DEVELOPING LANDSCAPE: INTERNATIONAL DEVELOPMENT, ENVIRONMENTAL ETHICS AND LANDSCAPE ARCHITECTURE

By

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To my mom, who taught me the importance of considering other peoples’ perspectives
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<tr>
<td>ASLA</td>
<td>American Society of Landscape Architects</td>
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<td>COEE</td>
<td>Code of Environmental Ethics</td>
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<td>CLARB</td>
<td>Council of Landscape Architectural Registration Boards</td>
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<td>DA</td>
<td>Discourse Analysis</td>
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<td>ECA</td>
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<td>ELC</td>
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<td>HH</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>IFLA</td>
<td>International Federation of Landscape Architects</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>SDG</td>
<td>Sustainable Development Goals</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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Both disciplines of international development and landscape architecture often work toward addressing landscape-based concerns such as improving human habitat, upgrading infrastructure, and protecting and restoring terrestrial and marine ecosystems. Both express dedication to “sustainability” and express values of societal and environmental welfare. Their apparent crossover of project types and values suggests a strong opportunity for collaboration. However, landscape architecture is not often identified as a part of the international development community, and few resources exist to help landscape architects navigate the ethical challenges associated with international development.

Because landscape architecture is primarily a developed-world profession, and international development primarily takes place in the developing context, this dissertation is particularly concerned with understanding interactions between the developed-world and the developing-world. Positioning this research within postcolonial theory allows for better understanding of how power dynamics, especially uneven power
dynamics often attributed to the relationship between developed and developing places, can be perpetuated in international development and landscape architecture.

This dissertation relies on insights from environmental ethics and international development to better understand the role of landscape architecture in a postcolonial approach to international development. The research uses ethnographic content analysis (ECA) and discourse analysis (DA) to elicit and juxtapose themes from environmental ethics and critiques of international development alongside skills and values expressed in landscape architecture. The themes provide the basis for recommendations on how the profession might collectively pursue ethical approaches in the developing context.

Findings suggest that while many of landscape architecture’s strengths, such as design-thinking and familiarity with socio-environmental relationships, could greatly contribute to international development projects, several opportunities exist for landscape architects to address their assumptions and reexamine their values and approaches, especially those that relate to the themes of justice, power dynamics, accountability, and respecting and responding to difference, that were elicited in this research. These themes are further explored in examples of academic and professional design practice to show how they can be grounded in praxis.
CHAPTER 1
INTRODUCTION

In this dissertation, I explore the potential for uniting the professional fields of landscape architecture and international development in order to further landscape architects’ ethical involvement in the developing world. Here, landscape architects comprise the primary audience, international development provides the main context, postcolonialism structures the theoretical framework, and ethical theories of ecofeminism, environmental justice, and ecological justice offer moral direction. This dissertation analyzes discussion from the fields of landscape architecture, international development, and environmental ethics, especially as they intersect on themes of power, justice, accountability, and difference. Insights on how these themes might find grounding in landscape architecture can help landscape architects to meaningfully and ethically contribute to international development projects and combat the social and environmental inequity that exists in developing places.

This dissertation seeks to better understand the professional relationship between landscape architects and the people and places in the developing world. The ideas here are rooted in postcolonial theory, which states that colonial power dynamics still exist between developed nations, often former colonizers, and developing nations, often formerly colonized.¹ The fact that it is the developed world practitioner who is most often involved in alleviating the developing world’s problems necessitates attention to how the practitioner ethically navigates not only the practical and technical challenges of

¹ The history of both colonization and development is complex. For example, a number of former colonies are now among the most “developed” countries in the world, such as the United States, Ireland, and Australia. Although former colonies themselves, these countries still struggle with infamous history and current treatment of indigenous peoples and religious minorities within their borders. Categories like developed and colonizer do not always fit into neatly defined boxes amidst neatly defined nation-states.
the project itself, but issues of power that inevitably follow. Because landscape architecture is primarily a developed-world profession, consideration for the often uneven relationship of power between practitioners and the developing context must be integrated into the profession. This is not to say landscape architects or international developers purposefully maintain uneven power dynamics in their favor, but as will be explored in this dissertation, assumptions, biases, and even well-intentioned values and actions can negatively affect people and places in the developing world.

Postcolonial criticism of uneven power dynamics and resulting oppression provides the main lens with which to view and analyze landscape architecture alongside international development and environmental ethics. Using an ethnographic content analysis approach, I analyze the discussions in landscape architecture, international development, and environmental ethics for themes of power: how power is manifested in the landscape, how professionals and academics discuss and theorize power, and what approaches have been used to combat uneven power. From that analysis, the related themes of justice, accountability, and difference emerged and were reintroduced into a secondary analysis to elucidate more connections and more themes.

Themes were specifically explored for their potential in helping landscape architects act ethically in developing contexts. The results of this research’s analysis highlight areas in which landscape architects are already aptly primed to contribute to international development, and where they have an opportunity to expand their practical and theoretical knowledge. This dissertation provides background information and analyses to help understand current approaches and theories in landscape architecture and international development, and offers suggestions on how landscape architects can
better integrate approaches to power, justice, accountability, and difference into their theory and practice.

The Big Picture: Connecting International Development, Landscape Architecture, and Environmental Ethics

The scale and scope of global poverty and inequity is horrific: at this moment, there are more than a billion adults, infants and children across the globe living in impoverished conditions; two and a half billion human beings live in environments that lack basic sanitation; each day, more than 22,000 children die because they fail to overcome the challenges of living in poverty (un.org). The inhumanity of this situation coupled with the degraded and unhealthy environments that often accompany these places demands action. Practitioners of international development, with help from allied professionals in fields such as anthropology, engineering, economics, politics and international relations, agriculture, forestry, planning, and architecture, specifically seek to alleviate the pressures of global inequity.

