Anthias, 2013). For example, if we examine certain conflicts that take place in schools we would learn that students of colour are more likely to be referred to the juvenile justice system, or *non-person actors* such as law enforcement institutions, rather than for counselling or another conflict resolution strategy that is a more personal and restorative practice (Crenshaw, Ocen, & Nanda, 2015).

The intersubjective arena emphasizes the teacher-student relationship to enable investigation of how teachers *perceive* students' abilities (Núñez, 2014). For instance, implicit biases, stereotyping, and other cultural factors may play a role in why Black girls face higher risks of suspension and expulsion, and "these dynamics may contribute to *perceptions* by decision makers that a Black girl has run afoul of institutional norms, and that punishment, rather than restorative or therapeutic responses, is warranted" (Downey & Pribesh, 2004, as cited in Crenshaw, Ocen, & Nanda, 2015, p. 24, emphasis added). By analyzing the teacher-student relationship, we learn that teachers not only *perceive* the female Black students as being defiant and behaving in such a way as to justify punishment, we also learn that these students receive less attention in school because teachers *assume* that they are more socially mature and self-reliant than their male peers and therefore do not need their attention as much (Crenshaw, Ocen, & Nanda, 2015).

The intersubjective arena also focuses on "patterns of practices of identity and otherness (such as practices of bonding, friendship and distancing)" (Anthias, 2013, p. 11). Stakeholders note that "when girls sense that teachers do not *value* them or celebrate their achievements, they are more likely to leave school" (Crenshaw, Ocen, &

Nanda, 2015, p. 27, emphasis added). When we analyze these factors, they help us comprehend that when teachers overlook or undervalue girls' achievements, their attachment and *sense of belonging* in school are often threatened, which is likely to cause an increase in drop-out rates.

Black and Latina girls are more likely to face familial obligations, such as taking care of parents or siblings, pregnancy, and early parenting, in ways that boys of the same age do not (Crenshaw, Ocen, & Nanda, 2015). When we analyze these familial responsibilities more closely, we learn that as a consequence of such obligations these girls are segregated from their peers, stigmatized, and their attachment to school is undermined. We also learn that these responsibilities threaten these students' sense of belonging and their practices of identity and bonding, creating barriers to these girls achieving their academic goals.

Stakeholders that participated in this report point out that teachers, directors, and school staff have failed to intervene in situations involving the *harassment* and bullying of such girls in schools (Crenshaw, Ocen, & Nanda, 2015). They often note that "zero-tolerance policies may exacerbate the vulnerability of girls to harassing behaviour because it penalizes them for defending themselves against such acts" (Crenshaw, Ocen, & Nanda, 2015, p. 10). As the arenas of this model allow us to link micro-processes with broader structures (see Núñez, 2014), by focusing on the context of *harassing behavior,* we can better analyze these issues through the intersubjective arena that focuses on personal relationships. Then, by investigating the *zero-tolerance policy* we enter the organizational arena, and this investigation allows us to learn that these policies not only lead students to feel insecure in school environments more

regularly, they also create limitations for school staff to intervene in cases of harassment and bullying.

Now we are at the center of all four circles, at the last level of the multilevel model of intersectionality. This is the **experiential arena**.

In the study that I have been discussing conducted by Crenshaw, Ocen, & Nanda (2015), the female students and stakeholders participated in focus groups and were also interviewed. Here in the experiential arena we should focus on investigating these interviews and focus groups because this level of analysis is concerned with students' perceptions, narratives and "narrative sense-making," and also the *meanings* they make of their experiences in school (Núñez, 2014, p. 88). Through the experiential arena we can examine how these students construct their own narratives about their educational possibilities, opportunities, and academic abilities.

During the interviews and focus groups, students shared experiences and feelings that revealed the reasons they either dropped out or were pushed out of school. When they reflected about their own experiences, they often expressed that "discipline and order are priorities that transcend the educational mission of the school" (Crenshaw, Ocen, & Nanda, 2015, p. 27). These girls believe that discipline is prioritized over educational attainment, which therefore makes them perceive that school policies are unfair.

Another focus of the experiential arena is the *sense-making* around interactions with teachers, counsellors, and peers. That means that this level of analysis is also concerned with "the affective, the emotional and the body . . . [and] narrations of identification, distinction, and othering" (Anthias, 2013, p. 11). When we analyze

students' lives through the experiential arena, we learn that these girls describe their interactions with teachers and counsellors as unsatisfying and discouraging and they perceive that there is an absence of academic support and lack of incentive to complete school (Crenshaw, Ocen, & Nanda, 2015).

Finally, there is a strong interpersonal violence narrative among school-age Black girls. Crenshaw, Ocen, and Nanda note that "among the factors that disrupted some of the participants' ability to finish school was trauma associated with sexual assault and other forms of violence" (p. 11). Here we see an illustration of the intersubjective and experiential arenas overlapping. In the level of analysis of the intersubjective arena we would focus on personal relationships, which in this case relates to sexual assault (practice of distancing). Then, in the experiential arena our focus would be on the analysis of these girls' construction around the narrative of violence, meaning how they internalize these experiences with violence, what meaning they make of them, and how these experiences affect their educational outcomes and opportunities.

2.3 Concluding Thoughts

In this chapter I discussed forms of enhancing the applicability of intersectional analyses in today's educational research area. I discussed the importance of educator-researchers emphasizing the intertwined mechanisms that create and reinforce social inequalities and injustices to increase the potential of intersectionality to be used as an analytical tool. I demonstrated how intersectional analyses allow educator-researchers, in particular through the analyses of the 'interlocking systems of power,' to examine the ways that power structures shape students' experiences and influence their life

opportunities and access to educational equity. Following that, I discussed how important it is for educator-researchers to be able to connect micro- and macro-levels of analysis, and when possible analyze them simultaneously, because the analytical potential of intersectionality increases when positionalities and identities are linked to the investigation of interlocking systems of power. Consequently, I introduced the multilevel model of intersectionality that allows the investigation of the ways that structural and institutional systems create and reinforce inequalities and are also manifested and embodied in the everyday lives of students. This model is useful for educator-researchers to organize the type of issues they want to emphasize, the foci they want to investigate, and more importantly, to link one analytical level to another.

CHAPTER THREE

The Intersections of Social-Ecological-Environmental Dimensions:

Exploring Emerging Frontiers for Future Inquiry and

the Potentialities for Intersectionality in Educational Research

…how

urgent it is that

we fight for more fundamental

ethical principles, such as respect for the

life of human beings, the life of other animals, of birds,

and for the life of rivers and forests. I do not believe in loving…

among human beings, if we do not become capable of loving the world.

Ecology has gained tremendous importance at the end of this century.

It must be present in any educational practice of a radical, critical, and liberating

nature…

If education

alone

cannot

transform

society,

without it

society

cannot

change either

Paulo Freire, 2004, p. 47

I begin this chapter with a portion of a letter written by Brazilian educator Paulo

Freire on April 22, 1997 (see Freire, 2004)—his last. Freire writes with indignation after

learning that a group of teenager students had set fire to an indigenous man from the

pataxó tribe in Brazil's capital city, Brasília. The man was sleeping peacefully in a bus station when the group came and set his body on fire. According to the police report, the whole thing was just a hoax. "What a strange notion" Freire writes resentfully, "to kill for play" (p. 45). Freire wonders whether these teenagers had grown up happily strangling baby birds, setting cats on fire, and having fun by destroying flowers. He thinks about the houses these teenagers used to live, their families, neighbourhoods, and the schools they may have attended. This leads him to ask himself how these teenagers were taught to think about the poor, the homeless, the women, the peasant, the worker, people of colour, native peoples—like the man they killed. "That Indian [sic] was not a *you* or *he*," Freire writes. "He was *that thing* over there. He was some sort of lesser shadow in the world, one inferior, bothersome, and offensive" (p. 45, emphasis in original). He concludes the letter by saying that in our society no value is given to the love of others and that we lack a reverence for life: not only human life but also nonhuman life. Freire urges people to fight for fundamental ethical principles, such as respect for all human beings, for animal life, rivers, and forests, and ends the letter by arguing that "[ecology] must be present in any educational practice of a radical, critical, and liberating nature" (p. 47).

In this chapter, I attempt to respond to Freire's call for more respect, care, and love for all things and all kinds of lives, as well as for the inclusion of ecology to any educational practice of critical and transformative nature. I aim at exploring further relevant discussions that intersectionality can produce in education. These discussions are actually related to a key research gap regarding the way intersectionality has been applied to educational research, namely, a lack of intersectional analyses that address

issues related to nonhuman beings, the environment, and ecological sustainability. I propose one particular direction for educator-researchers to continue to move the field forward, especially those who are doing intersectional work and are interested in helping build a society based upon principles of social justice and equity, namely that *the significant advancement of intersectionality in education is in the investigations of power that allow the inclusion of nature and the environment*, thus enabling educator-researchers to move beyond humans when addressing equity and justice concerns in the area of research in education.

To discuss the possibilities for intersectionality to be advanced and developed in educational research, I divide this chapter into two major parts. In the first part, I discuss a *rationale* for including ecological and environmental dimensions in educational research. Then, I explore the lack of environmentally- and ecologically-related issues from the literature in education, with an emphasis on intersectional research. After discussing the outcomes of these omissions in education, I explore the work of posthumanist theorists who have been shifting perspectives and therefore contributing to the increasing inclusion of the nonhuman other in our investigations of power and dominance. In the second part of the chapter, I begin to explore basic ways to broaden the theoretical framework of intersectionality, ways that might enable educator-researchers' investigations to become more inclusive of ecological and environmental dimensions. I then discuss more specifically how intersectionality can promote critical insight and also serve as a valuable analytical tool to investigate the ways social-ecological-environmental dimensions illuminate equity and justice concerns in the area of educational research.

3.1 Rationale for Including Ecological and Environmental Dimensions to Research in Education

As climate change has gradually become a more apparent and acknowledged threat, discussing the effects of climate change and other environmental issues has become imperative rather than optional. Ecologically minded scholars insist that we are living in a historical moment in which we must start asking ourselves "how humans can live well with each other *and* in balance with the planet's ecological systems" (Taylor, 2014 as cited in Somerville, 2017, p. 22, emphasis added). In this chapter, I support this view, arguing that intersectional theorists need to pay more attention to all living beings—and non-living beings—that constitute our planet's ecological systems and rethink the current paradigms of sustainability. Fortunately, as I will show below, intersectional theorists have already begun to take up this important task.

One specific educational question is how educators can contribute to achieving a balance in the planet's ecological systems while also emphasizing their role in the pursuit of ecological sustainability and ecosocial justice. Answering this question is especially important because "sustainable development for all countries is only truly possible through comprehensive cross-sector efforts that *begin with education*" (UNESCO, 2014, p. ii, emphasis added). In addition, Paulo Freire (2004), in the letter summarized at the beginning of this chapter, posits that: "if education alone cannot transform society, without it society cannot change either" (p. 47). Thus, it is imperative that educator-researchers and scholars, especially those who work towards education that includes the pursuit of social justice, social transformation, and equity, develop a more sustainable education to address and challenge injustices and inequalities that

affect *all* living beings. To fight climate change, challenge environment-related injustices, and also eliminate human and nonhuman violence, exploitation, inequalities and oppression, educator-researchers need to take into account social, ecological, and environmental dimensions of the contexts they investigate.

As I already mentioned, "intersectionality is inextricably linked to an analysis of power" (Cho, Crenshaw, & McCall, 2013, p. 797). With that in mind, I want to demonstrate that a shift in power analysis that goes beyond the human allows educator-researchers to examine ecological and environmental-related injustices and inequalities, as well as various forms of oppression, discrimination, and violence that affect both human and nonhuman beings. Such a shift and examination enables these researchers to become sensitive to the inclusion of the nonhuman other, the environment, and entangled social, ecological, and environmental aspects in their interrogations of power.

3.1.1 The omission of environment- and nature- related issues in education. Unfortunately, there is a significant omission in the education literature of studies on nature- and environment-related issues (see e.g., AESA, 2014; Aikens, McKenzie, & Vaughter, 2016; Kahn & Nocella, 2012; Malone, Trong, & Gray, 2017; Pedersen, 2010; Rowe, 2015; Snaza, 2013). For instance, philosopher educator Bradley Rowe (2015) tells us that, "while numerous academic disciplines in the social sciences and humanities study human-animal interactions, education remains behind the times, so to speak" (p. 31). Given that *nonhuman* beings can become great "educatees" of more meaningful learning (Martin, 2011, p. 57), it is very unfortunate that the nonhuman other is not given much attention in the area of education.

When we analyze the applications of intersectionality in educational research, not surprisingly this absence is also noticed (see e.g., Kaijser & Kronsell, 2014; Rowe, 2015). There are very few books on educational research that focus mostly on K-12 education and use intersectionality as the main analytical tool to tackle educational problems and address educational outcomes. The books available today that encompass these issues and topics are *Intersectionality and Urban Education: Identities, Policies, Spaces & Power* by Zwier and Grant (2014) and *Intersectionality in Educational Research* by Davis, Brunn-Bevel, and Olive (2015). When we explore these books we notice a lack of investigations on human-nonhuman relations, nature, climate change, environment, or ecological sustainability (for more examples of books that also ignore these issues in the context of postsecondary education research, see Barnett & Felten, 2016; Berger & Guidroz, 2009; Dill & Zambrana, 2009; Mitchell, 2014; Ouellett, 2011; Strayhorn, 2013, for example).

Given the importance of these books, to demonstrate at greater depth the absence of environment- and nature-related issues in educational research, I now analyze two relevant fragments. These illustrate how influential educator-researchers have failed to include ecological and environmental dimensions in their intersectional analyses. Particularly, these fragments have to do with the way these scholars define intersectionality in today's context in education literature. These fragments illustrate very well the absence of these issues throughout the whole book.