International development encompasses a broad range of disciplines and strategies and is a highly-contested field. Although often based on policies, governance, and economics, many international development projects are landscape-based, that is, they rely on projects that interact with processes that occur in and are intricately tied to the landscape. Examples include promoting agriculture that sustains livelihoods through food production; protecting and cleaning freshwater systems that support both human life and larger ecosystems; conserving terrestrial ecosystems; harvesting and replenishing resources that support global economies; and broader sustainability concerns of mitigating the negative effects that human actions have on the wellbeing of terrestrial and marine ecosystems (un.org). Ultimately, the goals of international
development projects are to build communities, promote public health, end hunger, improve water and sanitation services, improve infrastructure, reduce inequality, and protect natural resources in poor, underserved places.²

Landscape architecture holds direct relevance to the concerns in international development. The types of projects in international development are strikingly similar to those in landscape architecture, especially those concerning communities and human habitat, water management, and protecting natural resources. The medium of landscape is particularly effective for exploring both social and environmental concerns in international development because it embodies the literal and figurative representations of the human-nature relationship (Selman, 2012). Additionally, landscape architects are trained in “design thinking,” a skill which offers a particularly appropriate method of framing the kinds of problems that are so prevalent in international development. Design thinking is non-linear, creativity-focused, and solutions-oriented—elements that many argue are distinct from the kinds of linear, technocratic, expert-as-universal-problem-solver methods that often fail to address complex problems (Buchanan, 1992; Rittel & Webber, 1973). Furthermore, landscape architects frequently express their core values as a trifecta of aesthetics, society, environment (Thompson, 2002), all of which are explicitly relevant to international development. Certainly, it seems that a profession concerned with improving place,

² Such places are referred to in several ways, including: developing, less-developed, underdeveloped, and industrializing. Often categories are used to geographically distinguish these places as different from Europe, Canada, Australia, and the United States including, the West versus the Orient, and the Global North versus the Global South. The terms First World and Third World are based on terminology from the Cold War and are considered outdated in international development studies. This dissertation mostly relies on the terms “developed” and “developing/less-developed” to distinguish between countries that are considered rich, and those considered as poor, respectively.
landscape, and socio-environmental well-being would have a role to play in addressing landscape-based problems in international development.

However, despite landscape architecture’s striking relevance to international development projects, and its rhetoric of dedication to social and environmental concerns (Thompson, 2002), landscape architects are seldom explicitly involved in projects that deal with global inequities (Crewe & Forsyth, 2003). Landscape architecture is a predominantly “First World” profession (Thompson, 2007) and when landscape architects engage in the developing world, the work tends to focus on major projects for wealthier clients (Brown & Kjer, 2007). A number of studies suggest significant opportunity remains for landscape architecture to expand into the world of international development and help mitigate social and environmental challenges (Baptist & Nassar, 2009; Brown & Kjer, 2007; J. Taylor, 2011a), especially those often faced by the global poor. While an exciting prospect, few studies provide direction to landscape architects willing to engage with such projects, nor do they elaborate on the ethical concerns and specific challenges inherent to international development endeavors. The challenges in international development are vast, and international development practitioners often adhere to drastically different solutions and approaches to try to address them, several of which will be discussed in later chapters. The most obvious starting point in exploring international development lies with the United Nations’ (UN) Sustainable Development Goals (SDGs), which currently offer the most ubiquitous representation of international development projects (Appendix A).

Significant overlap exists between landscape architecture practice and the SDGs (Appendix B), which further suggests the two fields would likely benefit from the other's
knowledge, approaches, and skills. Landscape architecture projects and international development projects often address the same kinds of systems-based, practical problems in the real world. People need clean and safe places to live; they need access to potable water, food, and means to make a living; they need physical places that support healthy communities. Ecosystems must be healthy enough to support both human and non-human life. In international development, these issues might be met by digging a well; providing seeds, fertilizer, or an irrigation system; structuring microloan systems that encourage women to start businesses; or establishing policies that dictate the use of natural resources. Although landscape architects most often work in the developed world where basic needs are usually met, they still seek to improve the built and natural environment, often with infrastructures that deal with water management and land use management, including addressing sea level rise and flooding by using landscape strategies to absorb, slow, clean, and direct water (Cockram, 2011); using multivalent materials in design and ecosystem services to mitigate brownfield sites (Myers, 2013); attending to infrastructure needs of agrarian bio-industries such as viticulture and silviculture (Belanger, 2009); and exploring how alternative forms of agriculture can affect sense of place and be designed to better benefit the larger community (Egoz, Bowring, & Perkins, 2006; Jackson, 2008).

As will be discussed later, the fact that landscape architects operate in the real world—that they do things and make physical, tangible changes beyond philosophical exploration, is a strength for their role in international development projects. However, the connection between landscape architecture and international development must not be limited only to practical connections found in the tangible world, but expand to
incorporate broader theoretical concerns and criticisms of international development and its more intangible aspects.

For this dissertation, the most important intangible aspect of international development is the uneven power dynamic between the “developers” and the objects of their development. Because landscape architecture is predominantly a developed-world profession, and the challenges of international development mostly exist in developing-world contexts, this dissertation is concerned with better understanding the relationship between landscape architects and the people and places of the developing world. As relevant as current strategies in landscape architecture may be in the developing world, we cannot rely on those strategies always translating directly into such a different context with such different needs. We must attend to the issues surrounding whose values matter, and who has the capacity to make decisions in the landscape. To do this, I rely on postcolonialism as my theoretical framework.

In short, postcolonial theory posits that while colonialism has been largely disbanded, the relationship of colonizer over colonized continues in the form of oppression through neoliberal economic policies, exploitation of resources, and even how Western-based “aesthetic, scholarly, economic, sociological, historical, and philosophical texts” portray culture and customs of the developing world in a way that reinforces that “the world is made up of two unequal halves” (Said, 2006, p. 12). Postcolonial understandings of international development maintain that the oppressive relationship between colonizer and colonized directly extends to the relationship

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3 Said (2006) speaks of the “Orient,” but his ideas and criticisms directly translate to Western treatment of developing places throughout the world.
between developed and developing (Andrews & Linehan, 2014; Escobar, 1992; Sumner & Tribe, 2008). Such power dynamics are exemplified when Western developers, not locals, make decisions about how development occurs in developing contexts, and when Western knowledge and technology are chosen over indigenous knowledge and technology. Thus, not only must landscape architects ensure that design strategies and technological approaches meet the tangible needs of the project, but that they do so in a way that combats the oppression left in the wake of colonialism—a task which is further exacerbated by the fact that their very involvement is grounded in a colonial legacy that oppressed the culture and agency of people in the developed world in favor of the culture and so-called “expertise” of people from the developed world.