The first example is a definition given by educator scholars Carl Grant and Elisabeth Zwier (2014a). In their definition of intersectionality, we notice that they are interested only in examining "identity categories," an issue that relates exclusively to

humans. The following quotation illustrates that these authors do not make any reference to nature or the environment in their definition of intersectionality:

> Our working definition of intersectionality theories is as follow: Intersectionality theories and intersectionally-informed methodologies seek to explain, critique, and transform relationships of difference within and across one or more levels or social spheres, taking into account the workings of power through fluid, context-specific, co-constructed identity categories. (pp. 10-11)

This definition does not include ecological or environmental dimensions, nor does it mention other relationships of difference that include the category of species (see Deckha, 2008), nor indeed any relevant concerns that go beyond the exclusively human.

In the introduction of the other book by Davis, Brunn-Bevel and Olive (2015), the authors explain that "this book seeks to advance understanding of intersectional theory and its application to research in education" (p. 2). When they define intersectional research, they assume that "research using intersectional theory enhances critical thinking skills and decision-making practices related to the intersections of race, class, gender, sexual orientation, religious background, ability, and other identities" (p. 2). Again, we do not see any reference to nature, species, the nonhuman other, or the environment in this excerpt, and even more explicitly than Grant and Zwier's definition, Davis, Brunn-Bevel and Olive's emphasizes only the human dimension as their concerns for race, gender, and sexual orientation make clear.

3.1.1.1 Outcomes of the omission of environment- and nature- related issues in education. These scholars' approaches to intersectionality are restricted

precisely because they omit and overlook ecological and environmental dimensions. As we saw, their approaches to intersectionality ignore other concerns and issues that are very important to be addressed when one is analyzing hierarchies of domination, power dynamics, and relationships of difference. Rowe (2015) refers to this type of approach to intersectionality as a humanist-intersectionality, suggesting that such approaches are reductionist in the way they challenge dynamics of privilege and domination. He argues that such approaches may hierarchize human concerns while marginalizing concerns about other parts of the natural world. Importantly, Rowe's concern is that this narrow and limited view is not educationally or ethically innocent: it contributes to and strengthens processes that reproduce complex systems of injustice. According to Rowe, these humanist intersectional approaches to education can lead educator-researchers to ignore or overlook important intersections within social-ecological-environmental dimensions, therefore limiting investigations of concerns that affect and are important to the more-than-human world. If "the ways humans think about and represent nature is always already imbricated with human social systems and forms of classification" (Brahinsky, Sasser, Minkoff-Zern 2014, p. 1144), then there is good reason to challenge and provoke approaches to educational research that continue to overlook or ignore human-nature interactions.

Rowe (2015) suggests that anthropocentrism—a view that assumes that humans are the most important species on Earth—is one of the reasons why educator-researchers remain relatively uninterested in studies on human-animal interaction in education, and also may be the reason these scholars are "unaffected by the increasing popularity of inquiry into human-animal relationships" (p. 31). In the same vein, scholar

educator Helena Pedersen (2010) suggests that the absence of studies on human-nature relations from the area of education may be a result of a Western pedagogy that is based on a humanist tradition that tends to ignore nonhuman creatures. Actually it is not only Western pedagogy that is based on a human/nonhuman boundary; this hierarchization inhabits Western thought in general (Deckha, 2008; Taylor & Pacini-Ketchabaw, 2015).

  3.1.2 The contributions of posthumanist theory. Recently, some educator scholars have begun to notice the lack of studies on the human-nature interaction in education, and as a result they have started to incorporate nonhuman beings into their analyses. Although this is happening in the education literature, Rowe (2015) tells us that "these notable exceptions remain on the periphery of critical education scholarship that aims to interrogate and change systems of oppression, privilege, and domination" (p. 31). These 'notable exceptions' of educator theorists and scholars have been challenging dualistic ontological approaches as a way to shift education research from human-centered perspectives towards a posthumanist paradigm that blurs the line dividing human and nature (see e.g., Kahn, 2011; Malone & Truong, 2017; Martusewicz, Edmundson, & Lupinacci, 2015; Somerville, 2017; Snaza & Weaver, 2015). At the heart of the *posthumanist pedagogy* critique is "the epistemological and ontological categories and dualisms that frame and permeate the humanist discourses of contemporary schooling and higher education, especially those that divide human/animal and human/machine" (Gough, 2004, p. 2).

  The work of posthumanist theorists from diverse areas of study was very important as I constructed my argument in this chapter, and what I propose here

depends heavily on their work (e.g., Deckha, 2008; Malone, Trong, & Gray, 2017;

Pedersen, 2010; Rowe, 2015; Snaza, 2013; Snaza & Weaver, 2015; Somerville, 2017).

For this thesis I am most interested in the contributions these theorists make in relation

to the broadening of the theoretical framework of intersectionality. They demonstrate

that there are various new possibilities in intersectional analyses, in particular the

potential to embrace the investigation of other forms of oppressions and systems of

power that includes the nonhuman other and the environment (see e.g., Cudworth,

2015; Deckha, 2006; 2008; Rowe, 2015; Thompson-Hall, Carr, & Pascual, 2016; Twine,

2010; Wyckoff, 2015; Yavinsky, 2012).

Theorists such as Richard Twine (2010) argue that intersectionality has multiple

ways in which to widen its scope and shed light on how structures of power emerge and

interact in the nonhuman realm, and that therefore intersectionality can be used to

theorize political relations between human and the more-than-human other.

Furthermore, legal scholar Maneesha Deckha (2008) argues that intersectionality

cannot stop the power of its critique at the animal/human boundary, and she writes that,

"intersectionality needs to… consider species as a force of social construction,

experience formation, and source of difference" (p. 267). Deckha's call for the inclusion

of species as a source of difference in intersectional analyses has profound implications

for the broadening of the theoretical framework of intersectionality, particularly given

that one of the central themes of intersectionality is to interrogate and understand fully

the differences and their operations (Hankivsky, 2014). There is a great need for

researchers who employ intersectional analyses to expand their horizons and their

understandings around relationships of difference, in particular to comprehend that our

own identities and lived experiences are likewise determined by our species status

(Deckha, 2008), for "species is similar to race, a social construct that arises out of

human interpretations of difference" (Rowe, 2011, p. 5). These are fundamental

ontological and epistemological questions that consider the concept 'human' to be a

social construction, which is formed and defined in relation to various "non-human

Others" (Snaza, 2013, p. 38).

3.2 First Steps to Broaden Intersectionality in Educational Research

Building on the work of posthumanist theorists, this part of the chapter introduces

some basic ideas to broaden the intersectional framework so that our interrogations of

power in educational research can become more inclusive of ecological and

environmental dimensions. I then move on to propose more specific ways that educator-

researchers can use intersectionality as a tool to investigate how these dimensions

influence and affect equity, justice, and equality in the context of education.

The basic idea I would like to explore regards analyzing some main assumptions

of intersectionality in order to find room to advance its theoretical framework in

educational research. Intersectionality assumes that the interlocking systems of power,

as well as relations of hierarchization and stratification create and perpetuate complex

inequalities and various forms of injustices (Cho, Crenshaw, & McCall, 2013). It also

assumes that these dynamics and relations are outcomes of the working processes of:

a) *exploitation* (commodification); b) *inferiorization and othering* (stigma, disgust,

devaluation, disrespect); and c) *unequal resource allocation* (which involves multiple

forms of inequities of access and inequality of outcome) (Anthias, 2013).