Postcolonialism is useful because it challenges us to pay attention to its criticisms of our actions and confront the possibility that developed-world practice reinforces oppression. However, postcolonialism faces its own criticisms. Postcolonial theory highlights the failures of international development but offers few alternatives on how to improve issues like global poverty (Pieterse, 2000). Furthermore, postcolonialism can easily become the very thing it criticizes; postcolonialists frequently argue that the developed world must not speak on behalf of the developing world because doing so is yet another form of colonial power. Yet, as a developed-world theory originating in elite academic circles that speaks of developing world issues and

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4 Postcolonial theory is explored further later in this chapter. Postcolonial critiques of development are further explored in subsequent chapters.

5 Many of the most renowned postcolonial scholars, such as Gayatri Spivak and Edward Said come from developing contexts, and their familiarity with those contexts has provided validity and insight to their arguments. But they do not speak as members of the subaltern. They speak as members of the academy to members of the academy, which exists as a mainstreamed, recognized, and accepted element of elite Western society.
tends to broadly label all forms of “development” as bad, postcolonialism is, by its own definition, a hegemonic influence. In short, postcolonialism offers valid criticisms of international development, but using postcolonial theory to reject all forms of international development is unlikely to provide a fruitful position.

To address the criticisms of both postcolonialism and international development, this dissertation recommends an approach commonly referred to as “alternative development,” which is a relatively new approach in international development that recognizes development as inherently capable of reinforcing power dynamics, but still seeks to rectify its approach without necessarily dismantling the idea that developed countries can or should participate in promoting human and environmental welfare in developing places (Pieterse, 2000). Thus, while traditional forms of international development like the SDGs are relevant in that they showcase the kinds of real-world projects landscape architects could engage with, such approaches must be tempered with understandings of how implementation of the SDGs can inadvertently perpetuate oppression. The challenge is to figure out how landscape architects might fit into this alternative approach to international development—what strengths they can bring to the process and what aspects of their skills, values, and ethical tenets might alternative development help refine.

Ultimately this dissertation is dedicated to the idea that landscape architects can help end the oppression caused postcolonial power dynamics in international development.

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6 Postcolonial scholar, Gayatri Spivak, echoes the idea that despite postcolonial criticisms, the developed world should address global issues of poverty and inequity, and that through a process of self-implication, an ethical encounter with the developing world is possible (Kapoor, 2004).

7 International development and alternative development are further explored in Chapter 2.
development projects. Doing so will require them to reflect systematically upon the ethics, values, and motivations behind their work. They can find help for this project from environmental ethics, especially in explorations of landscape architecture’s current ethical understandings which rely heavily on aesthetics, utilitarianism, and sustainability—all of which also relate to ethical concerns in international development. However, when considering how to implement these ethical models within the postcolonial goal of ending oppression in developing contexts, these models face a number of challenges. Landscape architects’ value of redressing social inequities is not often translated into their professional practice (Thompson, 2002). The welfare of society and the environment may be generally valued in landscape architecture, but the specifics behind those values can be ill-defined, and at times contradictory, offering little help in navigating design decisions. Furthermore, even the most clearly articulated values do not necessarily interact with the real world in a straightforward way (Peterson, 2006). Finally, little critical analysis exists regarding the applicability of landscape architecture’s professional values to international development situations.

Thus, in addition to considering postcolonial aspects of international development, this dissertation relies on insights from environmental ethics to expand landscape architecture’s ethical approach and critically reflect on landscape architecture’s espoused values of society, environment, and aesthetics. Specifically, this dissertation argues that themes of power, justice, accountability, and difference are critical to furthering the goals of this project. I argue that ecofeminism can be used to challenge the way we conceive of power and difference; environmental justice can reinforce the inexorable connection between human and environmental welfare; and
ecological justice might help shift anthropocentric thinking toward actions that reinforce our accountability to the non-human world. Exploring and evaluating values and ethical tenets in the discipline alongside established concepts in environmental ethics can help address challenges faced by landscape architects and answer important questions: What would happen if landscape architects actively pursued ecofeminist approaches to understand the role difference plays in developing places? How might the strategies, theories, and professed values of generally improving environments and societies in landscape architecture be refined to better address inequity as understood through postcolonial theory?

Because the topics in international development are relevant to the profession, landscape architects should be more involved in alleviating global social and environmental adversities such as poverty, hunger, inequality, environmental degradation, and lack of access to health, infrastructure, and education. By paying attention to postcolonial criticisms of international development, and reevaluating landscape architecture’s ethical approach within acknowledgement of those criticisms, this dissertation provides recommendations on ways landscape architects can ensure they are making meaningful and ethical contributions in the developing world.

The remainder of this chapter elaborates on key terms and explains postcolonialism as a theoretical framework. It concludes with an overview of the document analysis methods used, specifically ethnographic content analysis and discourse analysis.

**Approach to Key Terms**

Many of the key terms used in this dissertation are rarely well-defined and can take on radically different meanings based on context. Several terms such as
Sustainability and Sustainable Development

Sustainability is both notoriously ill-defined and ubiquitous in international development, and its lack of specificity renders it difficult to glean the implied values of sustainability. In part, sustainability stems from ideas about conservation and preservation as explored by Theodore Roosevelt, John Muir, and others, and their concept that people should protect natural resources for the sake of future generations (Kopp, 2011). In the 1970’s, growing environmentalism in the United States prompted many grassroots and political organizations to promote “thinking globally and acting locally” with efforts to recycle materials, protect endangered species, ensure clean air and water, and celebrate the interrelationship between society, economy, and the environment on a global scale (Kopp, 2011).

Sustainability is practically inseparable from international development, as sustainability in large part emerged as a concept within the development agenda. By the early 1980’s the United Nations World Commission on Environment and Development (WED) formally introduced the term “sustainability” as a response to industrial development of so-called “Third World” countries. In 1987, the WED published Our Common Future, also known as the Brundtland Report, which defines sustainable development as: "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Cranz & Boland, 2004, p. 104). Although both social and environmental welfare are often implied as a goal in sustainability discussions, as Agyeman (2005) points out, this “single most frequently quoted
definition of sustainable development does not explicitly mention social justice or intergenerational equity (p. 84).”

This dissertation addresses sustainability as it relates to the United Nations’ (UN) Sustainable Development Goals (SDGs). The UN, which is still a key player in implementing the Brundtland Report, subscribes to the notion that sustainability consists of three integrated dimensions: economic, social, and environmental. Thus, the UN defines “sustainable” as maintaining or improving the health of human and non-human systems without depleting planetary resources. Implementation of the SDGs is driven by the goals of reducing negative aspects, such as pollution and greenhouse gases, and promoting positive aspects, such as natural resources and livelihood, preferably in ways that respect complex socio-environmental relationships and maintain potential for future generations to thrive. But this very broad and generalized conception of sustainability belies the much more complex, contested, and variable interpretations of sustainability, which greatly affect the ways sustainability is understood and implemented.

Sustainability as an idea is a worthy goal to pursue—for the most part, it is little more than a responsible and common-sense approach to health and survival. However, the word is problematic in that it can often be used to avoid specificity and accountability. “Sustainable” generally means valuing certain ecosystems, lifestyles, posterity, and futures, but those values can vary greatly depending on the context. Furthermore, how do those values compete with, negotiate, override, or augment other values and perspectives that are relevant to the project? How are values like sustainability actually implemented? Whose definition of sustainability wins and why? While a much more thorough definition of sustainability is needed, this dissertation is concerned with
encouraging landscape architects to pay more attention to the profession’s implied values, such as caring for the environment, or preserving places for future generations, and how their values affect the developing context.

**Development**

The concept of international development is highly contested, and many fundamentally different interpretations, approaches, processes, policies, and methods exist. Each approach, although still under the disciplinary umbrella of “international development,” subscribes to different theoretical premises, different ideas on what constitutes “good” development, and different ideas on the right kinds of practice. This research seeks to connect landscape architecture with two main approaches to international development, specifically: approaches that are categorized as “goal-based development,” which is also referred to as mainstream or traditional development, and “development as discourse,” which emerged as a response to and is based on postcolonial criticisms of goal-based development (Sumner & Tribe, 2008). Although often seen as opposing viewpoints, this dissertation posits that the two interpretations of goal-based and discourse development are not mutually exclusive. Goal-based development, like the UN’s SDGs represent a global standard of development efforts. The SDG topics are grounded in the material challenges of international development; they focus on place-based issues such as habitat, agriculture, and water quality and exemplify the strong connection between landscape architecture and international development. But the approaches of goal-based development are not flawless, and postcolonial criticism of those development flaws provides important theoretical considerations for how landscape architects can participate in international development without perpetuating its negative consequences. The approach to development that
considers both goal-based and discourse sides of development is often referred to as "alternative development," a concept which best represents the ideal form of development for landscape architects to pursue.

In landscape architecture, “development” often refers to the built world. The grey area between “built” and non-built” world can be debated, but the rhetoric tends to suggest that the primary concern of landscape architects involves mitigating the battle between “unspoiled landscape” and development (McNally, 2011) with development goals being viewed in tension with environmental preservation goals (Machemer, 2006). This perspective is consistent with landscape architecture’s strong focus on protecting the natural environment. Devotion to natural resources will hopefully continue, but offering solutions to challenges in development that transcend built and non-built dichotomies to address the complex and dynamic systems of landscape present an exciting way forward.

Subaltern

While the term “subaltern” is synonymous with marginalized, disenfranchised, discriminated, and oppressed, this distinct term is derived explicitly from a postcolonial viewpoint.^{8} People can be marginalized or oppressed on the basis of any number of characteristics including race, gender, or economic class; but the term subaltern specifically refers to those who are socially, politically, or culturally “outside” the hegemony imposed by a colonizing state. Specifically, the subaltern are “those agents who have been expropriated, exploited, marginalized, racialized, bestialized, and

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^{8} The next section further explores postcolonialism, which can be boiled down to the concept that despite the official end of colonialism, developed countries still exploit and dominate developing countries in a present form of colonialism (Costa, 2014).
rendered part of the fauna of continents empty of people and subjects” (Mendieta, 2014 9. 727).

Discussing and writing about the subaltern can be challenging. Postcolonialism’s core concept contends that the exploitation of colonized peoples should be stopped, presumably by the institutions, governments, people, and/or societies that are exploiting them. Recognizing and responding to such oppression has, in large part, been the call to action for postcolonial scholars. On the other hand, some scholars challenge the postcolonial narrative for reinforcing hegemonic colonial narratives in and of themselves—essentially scholars are defining and categorizing subaltern peoples as helpless, which may not be how they identify themselves, nor accurately represent the situation. Postcolonial theory posits that speaking on behalf of the colonized has perpetuated their situation of being outside the discourse. Scholars such as Anna Tsing (2011) celebrate the power of the subaltern, highlight the friction of development, and argue that subaltern agents are not as powerless as some suggest—that their resistance to the hegemonic discourse can in fact result in change.

While this research highlights some of the aspects of global inequity and outline some commonalities among the global poor, those defined as “the poor,” or living in “the underdeveloped” or “subaltern” circumstances are not a homogenous group. Nor do the places they inhabit around the globe face the same types of inequities or exhibit the same cultural constructs. The subaltern context is richly diverse, encompassing a

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9 I do not claim to know the situation of the subaltern, nor do I wish to be their voice (to do so would be decidedly non-postcolonial). Rather, the focus here is on enhancing landscape architecture’s contribution to the empowerment of the subaltern people’s own voices by incorporating postcolonial knowledge and strategies into the discipline.
variety of histories, geographies, politics, and cultures, and each place features unique sets of problems, issues, or needs. No “one size fits all” solution exists. It will be important to shift the development perspective away from seeking universal answers (Banerjee & Duflo, 2011).

An example of how development practitioners rely too heavily on universal answers to big questions revolves around the issue of monetary aid. On one hand, international developers claim that poor countries are poor because they are in what economists refer to as a “poverty trap,” and the only way to escape is by using a large initial investment of foreign aid to kick-start economies and help deal with endemic problems (Sachs, 2006). This approach is widely adopted by the United Nations’ approach to development (Banerjee & Duflo, 2011). Conversely, and equally as vocal, others believe the poverty trap notion is false and argue that aid does more bad than good because it prevents people from finding their own solutions (Easterly, 2006; Moyo, 2009). However, answers to questions of how to help the poor are rarely obvious, and knee-jerk ideological reactions obscure our ability to more carefully look at the world (Banerjee & Duflo, 2011). Sometimes wrong policies are chosen “not out of bad intentions or corruption, but simply because the policy makers had the wrong model of the world in mind: They thought there was a poverty trap somewhere and there was none, or they were ignoring another one that was right in front of them” (Banerjee & Duflo, 2011, p. 16)

If development efforts are to make meaningful and positive changes, they must reject simplistic theories and tailor their responses to the specific and complex nuances of the context. Furthermore, any proposals for remedying subaltern issues must also
address the relationships that exist between society and environment and their corresponding and interdependent systems, an area where landscape architecture can contribute.