We can expand the framework of intersectionality here by assuming that these processes do not need to be focused exclusively on human-related issues, but can also include ecological and environmental relationships. That is, when investigating processes of exploitation we can consider commodification of persons *and* non-persons, such as other species; when analyzing inferiorization and othering*,* we can be inclusive of the earth-other; and when examining unequal resource allocation, we can acknowledge unequal access to natural resources as well as inequalities and injustices that affect both humans and the nonhuman other.

I would like to use an example of intensive animal agriculture to illustrate a practice that has many negative effects not only on humans but also on nonhuman beings and the environment (Kirby, 2011; Robbins, 2001; Tuttle, 2005). Beyond its immediate impact on the environment through deforestation, toxic effects on water, and global warming (Kahn & Humes, 2009), this industry and practice also exploits and commodifies both animals and humans. In *Slaughterhouse: The Shocking Story of Greed, Neglect, and Inhumane Treatment in the U.S. Meat Industry*, Gail Eisnitz (2007) describes the suffering of animals and the cruel treatment of workers who are responsible for killing these animals. On the one hand we have nonhuman beings trying everything to get away from suffering, while we also see human workers being exposed to physical danger and horrible working conditions that seriously affect their mental health (inferiorization: stigma and devaluation). What are these conditions? First of all, these workers are underpaid, often have to work long hours, and are exposed to horrible environments and terrible work conditions (unequal resource allocation: inequities of access). Second, these workers have the obligation of killing other *living*

beings (othering: disgust and disrespect), which is awful in itself, but these animals are also often fighting, kicking, squealing, and "doing whatever they can to try and get away" (p. 75) (unequal resource allocation: inequality of outcome). Third and finally, presumably as a result of those conditions, such workers are at greater risk of alcohol addiction, of being arrested for assault, and are also exposed to psychological danger and physical injuries (exploitation and unequal resource allocation).

This example illustrates how we can investigate injustices and inequalities within the intersections of social-ecological-environmental dimensions. It is usually humans in positions of less power/marginalization who bear the brunt of policies and practices that exploit and harm nonhuman beings and things (e.g. the climate). Thus, it is not as if we can cleanly separate an examination of one from the other. Oppression, exploitation, harm, and discrimination of one tends to go hand in hand with the other.

Another necessary step to widen the framework of intersectionality is the search for interlocking systems that go beyond the exclusively human and also other relations of power that may not be evident in certain situations. One way of doing that is through what Matsuda (1991) proposes as the 'asking the other question' approach:

> When I see something that looks racist, I ask, 'Where is the patriarchy in this?' When I see something that looks sexist, I ask, 'Where is the heterosexism in this?' When I see something that looks homophobic, I ask, 'Where are the class interests in this?' (p. 1189)

In short, educator-researchers can expand their approach to intersectionality by asking: Where are the other "isms" in my analyses? Are there any nature- or environment-related issues relevant in this investigation? This process of questioning is

important not only because it allows educator-researchers to see whether environment- or ecology-related issues are present in their investigations, but because this process enables them to acknowledge and recognize other "isms" and interlocking systems of power that may be related to the issue they are exploring and analyzing. For instance, though speciesism initially may not be included in her examination, after she searches for other "isms," the researcher may discover that the category of specie is indeed closely related to the issues and context she is exploring.

Certainly, these questions are important as first steps to enlarge the framework of intersectionality and to identify power imbalances. However, because intersectionality emphasizes the notion of the 'interlocking systems of power,' it assumes that the systems of power interact with one another in a *mutually-reinforcing* manner. The efficacy of intersectional analysis is enhanced when one starts examining *how* the systems of power, structures, and institutions really intersect, that is, how they transform, rely on, and depend upon one another to exist and be reinforced (Collins et al., 1995; Núñez, 2014). That is, an intersectional analysis requires that researchers identify relationships among the systems and factors, look for patterns and commonalities (Kaijser & Kronsell, 2014), and examine the ways in which these structures and other multiple variables intersect.

3.2.1 Exploring environmental concerns through intersectional analyses. First of all, we need to look at environmental concerns through the intersections of sexism, capitalism, colonization, racism, speciesism and other forms of institutional power (see Fanshier, 2016). In addition, we need to explore how structures of power depend upon one another to exist and be reinforced through economic, political, social,

and ecological spheres. In the specific case of climate change, investigating these factors and spheres is important because they help us understand how inequalities are created and reinforced and also how humans and nonhumans' exposure to climate hazards is influenced by these factors.

When power dynamics and climate change are analyzed intersectionally, our focus should go beyond investigating how humans and nonhumans are implicated by climate hazards. Rather, to better understand these complex situations we first need to assume that climate hazards *alone* do not create inequalities and injustices. Surely we cannot forget the situations in which climate change can *aggravate* preexisting socioeconomic inequalities depending on the individual livelihood (United Nations, 2016). Yet, it is the uneven manifestation of power through socioeconomic, political, ecological spheres that will affect humans and nonhumans' lives and make them *more* vulnerable to the effects of climate change. Thus, an intersectional analysis of climate change needs to focus on the root of the problem, that is, to investigate how uneven manifestations of the 'interlocking systems of power' exacerbate multiple inequalities and inequities, which then leads to the *intensification* of the vulnerability to climate hazards.

3.2.1.1 Exploring the 'interlocking systems of power' in human-environmental relationships.

The manifestations of the systems of power in the sociopolitical and economic spheres affect people's opportunities and possibilities, in particular by giving them less access to public resources (such as health, education, infrastructure and the judicial system), and by constraining their opportunities to influence policy decisions and participate in decision-making (United Nations, 2016). As

the voices of these people are ignored, very often, the public policies that are adopted

by those in power or with access to power leave these already marginalized people

vulnerable and more exposed to climate change. For example, on one hand, those who

have access to power and can influence policies and political decisions—typically

wealthy people—have their houses better protected against climate hazards and are

therefore less affected by such hazards (United Nations, 2016). On the other, those who

live with income constraints or are subjected to various forms of discrimination,

particularly with respect to access to services and infrastructure, are forced to live in

marginal areas or other geographical spaces that are more exposed to climate hazards.

Slums, for instance, are not only marginalized spaces, but are also often located in

areas of greater climate risk (Arimah, 2011).

Structural inequalities create barriers for resources to be evenly distributed, and

those who are affected by these power imbalances often have insufficient access to

basic public services and to proper resources. In addition to the effects of climate

change, these dynamics not only aggravate the inequalities and injustices in the lives of

people who are marginalized and in disadvantageous positions, they also constrain

these people's opportunities.

3.2.1.1.1 Climate change and education. There are three important factors

regarding climate change and power imbalances that are related to each other, and that

in combination can greatly constrain children's educational possibilities and life

chances. The first factor regards those people who live in disadvantageous and/or

marginalized spaces. What happens to these people when they are affected by climate

hazards is that they often have to choose between protecting their human capital, such

as their education, or preserving their physical capital, such as their own bodies (United Nations, 2016). Second, some studies show that children who had to leave school for a time because they were recovering from climate hazards were 30 percent less likely to complete school compared to those who stayed in school (Janvry et al., 2006, as cited in United Nations, 2016). Third, as a result of structural inequalities, individuals who live in marginalized situations often have less access to resources, making them less likely to be able to cope or recover after a climate hazard has materialized (United Nations, 2016).