**Postcolonialism as Theoretical Framework**

Because landscape architecture and international development are strongly rooted in a “Western” perspective, the relationship between developed and developing contexts must be better understood. To this end, postcolonialism, which critiques power dynamics and advocates specifically for people who are oppressed under those power dynamics, provides the theoretical framework for this dissertation. Postcolonial research is an interdisciplinary field whereby “researchers tackle the problems of how the experience of colonization affects those who were colonized; how colonial powers continue to control; what remnants of colonial control remain in education, science, and technology; what forms of resistance were and are being used against colonial control; how colonial education influences the culture and identity of the colonized; how Western science changes knowledge systems in the world; the emergent forms of postcolonial identity after the departure of the colonizers; whether decolonization and a return to the precolonial past is possible or desirable; and how new forms of imperialism might be emerging and replacing colonization” (Andrews & Linehan, 2014, p. 1404). Postcolonial theory posits that despite the widespread disbandment of colonialism, the hegemonic relationship between colonizer and colonized is still being reproduced. In this “postcolonial present,” governments may not technically rule over the political freedoms of formerly colonized nations, nor openly enslave populations or exploit resources; however, the so-called “developed” countries continue to dominate political, social, technological, and environmental realities, discussions, and decisions in developing
contexts. By disclosing the view of the colonized, specifically the subaltern, postcolonial theory actively seeks to eliminate the oppressive conditions left by colonial domination by emphasizing and committing to transnational social justice (Kurian et al., 2010).

So, the critical question remains: how can landscape architects, who are predominantly rooted in developed contexts, ensure they do not perpetuate colonial power dynamics when working on projects in developing places? More specifically, how can theories in environmental ethics and strategies in international development, that revolve around themes of power, justice, accountability, and difference better enable landscape architects to combat global inequities—especially those that privilege developed-world experts over those who live in developing-world contexts? The following section outlines some key aspects of colonialism to provide a basis for understanding the reaction of postcolonialism, and outlines some key aspects of postcolonial theory such as accountability and its political nature.

**Colonial History and European Empire**

To understand postcolonialism one must first acknowledge the legacy of oppression that colonialism left in its wake. While numerous examples of colonialism exist throughout the history of mankind, the period of European colonial expansion from the 16th century to the mid-20th century holds the most relevance for understanding development and the shape of the modern world.

Motivated by the promise of procuring spices, commodities, and exotic goods from the Orient, the so-called Age of Discovery signaled the beginning of globalization and an era of European empire (Kurian, 2017; Warf, 2017). By forcibly securing goods and labor, the mercantile fleets of the Old World bolstered the political and economic prowess of their host countries. Colonial powers were rooted in control of the landscape
and its resources (Sluyter, 2002). Europeans sought to commodify raw materials of all kinds as they built sugar and coffee plantations, and harvested timber and rubber (Beinart & Hughes, 2009). Colonizers introduced “new methods of farming; some displaced indigenous peoples and their methods of managing the land” (Beinart & Hughes, 2009, p. 1). Colonial cities, such as Mumbai, Singapore, and Rio de Janeiro grew around ports that serviced extraction of resources and labor, and served as “the very apparatus through which domination was maintained over this subject population” (AlSayyad & Rajagopalan, 2017, p. 166). The massive influx of wealth from the exploitation of the colonies fueled the Industrial and Scientific Revolutions (Bampilis, 2012). The success of the Old World and growth of the European elite and emerging middle class came at a horrific cost to the people of the Americas, Africa, India, and Southeast Asia. Europeans subjugated native people’s freedoms by changing and controlling their identity, landscape, religion, and government through policies, discourse, and sheer force (Trevino, 2017).

Colonialism and global development are intricately related. European conquerors justified their actions by interpreting colonization as a form of benevolence on their part, whereby they assumed the “white man’s burden” as a patriotic or religious duty to “help” native peoples become more like the civilized white man (Trevino, 2017). This idea of helping developing places be more like developed places reflects a contemporary criticism in postcolonial analyses that the so-called humanitarian motivations ultimately promote the colonial legacy of the developing depending on the developed (Easterly, 2006). In many situations, this dynamic remains when developed-world “experts,” such
as academics or UN officials, implement their strategies in developing-world contexts and communities.

The developed world has privilege and power over the developing world, and the postcolonial critique of power inequities between colonizer and colonized is a helpful theoretical approach. The postcolonial critiques on development highlight how Western governance has imposed ideas, practices, values, and discourse that shape reality for non-Western peoples and define them as underdeveloped (Everett, 1997). The very idea of international development is intensely embedded in the power dynamics that presume “civilization” and the “developed world” know best how to imagine development framework. Postcolonialists posit that the current imbalance of power inherent to development begets continued global inequalities and conceptualizes alternative discourse, methods, and ideas of development, especially in critique of Western practitioners of development.

**The Politics of Postcolonialism**

Postcolonialism is inherently political, not only in its exploration of governance, power, and justice, but in its advocacy of change in power dynamics to favor those who are oppressed. Theory that takes a political position is relatively rare in academia. Academics tend to value scholarly research and the knowledge produced by that research when it is nonpolitical, meaning impartial, mitigates bias, and is free of dogma (Said, 2006). In theoretical applications, few criticize such ambitions, but in practice, reality rarely affords a truly apolitical standing. However, more impartial research does not necessarily equate with a non-political position (Said, 2006). Furthermore, claiming that overly political knowledge is not “true” knowledge obscures the political context present in the production of that knowledge (Said, 2006). This dissertation deliberately
seeks to engage the political, enabling landscape architecture to elevate the needs and voices of the subaltern to a level that is as equally empowered, recognized, and considered as those of mainstream society.

**Methods**

This research focuses on collecting, delineating, and interpreting relevant knowledge across the disciplines of landscape architecture, international development, and environmental ethics to provide insights on how landscape architects can better develop an ethical approach to the subaltern. It explores and analyzes the theories and practices of landscape architecture, international development, and environmental ethics from a postcolonial theoretical viewpoint in order to identify themes and concepts that can be incorporated into landscape architectural theory and practice. Evaluating and comparing the rhetoric within these fields necessitates a qualitative method that allows themes to emerge within their respective contexts.