How do these factors interrelate and affect children's life chances and educational equity? When children who live in marginalized and/or disadvantageous spaces encounter climate hazards, they are put in a situation by which they (and their families) are forced to choose between protecting their educational goals and achievements (human capital) or preserving their health and bodies (physical capital). If they have no option but to choose preserving their own lives, they will have to leave schools, even if only temporarily, because they live in marginalized spaces that offer them limited access to resources to recover from the effects and hazards of climate change. The outcome of all that in their lives is typically quite negative because this complex situation, which is intrinsically related to larger structures and uneven power dynamics, will likely create limitations that will discourage these children from achieving their potential (see Anthias, 2013), a potential such as the completion of school.

3.2.2 Exploring social-ecological dimensions through intersectional analyses. The work of educator philosopher Bradley Rowe is an important contribution to the broadening of intersectionality in education, in particular as he is one of the few

educator scholars who have proposed a way of applying an intersectional framework to educational research while also considering the relations of human and nonhumans (see Rowe, 2011; 2012; 2015; Rowe & Rocha, 2015). Rowe draws on posthumanism to expand upon the theory of intersectionality, break with hierarchies of domination, discuss the connections between human and animal oppression, and connect the various forms of injustices among human and nonhuman species.

From this *intersectional-posthumanist* framework, and assuming that transformative education should discuss bodily experiences and their meaning in relation to our relationships with living beings in the world, Rowe (2015) proposes a pedagogical possibility for allowing ways of dissolving the human/animal essentialist binary, which he calls a *gastro-aesthetic pedagogy.* Rowe's pedagogy refers to a process of placing together a shift in perspective and a sensory-aesthetic experience of mindfully and critically practicing the act of eating meat. This pedagogy is meant to enable students to relate to nonhuman others in a different way, and also to include animals in the critiques of power, oppression, and privilege while envisioning justice, peace, and freedom. Rowe's pedagogy is powerful in making us reflect intersectionally about these concerns. His pedagogy literally *intersects* human and animal bodies: "posthumanist intersectionality made flesh" (p. 42). If and when one eats meat in the critical and mindful way that Rowe proposes, one is constituted by the flesh of animals: "meat eaters physically become through ingestion, engagement, and assimilation of the animal *other*" (p. 42, emphasis in original). Through a pedagogy constructed from an intersectional-posthumanist perspective, one becomes what one eats in both an ontological and a physical-fleshly relationship.

Rowe's work helps me illustrate what a broadening of intersectionality can produce in the area of research in education. When educator-researchers are willing to engage with the more-than-human world, they open up a space in which it is possible to analyze the relationships between human, nature, and the environment. This allows them to comprehend, for example, that various forms of human and nonhuman oppression, violence, injustices, and inequalities do interrelate and are deeply intertwined with one another (Rowe, 2015).

3.2.2.1 Investigating human-nonhuman interrelations through the multilevel model of intersectionality. In this last part of the chapter, I once more apply the 'multilevel model of intersectionality,' previously discussed in Chapter 2, as a way to demonstrate that there is a great potential for intersectionality to be used as an analytical tool to investigate and explore ecological and social dimensions of a situation simultaneously. I do this by applying the arenas of the 'multilevel model of intersectionality' to analyze Rowe's work. In focusing on the concerns that are most important to each arena of this model, I draw upon Rowe's work to help me raise questions that warrant further investigation by educator-researchers who intend to contribute to the construction of a society based upon principles of social justice. In fact, the questions I raise here are just a first step towards the broadening of intersectionality in educational research. They will help me show that intersectionality does not have to be used only as a tool to investigate the operations of power manifested through human lives, but that it can also be used to explore nonhuman oppression, injustices, and suffering.

Through the societal arenas of investigation and the different levels of analyses they represent, the multi-level model of intersectionality provides educator-researchers with a way to interrogate the mechanisms—by which I mean the structures and power dynamics—together with factors and practices that can constrain or enhance students' educational equity, opportunities, life chances, and access to just relations (Anthias, 2013; Núñez, 2014). Using this model, I will explore the arenas with these two different outcomes in mind: in the organizational and representational arenas, I will focus on factors that create barriers and limitations to students, and in the intersubjective and experiential arenas, I will emphasize factors that enable access to educational equity and just relations.

I begin my analyses with the organizational and representational arenas, which represent structural-/macro-levels of analysis. The organizational arena is a level of analysis that focuses on investigating how power is institutionalized and reinforced (Anthias, 2013). This arena allows educator-researchers to explore and analyze how the constitutive dynamics of power in institutions perpetuate social reproduction of inequalities and inequities (Núñez, 2014).

In the organizational arena, it is possible to analyze the interlocking systems and structures of power, constructs, and assumptions that create and reinforce hierarchies of domination between human and nonhumans. By applying this arena's concerns to Rowe's work, we learn which dynamics, systems, and structures are relevant for our investigation, and how they relate to education and the nonhuman other. For example, Rowe (2011) tells us that corporatization, privatization, and commercialization of education are intrinsically related to food in schools. The structural power of capitalism,

through industrial and consumerist assumptions of the food industry, manifests itself in schools by producing and reproducing students who become passive consumers "at the expense of engaged and critical citizens" (p. 14). In addition, exploring the ways food influences schooling also allows us to critique and investigate neoliberalism (Rowe & Rocha, 2015) and the forms in which this system manifests in schools and in the lives of human and nonhuman subjects.

The organizational arena is concerned with policies, laws, and acts (Anthias, 2013), and by focusing on these factors we can investigate the ways in which the policies of food companies, school districts, and the USDA perpetuate and reproduce the assumption that animals are mere products or 'commodities' (Rowe, 2011). By analyzing these assumptions, structures, and dynamics, we can better understand how and why schools may be perpetuating the belief or value that farm animals are resources (for our use) while pets are to be loved (Rowe, 2011). Why are these assumptions perpetuated in schools? By exploring this question, we can ascertain who/what benefits from such an understanding and who/what loses. "Schools," Rowe writes, "inculcate absent-mindedness by distracting from, rather than bringing attention to, the connections with what students eat and the world beyond" (p. 14). How are schools distancing students from what they eat, in particular by constraining their learning about the lives of farm animals?

This type of question could also be usefully investigated in the *intersubjective arena*, which I will further discuss after the organizational and representational arenas. If we switch our analysis to focus on the concerns relevant to the intersubjective arena, which is mostly about relationships, we could investigate how schools may be

distancing students from farm animals: How are the connections and relationships between students and animals being constrained by schools? When we explore the influence that meat-food has on schools and students' lived experiences, we learn that one of the fundamental ways the distancing of students and animals occurs is through school lunches (Rowe, 2011). Usually, students are not taught about the lives of farm animals, and this distances students from the nonhuman other, in this case, these kind of animals. In addition to that, the lessons and assumptions that animals are mere commodities are reinforced and perpetuated especially through practices that take place during lunch time.