The methodology for this dissertation combines components of both content analysis and discourse analysis. While traditional “content analysis” is often rooted in applying predefined categories to produce quantitative accounts of raw material, this research uses qualitative content analysis and conceptualizes the analysis as fieldwork. Ethnographic content analysis (ECA) enables comparisons and assessments of the documents associated with the theories and practices of landscape architecture, international development, and environmental ethics. By taking an ethnographic perspective, I am able to better delineate patterns within the analyzed discourse by highlighting the “situations, settings, styles, images, meanings, and nuances” as key topics (Altheide & Schneider, 2012, p. 14). The methodology used here also incorporates some elements of discourse analysis (DA), such as its emphasis on the
way discourse produces versions of the world, society, and events (Bryman, 2015). However, unlike DA, this research will not rely on detailed linguistic understandings of the data.

This research assesses documents found in landscape architecture, international development, and environmental ethics. Related fields such as planning, architecture, cultural geography, and anthropology are also considered, as long as the content is ultimately relevant to landscape architecture’s role in the subaltern. Documents are considered relevant if they are applicable to landscape architecture; discuss socio-environmental concerns and marginalized or subaltern contexts; elaborate on the current theory and practice within development and landscape architecture; critique that status or make suggestions on ways to move forward; or examine ethical or moral implications applicable to developed-world professional involvement in less developed contexts. Additional relevant literature also includes the United Nations’ list of SDGs and supporting literature, and publications from organizations such as the American Society for Landscape Architects (ASLA), the International Federation of Landscape Architecture (IFLA), and the Landscape Architecture Foundation (LAF).

Although the resulting themes of power, justice, accountability, and difference are discussed almost exclusively as findings in Chapter 5, the ECA and DA methods influenced all subsequent chapters in this dissertation. Even though chapters 2, 3, and 4, mostly present background information on the respective fields of international development, landscape architecture, and environmental ethics, the content presented in those chapters connects to the methodology in one of two ways. Either the content directly contributes to identifying themes, or the content responds to the themes. Thus,
in addition to reviewing relevant literature, chapters 2, 3, and 4 introduce my findings for analysis and represent the basis of my recommendations; they present information that was compiled and assessed through a postcolonial theoretical framework and connects to the methodology and the themes the methodology sought to identify.

**Ethnographic Content Analysis**

Relevant documents, such as academic articles and published documents from development organizations, will be evaluated through a qualitative content analysis based on Altheide’s (1996) “ethnographic content analysis” (ECA). Documents are defined as “any symbolic representation that can be recorded or retrieved for analysis” (Altheide & Schneider, 2012, p. 2). But, in contrast to traditional quantitative content analysis, ECA contends that “true knowledge” is not necessarily equated with numbers and measurement. When using ECA the researcher must be aware that human documents are informed by specific social and cultural processes and attribute meaning and significance when the document is situated in its context. As such, “it is the researcher’s interest and relevance plus the retrievable characteristic that produce a research document. If something is relevant but not retrievable, it does not qualify as a document, even though it may be helpful for the overall project in question” (Altheide & Schneider, 2012, p. 2). While the document has an existence outside the researcher, the document depends on the researcher’s eye in order to be transformed into “data” (Altheide & Schneider, 2012). In this case, the documents will be transformed into data based on a theoretical framing within postcolonialism, my experiences as a student, practitioner, and instructor of landscape architecture, and questions regarding how to encourage more ethical applications of socio-environmental values within landscape architecture’s involvement in international development projects.
While codification techniques in ECA are similar to traditional content analysis, ECA differs in that the researcher constantly revisits, reflects on, compares, and revises the themes that emerge from the documents. It is systematic, but not rigid; initial categories guide the study but the strategy allows for orientation toward constant discovery (Altheide, 1996). According to Bryman (2015) the first step in ECA is to generate a research question. Here, the key question is: What insights from postcolonial understandings of international development and environmental ethics can contribute to landscape architects' abilities to affect meaningful, positive change in the subaltern?

Bryman’s (2015) second step is “to become familiar with the context within which the documents were/are generated” (p. 393). Familiarity with the context was achieved through a broad review of related literature. This dissertation’s committee members, experts in their relative fields of landscape architecture, urban planning, international development and planning, and environmental ethics, provided direction towards particularly relevant literature and organizations. Key words were used to find relevant articles and books in the University of Florida (UF) library search system, as well as Google Scholar. Articles and books were limited to those accessible through the University of Florida. Non-academic documents, such as those from relevant professional organizations, were limited to those accessible through the internet.

From the initial collection of documents, I selected several from each disciplinary category to focus on, in following Bryman’s (2015) third step to “become familiar with a small number of documents” (p. 393). These articles were selected based on my perception of their relevance to the dissertation question. Careful analysis of these documents helped generate the categories of justice, accountability, and difference.
These themes helped further “guide the collection of data, and draft a schedule for collecting data in terms of the generated categories” (p. 393), Bryman’s (2015) fourth step.

The process of developing these themes was non-linear and exploratory. The starting point for understanding how insights from international development and environmental ethics could influence landscape architecture revolves around power, but power is discussed differently across the three disciplines. In considering power dynamics, postcolonial scholars advocate accountability as a superior alternative to responsibility; thus, discussions in landscape architecture, and allied professions of planning and architecture, were analyzed for situations in which they discussed both accountability and responsibility. Notions of responsibility in landscape architecture led to the environmental ethical model of stewardship, which was in turn assessed with a postcolonial lens. Similarly, ecofeminism, an environmental ethics theory on power, highlights the fallacy of dualistic thinking and advocates for an approach to difference without hierarchy. Ecofeminist concepts were then situated alongside landscape architecture to better understand how they might relate to landscape architecture practice. Although not specifically about power, environmental justice is a prevalent response to oppression—the by-product of power that we wish to end. Thus, concepts of justice and socio-environmental welfare were further explored to better understand how the different disciplines approach environmental justice, and what can be learned from each. So, themes of justice, accountability, and difference emerged from the initial theme of power and provided additional layers to the analysis.
In short, data, in the form of summaries and key words were tabled and cross-referenced with each other to elicit themes. The cycle of collecting, analyzing, and cross-referencing occurred several times to varying degrees. The final themes of power, justice, accountability, and difference, were selected as themes to focus on for recommendations, but discussions related to values and socio-environmental systems also heavily influenced the findings and content in this dissertation. Each of these themes manifested differently within the disciplinary fields of landscape architecture, international development, and environmental ethics. The challenge of this dissertation is to find the strongest and most fruitful points of connection among them, and how insights might be translated into landscape architectural theory and practice. It is important to note that throughout the entire process, postcolonial attention to power dynamics influenced the selection of articles and themes.