The *representational arena* focuses on investigating how discursive practices construct boundaries and allocate value (Anthias, 2013). Rowe (2011) tells us that "discourse is a powerful device in *distancing* and *diminishing* the lives of others… reinforcing hierarchy and objectification of others" (p. 10, emphasis added). As this model enables us to link one level to another, we could analyze the organizational *and* representational levels simultaneously. By doing that we learn that it is not only the schools during their lunch time that distance students from nonhuman others, but that discursive practices are also used to assign less value to the lives of others, and that hierarchies of domination are reinforced to support the objectification of others. From that, our analyses would need to focus on both the structures that perpetuate the assumption that animals are mere commodities, and also the discourses that serve as devices for inferiorization, objectification, and othering of nonhuman subjects.

Discourse about difference that people use as tools to legitimize hierarchies of domination can include, for example, allegations that the suffering of animals is not as

urgent or important as the injustices humans experience (Rowe, 2015). Linguistic tools can also be used to legitimize human power over the nonhuman other: "animals are represented in language not only as different but also as *inferior*, the two conditions necessary for oppression" (Stribbe, 2001, as quoted in Rowe, 2011, p. 10, emphasis in original). We need to address these discursive practices that create conditions for the legitimization of oppression, domination of humans over nonhumans, as well as the reinforcement of hierarchies. For human and nonhuman subjugation, oppression, and injustice are not disconnected. As Rowe (2015) puts it, "humans don't exist on some separate, superior echelon of injustice […and therefore] non-human injustice not only can be, but should be, explored simultaneously, side by side, with human injustice" (p. 35). Any assumption, structure, construct, or system that is used as a tool to legitimize hierarchies of domination or to consider human injustices to be superior should be addressed in our analyses—and be challenged.

The representational arena also signals who is included and excluded (Anthias, 2013) and it is worthwhile investigating why the nonhuman other is excluded from educational contexts. For instance, when considering educational research and the category of species, when researchers investigate relationships of difference (e.g., sexuality, culture, race) the species category is often overlooked (Rowe, 2015). This illustrates how educator-researchers assume that species is an inferior category in the hierarchical marker of privilege and power, and this often leads to the exclusion of the nonhuman other from this area of study.

Rowe (2015) suggests that analyzing species as a category of social difference and as a hierarchical marker of power is valuable because this category provides

discursive meanings of superiority and inferiority, which are often used to create and reinforce human/animal dichotomies. Such analysis also allows the investigation of practices of subjugation, domination, and oppression, and how structural power embodied in such practices as capitalism, colonialism, racism, and others 'isms' manifest themselves through this category. Indeed, investigating how human/nonhuman dichotomies intersect with sociocultural categories can reveal "how systems of hierarchy, language, and meaning are imposed onto both nonhumans and humans" (Rowe, 2011, p. 5). These are very important concerns to be explored, and the intersectional analysis in the representational arena is a useful tool to use to interrogate these structures that exploit and oppress both human and nonhuman beings.

Now I have arrived at the intersubjective and experiential arenas, which represent individual or micro levels of analysis. The intersubjective arena is concerned with relationships, while the experiential arena focuses on lived experiences. In light of the focus of Rowe's gastro-aesthetic pedagogy both on relationships and experiences, I will explore these arenas together. In addition, as I mentioned at the beginning of this chapter, my focus here will be to explore ways in which these arenas can illuminate the enhancement of students' opportunities and life chances rather than investigating the factors that limit or constrain their possibilities.

The intersubjective arena is concerned with relationship practices between people and also between people and nonhuman actors: the "intersubjective… focuses on practices in relation to others, including non-person actors such as the police, the social security system and so on" (Anthias, 2013, p. 11). Thus, one way to expand the analyses in both these arenas is by first considering the nonhuman other as the non-

person actors in these relationships. Following that, as we emphasize the relationships between students and nonhumans (intersubjective arena), we can also investigate how these human-nonhuman relationships influence the narratives and meaning that students construct around these relations (experiential arena).

When I was exploring the representational arena earlier I mentioned that some discursive practices can create species boundaries, meaning hierarchies of domination that locate humans over and above nonhumans. Rowe's pedagogy is based on the metaphor of *becoming-animal* (see Deleuze & Guattari, 1987; and also DeLeon, 2010, as cited in Rowe, 2015), and he suggests that through this metaphor species boundary can be transgressed. That is, when one can "become" animal, one can think from a more holistic and ecological perspective, meaning one can take on the perspective of the nonhuman other (Rowe, 2015). Rowe also adds to his pedagogy a somatic component, which allows the individual not only to think differently, but also to *sense* and *experience* things differently— "to really feel becoming-animal through the somaesthetic practice of eating animal" (p. 41). What Rowe proposes through his pedagogy of eating meat is that students can "see" animals in the meat they are eating and then relate to them—the opposite of assuming that animals are mere commodities. Through the corporeal dimension of becoming, human and nonhuman bodies become one. "This transformation," Rowe writes, "is ontological, embodied, and deeply personal; it exists in our *being* and its location is the body" (p. 42, emphasis in original). When students embrace the meaning of this gastro-aesthetic pedagogy and eat meat as material transformation, they are able to "see" animals in themselves, in their own bodies, in their flesh.

Rowe (2015) also suggests that "to sense the world in a new way, we need to eat in a new way" (p. 40). This way of eating creates mindfulness, critical awareness, and introspection into the practice of eating meat, and this in turn relates to the ontological transformative process I described above. What this new way of consuming meat means in practice is that students can become mindful of the relationship between the act of consumption (of an animal body) and their own material constitution (their own body).

By relating this mindful act of eating meat to the experiential arena, we could investigate the sense students make of these experiences of learning to eat in this way, and how this act influences their opportunities and life chances positively. The experiential arena is concerned with students' meaning-making of their lived experiences, which involves "the affective, the emotional, and the body" (Anthias, 2013, p. 11). Here, we can explore how this practice of a new way of eating influences the meaning students make from their bodily, affective, and emotional experiences of this act of eating. Also, we could explore the meanings that students make of the experience of learning to understand critically the relationship between the (dead) body of the animal and their own bodies that are consuming it.

The experiential arena "focuses on narratives relating to meaning-making and sociality… [and] includes narrations of identification, distinction, and othering" (Anthias, 2013, p. 11). I turn now to focus on these narratives of identification, distinction, and othering.

Exploring Rowe's pedagogy (2015), we learn that "meat eaters *physically* become through ingestion, engagement, and assimilation of the animal *other*" (p. 42,

emphasis in original). Here, our focus is to investigate the narrations students make regarding identification, meaning how students identify with the nonhuman other through the process of assimilation and engagement with the animal other. In particular, we investigate how this experience may change the way students see themselves or how nonhumans influence the ways students' construct their own identities.

Given that my focus is on investigating the ways Rowe's pedagogy brings positive outcomes in relation to narrations of distinction and othering, we could actually investigate the opposite of these practices. For instance, we could explore how this experience of relating to the nonhuman other and perceiving them in a more holistic and ecological perspective may help students construct narratives of connection, empathy, and acceptance. That is, we could investigate the ways students may use the somatic experience and practice of eating meat to dissolve the self/other dichotomy and liberate themselves from the perils of human supremacy that treats nonhumans as *others* (Rowe, 2015).

Similar to that, the intersubjective arena focuses on investigating "patterns of practices of identity and otherness (such as practices of bonding, friendship, and distancing)" (Anthias, 2013, p. 11). When we explore Rowe's pedagogy through this arena, we learn that another way students can bond with nonhumans is through the understanding of "the commonalities between various experiences of oppression" (p. 35), meaning, through the comprehension that many forms of human injustices intersect with injustices that also affect nonhumans. "Understanding the plight of animals," Rowe explains, "is part of understanding the plight of humans, since subjugation and exploitation exist in multifaceted ways, crossing and intersecting between and among

species" (pp. 34-35). When humans and animals are exploited, they are treated as others by their oppressors. When students are enabled to identify patterns, overlapping structures, and interlocking practices of injustices that affect both humans and nonhumans in various levels and diverse ways, they become able to understand some fundamental logics and legitimizations behind the subjugation, domination, exploitation, and practices in which nonhuman subjects are *othered*. By analyzing these interconnections, we can investigate how this understanding may influence, for example, students' empathy towards others—humans too, but specially nonhumans— as well as how this comprehension influences students' sense of justice and equity.

As students become connected with the nonhuman other and learn to identify intersecting injustices among humans and nonhumans, they tend to start asking themselves "how other-than-human animals are interconnected and implicated in human experience" (Rowe & Rocha, 2014, p. 484). That means that they can critically and mindfully reflect about the *implicatedness* of the nonhuman other into their own realities and their lived experiences, which can influence *positively* their possibilities and opportunities.

3.2.2.1.1 Building compassionate-relationships with earth-others. This brings me to the last point of this chapter. Here I draw upon Jodi Rios' (2011) reflections about intra-human relationships, particularly her understanding of a "true relationship," to explore relations beyond the human. Although Rios is not referring to the more-than-human world, her way of describing what this type of relationship means and what it can produce relates in many ways to what I have been discussing in this chapter. She writes that "when true *relationship* is achieved, it is inherently transformative because one

cannot remain indifferent to those with whom one is intertwined" (p. 40, emphasis

added). Linking this understanding particularly to the discussion above about the

relationships between students and the non-human other, my point is that when

students can acknowledge and recognize various forms of injustices, inequalities, and

oppression that affect both human beings and the earth-others, they can begin truly to

relate to nonhuman beings. Simply put, when students can see how their own suffering

is interconnected to the suffering of earth-others, and vice-versa, they achieve a

compassionate-relationship, meaning that they cannot ignore the suffering "to those

with whom one is intertwined." When students can see their interwoven-ness with

nonhuman beings and also with the environment, they achieve a compassionate-

relationship with earth-others.

3.3 Concluding Thoughts

In this chapter I attempted to respond to Freire's call for more respect and love

for the more-than-human other and also for including ecology in education. I

demonstrated that intersectionality has the potential to be expanded and be used as a

tool to explore the interdependencies of the human and more-than-human dimensions.

It is important that educator-researchers re-think the human-nature-environment

relations and start addressing and examining these issues through a lens that pays

attention to imbalances of power that affect social, ecological, and environmental

dimensions. To do that, researchers have to recognize that there are interlocking

practices of injustice, domination, and hierarchization among these relationships. This

allows them to comprehend that these practices go beyond our human world, which

then enables them to disrupt hierarchies inherent to dominant human perspectives on

nonhuman beings, and also more-than-living beings. In short, educator-researchers

who work towards social justice, social transformation, and educational equity must re-

think the relations between human and the Earth and start including in their

investigations of power and dominance the many forms of injustice, inequality,

oppression, discrimination, and violence that are indeed intertwined in these relations.

CHAPTER FOUR

Concluding Remarks: Did You Enjoy the Conversation?

> *We're never going to have respectful and reverential*
> *relationships with the planet—and sensible policies about*
> *what we put in the air, the soil, the water—if very young*
> *children don't begin learning about these things literally*
> *in their houses, backyards, streets*
> *and schools.*
> Elise Boulding

First, I would like to ask you, the reader, whether you have enjoyed our conversation during this thesis. Before you answer that, let's try to recall how the discussion unfolded. A metaphor will help. Let me ask you to imagine this whole thesis as if it were a hiking-trail that we decided to follow together. During the hike, imagine that we have crossed paths with various educator hikers (i.e. researchers and scholars), and various things in our way (e.g., studies, other areas of inquiry, debates, investigations). Then, the mountain we decided to hike together was the educational mountain (i.e. educational research area). Imagine also intersectionality as a map. When we use it in our investigations on this thesis-trail in the educational mountain, this map guides us through some educational paths. We decided to hike through this thesis-trail because we learned that this map could offer us very interesting and significant insights, particularly in advancing our understandings of equity and social justice within institutionalized educational contexts, such as schools and school systems.

Let us now stretch our legs a moment and talk about what we saw back at the beginning of the thesis-hiking-trail. As I remember, one of the first things we saw was a

sign indicating where we should start, and this sign said: "Exploring Ways of Enhancing

the Analytical Potential of Intersectionality in Today's Educational Research Area."

After we passed that, we decided to warm up and better analyze the

intersectional map that was going to serve as our guide. We heard that some hikers

were not so interested in following other maps' levels, because they wanted to stop at

the individual/micro-level. I told those hikers that the information in the intersectional

map was telling us that we should keep going, because if they stopped there they were

only going to be able to analyze students' multiple identities and positionalities, ignoring

therefore the most important purpose of the intersectional map: to serve as a

mechanism to explain inequalities and injustices through analyses of power.

At this point on our walk we heard the voice of some other hikers, who were also

being guided by the intersectional map. They were saying that if we really wanted to

reach the "heart" of the intersectional map, and therefore increase the potential of this

map to guide us, we needed to keep following the map's other levels, particularly the

level that would allow us to investigate the *interlocking systems of power*–meaning, how

power relations are (re)produced, co-constructed, and manifested to exist and be

reinforced. We also learned how uneven power relations perpetuate oppression and

discrimination and constrain students' access to equity and equality. These hikers who

were teaching us those things told us that the best level at which to analyze these

systems was through the so-called structural- or *macro-level*. We decided that we

should keep moving on towards this broader level, especially because we were

confident that we wanted to do everything we could to enhance the potential of the

intersectional map to guide us during our hiking and enable us to investigate equity and justice issues as thoroughly as possible.

Right after we learned these very significant things, we met another hiker on our way, Anne-Marie Núñez. She was also using the intersectional map to guide her on her own trail, and she showed us an interesting way to use the map. She first explained to us that it was important that we moved from individual/micro- towards structural/macro-levels, but agreed that nonetheless we needed to comprehend that the individual-level had an important role for the intersectional map. The map could be used through different levels and each one of these levels would take us closer to a better understanding of inequalities and injustices. We learned that although the structural-level was very important to enhance the potential of the intersectional map to guide us, we should not abandon the significance of the individual-level.