**Discourse Analysis**

ECA provides the general structure for information collection and review, but the approach is also augmented with some of the epistemological and ontological features found in Discourse Analysis (DA). DA is generally oriented as anti-realist, in the sense that it “denies an external reality awaiting definitive portrayal by the researcher, and it therefore disavows the notion that any researcher can arrive at a privileged account of the aspect of the social world being investigated” (Bryman, 2015, p. 370). While I do not adopt a stance so staunchly on the anti-realism end of the binary scale of realism/anti-realism, I do adhere to the basic principal within DA, and in postcolonialism, that calls into question how we portray and represent so-called “truths.” As such, DA is constructionist in that its “emphasis is placed on the versions of reality propounded by members of the social setting being investigated and…entails a recognition that
discourse entails a selection from many viable renditions and that in the process of a particular depiction of reality is built up” (Bryman, 2015, p. 370).

Due to its strong rooting in postcolonial studies, some of DA’s approaches are relevant to the specific methodological needs of this dissertation. However, within DA the results often rely on detailed and deconstructed nuances of linguistics, which does not relate to the subject matter of this dissertation. Rather, the intent is to produce a narrative based on the themes identified using both ECA and DA and present that narrative in a way that is applicable to landscape architects. While the constructionist philosophy behind DA will be incorporated as a means of identifying and exploring themes, its focus on linguistics will be tempered with more reliance on ECA’s codification techniques.

**Summary**

The material found in relevant documents is deconstructed and analyzed using ECA and DA. These qualitative methods allow themes to be analyzed within their respective contexts and to emerge and evolve as the research continues. Comparing, contrasting, and evaluating the themes through a postcolonial lens can reinvigorate landscape architecture, expanding the boundaries of the profession to a global development context. Ultimately the discussion seeks to highlight what will be most important for landscape architects to know, and suggest ways of adopting, changing and supporting ideas to foster better relationships in developing contexts that break the barriers of colonial power hierarchies.

**Overview of Chapters**

Postcolonialism, ethics, and values are elements of critical interest throughout this research, especially as those elements are related across the disciplines of
international development, landscape architecture, and environmental ethics. Because so much non-linear crossover and connection exists, the organization of the information in this dissertation quickly becomes challenging. Separating the three fields of international development, landscape architecture, and environmental ethics into their own devoted chapters allows the reader to focus on the perspective from each of those fields first, before delving into their connections and recommendations for landscape architecture in the final chapter.

Chapter 2 outlines core concepts and perspectives in international development that will help prepare landscape architects to engage with the discussions and understand the context. It introduces some of the history and topics of development. Most importantly, amidst the varied approaches and types of international development, the chapter suggests “alternative development” as the most appropriate category of international development for landscape architects to pursue.

Chapter 3 addresses landscape architecture as a widely-varied design profession; its medium is landscape, and it draws from both science and artistic disciplines. The chapter explores the strong topical connection between landscape architecture and international development projects, and highlights the role landscape can play in international development. Special attention is paid to landscape architects’ skill of “design thinking” as a way to approach the types of problems often found in developing contexts.

Chapter 4 situates some of landscape architecture’s most commonly espoused ethics within the field of environmental ethics. Discussions here begin to highlight some of the areas where the profession of landscape architecture has the most potential for
growth, if it is indeed to embrace theories and practices that are relevant to a postcolonial understanding of ethical concerns in the developing context.

Finally, Chapter 5 presents some recommendations for implementing a postcolonial ethic in landscape architecture. Specifically, it outlines proposed approaches to the themes of power, values, accountability, and justice, which most likely will need to be implemented through higher education and curriculum changes in landscape architecture.
CHAPTER 2
INTERNATIONAL DEVELOPMENT

Overview

In order to connect landscape architecture to the field of international development, it becomes important to establish a common ground of understanding on what “development” is, the historic and political factors that created and shaped development, and the specific approach to development that this dissertation advocates implementing. To that end, this chapter outlines the origins of development with a focus on the mid-twentieth century philosophies that influenced its formation and continue to be points of criticism for how international development currently operates. It also expands upon the scope of projects within international development, especially those that might best relate to landscape architecture. The chapter then outlines several different approaches within international development and promotes “alternative development” as the ideal model of international development in which landscape architects can participate.

The information on the three topics of origins, scope, and approaches presented here provide the foundation necessary to understand where landscape architecture fits in international development so it can be positively influenced by innovative ideas and theories in development, and, in turn, promote better practice in the developing world. International development and landscape architecture have much to learn from the other, and this dissertation asserts that a number of overlaps exist between the two fields, as they both are often concerned with improving the well-being of people and places. The challenge for this research is to highlight what those overlaps are and to gauge which aspects should be focused on to best encourage expanded awareness,
perspectives, and knowledge, within both disciplines, but especially for landscape architecture.

**Origins of International Development**

International development emerged through the 1944 Bretton Woods Conference (King, 2014; Moyo, 2009) and is rooted in mid-twentieth century philosophies of neoliberal economics, universal human rights, and modernization. Reeling in the wake of the economic turmoil and human rights atrocities of World War II, the leaders of the world’s major industrial states feared a repeat of the Great Depression and anticipated that postwar Europe would need vast amounts of economic aid if it were to regain stability (Moyo, 2009). With the main agenda of restructuring international finance and cooperation, conference participants formed a new global financial system. The International Monetary Fund (IMF) and the World Bank were created at Bretton Woods to facilitate the rebuilding of Europe (King, 2014). Generally speaking, the IMF’s purpose was to manage the stability of global finance, and the World Bank was designed to facilitate capital investment for reconstruction (Moyo, 2009). These two organizations established the aid-led economic framework upon which international development would be built (Moyo, 2009).