While we were learning these things, Núñez also explained to us how we could use various levels of the intersectional map together and link one level to another. She explained that this way of using the map was important because by doing that we could connect broader structures with lived experiences. She continued explaining that this connection was necessary because power relations operate in various and simultaneous levels, and uneven dynamics of power are found in relations of hierarchization and stratification that are manifested in mutual, complex, and various ways, creating inequalities in people's lives. Thus, connecting various levels in the intersectional map was valuable because it would reveal how the systems of power are both shaped *and* experienced.

After this enlightening conversation with Núñez, we started hiking the other half of the thesis-trail. The sign that we first saw, which indicated to us that we were beginning the second part of this trail, declared: "The Intersections of Social-Ecological-Environmental Dimensions: Exploring Emerging Frontiers for Future Inquiry and the Potentialities for Intersectionality in Educational Research."

The sign indicated that we should keep walking after we found the intersection labeled social-ecological-environmental dimensions. When we saw this sign, we stopped to check the intersectional map one more time to see whether we had understood the path ahead. We were not completely sure where we should go. The problem was that the intersectional map did not have many details about this intersection of social-ecological-environmental dimensions, and to this point we were not overhearing other educator hikers talking about this intersection or anything related to them. Even the information Núñez gave us did not mention this intersection. We were lost.

While we were still feeling lost, another educator hiker appeared on our way. His name was Bradley Rowe. We asked many questions of Rowe and he helped us a great deal. Rowe first confirmed to us that there were very few educator hikers who could help us find that intersection. He said that although some hikers on other mountains spend hours talking with one another about human-nonhuman relations, unfortunately the educator hikers on our educational mountain were ignoring this type of conversation. We then talked about a need to develop a more sustainable educational-road, and we also talked about possibilities for all educator hikers to keep walking

towards the intersection of social-ecological-environmental dimensions. This conversation with Rowe was formative.

Rowe then introduced us to some of his friends. These were the hikers Rowe had mentioned, the ones that were interested in talking about nonhumans. They told us they were not used to hiking the educational mountain, that they typically hiked other mountains, but they spent some hours there with us at our mountain anyway. They told us that they called themselves 'posthumanists.' I found the things they said fascinating, and they also helped me better understand certain things on the intersectional map that were not very clear to me. This group really helped us advance on our hiking trail, particularly by getting us closer to the intersection of social-ecological-environmental dimensions. The key was helping us include the nonhuman other in the conversations about power that we were having during the hike. They helped us see that the intersectional map could indeed guide us to the intersection of the social-ecological-environmental dimensions that we were trying to reach, which allowed us to have more conversations about the interlocking systems of power that manifest not only in the lives of humans and nonhumans, but that also affect the environment. After this conversation with the posthumanists, we decided that we were ready to continue on our way.

Rowe told us he needed to stop for a while, but we decided to keep walking. We talked about basic ideas to get to the intersection of social-ecological-environment dimensions, ideas that would help us advance on the hiking trail. After we walked for a few miles, we stopped at a simple cabin we found on the way. At this cabin we met a family, a family that was living in a very marginalized and disadvantageous situation. They told us about an intersection close to their cabin—the social-environmental

intersection. They told us that climate change and that the interlocking systems of power that manifest in these social-environment dimensions had important repercussions in their lives.

We left that house sad to learn about the ways that uneven manifestations of power exacerbate inequalities in the lives of these people, which then intensify their vulnerability to climate hazards.

As we continued the trail, Rowe caught up with us, and surprisingly Núñez also crossed paths with us again. We asked them if they would be willing to finish the trail together with us, and they were glad to do so. Rowe told us more about the potentials behind that intersectional map to guide us further. He said that the map could help us get to the intersection for which we were searching, as the map had great potential to help us understand other dimensions beyond the human sphere, namely the ecological dimension and nonhuman lives. This conversation with Rowe had a profound effect in making us reflect about those concerns in a more comprehensive and inclusive way. Núñez also helped us remember the ways we could use various levels of the intersectional map together, and our conversation flowed. Núñez and Rowe enjoyed good conversation, and while we were overhearing them we realized the value of the intersectional map: it allowed us to interrogate how power imbalances create and reinforce connected forms of injustices, suffering, and oppression that operate and manifest in human and nonhuman lives.

That conversation was becoming very interesting, and as we kept walking I felt we were getting closer and closer to the intersection of the social-ecological-environmental dimension. I was very interested in listening to the things Rowe was

saying and Núñez was also engaging in the conversation. They helped us to understand more about the significance of human-nonhuman relationship, particularly how this relation allows students to engage in critiques of power that include the nonhuman other, to identify intertwined oppression, violence, suffering, and injustices among human and nonhumans, and to build compassionate-relationships with earth-others, which then enable students to dissolve dichotomies between humans and animals. I enjoyed listening to all these things.

Right after this conversation, we saw a canyon that prevented us from easily gaining the other side to continue our path. All educator hikers who were there with us stopped and looked at that canyon. We all saw that there were many things waiting for us on the other side, and we recognized that these things would help us better comprehend the operations of power that are manifested in both human and nonhuman lives, operations of power that affect justice, equity, and equality. We then realized that the intersection we were looking for was not really an intersection, but that it was in fact a bridge that would take us to the other side. We then noticed that the bridge was just starting to be built, and we decided that we would work together towards finishing that construction, each one of us with the best tools at our disposal.

Though I realized we still had a lot to do, I looked at that canyon, at the beginning of that bridge, and I also looked at the intersectional map in my hands, and I felt thankful for the trail I had taken together with all those educator hikers and for the conversations we had had on the way. Although I had completed this thesis-trail, I did not get to the other side of the canyon. Nevertheless, I am glad not only that I learned many important things on this trail, but also that I was able to add a piece of wood to that bridge that we

are starting to build on the educational mountain, a bridge that will soon be sturdy enough to take us to the other side of the canyon.

4.1 Recommendations

This study made a contribution to scholarship by critiquing the theorizing of intersectionality in the context of educational research, which is important for its development and advancement in this area of study. In particular, the discussion was about ways of enhancing the analytical potential of intersectionality and broadening its theoretical framework. I explored forms of advancing intersectionality in education to contribute to research and analyses with the goal of the field of education becoming even more sensitive to the full range of historical, political, economic, social, religious, cultural as well as *environmental and ecological* dimensions that inform students' perspectives, experiences, and learning needs, especially as these relate to issues of equity, equality and justice. By developing intersectionality and enhancing its analytical potential, educator-researchers can further investigate issues and concerns that are inclusive of earth-others and the environment.

The study also brought attention to the need for educators to continue to contribute to the construction of a world in which every living being—and non-living being—can coexist in peace and among just relations.

My hope is that this study may encourage educator-scholars and researchers to push the theoretical boundaries of intersectionality in the area of education. Indeed, when broadening its theoretical framework, we can use intersectional analyses to disrupt hierarchies inherent to dominant human perspectives on other species, to re-

think equity and justice, and to envision new ways of addressing the question of how we

can live well with other humans and in balance with our planet.

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