The atrocities of World War II “sparked international conversations about the definition of human rights, cultural attitudes toward such definitions, and simple questions of humanity” (A. W. Lerner, Lerner, & Lerner, 2006, p. 41). Parallel to the creation of the Bretton Woods institutions, the adoption of the UN Charter in 1945, the creation of the UN Commission on Human Rights in 1946, and the Universal Declaration of Human Rights (UDHR) in 1948, helped structure human rights within a legal international framework.
A massive wave of global decolonization occurred in conjunction with the end of WWII and alongside the creation of the Bretton Woods institution. In some cases, imperial powers relinquished control over their colonies as a direct result of WWII. The Allies were recovering from expenses and damage to their economies and infrastructure, while the Axis powers of Germany, Italy, and Japan were forced to give up their colonial holdings (Rhymer, 2011). In other cases, anti-colonialist nationalists overcame the resistance of the colonizers, such as with the independence movements in the Middle East and "Monsoon Asia" (Shepard, 2006). Some scholars argue the withdrawal of colonial power was too quick, leaving many former colonies politically and economically disadvantaged and subsequently forced into an international system that they were ill prepared to enter (Rhymer, 2011). The economic struggles of newly decolonized nations enabled the Bretton Woods economic framework to expand into the so-called “Third World” by loaning capital to help poor countries transition into the developed “First World.”

The neoliberal and modernization philosophies that were espoused in the mid-century and solidified at Bretton Woods continue to influence international development. Neoliberalism is a political and economic doctrine that arose in the 1930’s and 40’s to counter the rise of socialism, fascism, and planned economies (Schnitzler, 2014). It

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10 First used in 1952, the “Three Worlds” refers to the political categorization of nations based on their alignment with either the United States and its allies or the Soviet Union and its allies: “first world” industrialized capitalist states; “second world” industrialized socialist states; the rest as “third world” (Shepard, 2006). Currently “First World” is used to refer to rich, “developed,” or “industrialized” countries, while “Third World” refers to poor, “developing” or “industrializing” countries. From a postcolonial perspective, use of the Three Worlds nomenclature is considered hegemonic and pejorative toward non-Western places. As such, its usage is often replaced with categories such as developed, and industrialized, although these terms are also not ideal from a postcolonial perspective (Sumner & Tribe, 2008).
emphasizes free markets, deregulation, and the privatization of state assets and services (Schnitzler, 2014). Especially since the 1970's, neoliberal paradigms have influenced international development. In order for developing countries to receive loans from the World Bank and IMF, they often must agree to conditions that implement and promote neoliberal policies (Schnitzler, 2014). The advocates for these “structural adjustment policies” posit that the free trade stipulations enable businesses from developed countries to invest and operate in developing countries, thereby promoting economic growth and “development.” Critics argue that rather than experiencing economic benefits, developing countries are too often exploited for their resources and labor, and benefits mostly go to the industrialized world just as they did during the colonial era.

Modernization is a theory of global social change that became prominent alongside neoliberalism and global development. It defines a universal, historical process through which traditional societies become modern (Latham, 2017). Modernization has helped advance human rights, medicine, and technology—all of which have implications for improving society and the environment. But critics suggest that the developed world’s definition of what is “modern” or “not modern” is hegemonic and we should instead focus on plural meanings of modernity (Ferguson, 2006). From the postcolonial perspective, modernization is synonymous with development, and represents yet another means of dichotomizing and hierarchizing developed and modernized societies from less developed and non-modernized societies.
Today the magnitude of global development challenges is overwhelming. Billions of people around the globe live in unsafe, unhealthy, impoverished conditions. A number of governmental, non-governmental (NGO), and private organizations are addressing these international development challenges. Some of the most prominent members of the international development community include the UN and its subsidiaries, especially the United Nations Development Program (UNDP); The World Bank; Peace Corps; International Monetary Fund (IMF); Red Cross; United States Agency for International Development (USAID); Amnesty International; and Habitat for Humanity (HH), among many others. These organizations and entities operate under the broad professional and academic category of “international development.”

The challenge is that these organizations still operate within a paradigm that explicitly and implicitly espouses the neoliberal and modernization philosophies of the mid-twentieth century. This is problematic because such philosophies promote uneven power dynamics between developed and developing places. Postcolonial theories posit that the institution of international development is directly responsible for maintaining the very impoverished conditions they are seeking to eradicate.

A now extensive literature argues that, like those of colonial rule, development’s rational models achieve cognitive control and social regulation; they enhance state capacity and expand bureaucratic power

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11 According to the United Nations Development Programme (UNDP), of the 7.3 billion people on the planet, half of them live in poverty, and 1 out of every 9 of them do not have enough to eat. Eight hundred million people, roughly the entire population of Europe, live in extreme poverty—defined as living on less than $1.25 a day. Water scarcity affects 40% of people around the world (undp.org). Every year 6 million children die before their fifth birthday. Armed conflict, torture, and violence affects millions of people. Terrestrial and marine environments are being destroyed at staggering rates by global warming, waste, pollution, and over-consumption. Climate change is causing more droughts, storms, and floods which only exacerbate problems for the most vulnerable people and places (undp.org).

12 In some cases, professional organizations “without borders” provide the infrastructure for doctors, engineers, and architects to volunteer services in international and impoverished settings; one of the most commonly known is “Doctors Without Borders” (Médecins Sans Frontières (MSF) International).
(particularly over marginal areas and people); they reproduce hierarchies of knowledge (scientific over indigenous) and society (developer over the ‘to be developed’), and they fragment, subjugate, silence or erase the local, all the while ‘whisk[ing] these political effects out of sight’ through technical discourses that naturalise [sic] poverty, objectify the poor and depoliticize [sic] development (Mosse, 2010, p. 4).

Despite its good intentions, the crux of international development pivots around outdated and harmful philosophies and biases. Certainly, much good has been done through international development efforts, but many of the practices remain unquestioned and now the challenge is to figure out what elements of development are, in fact, “good,” and how to promote them without succumbing to neoliberal and modernist assumptions.

The context under which development started remains true: there are billions of people on the planet who live in adverse conditions, and planetary destruction from pollution and climate change has yet to be curbed. These global issues must be addressed; there must be some form of relationships between developed and developing. Given the increased globalism of today, it is impossible to avoid connections between developed and developing places, whether intentional or not. While landscape architects seem to be primed to address global problems, we must combat the kinds of postcolonial power dynamics that are so strongly associated with international development, lest we inadvertently exacerbate global inequity, which is often the cause of global problems such as poverty and poor health. Indeed, the core goal for this research is to enable landscape architects to challenge such power dynamics through their practice.
Scope of International Development

International development is a highly contested field, engaging complex and competing understandings of progress, geopolitics, culture, and environment (King, 2014). It is largely understood as encouraging “change” that affects “economic, social, political, legal and institutional structures, technology in various forms (including the physical or natural sciences, engineering and communications) the environment, religion, the arts and culture” (Sumner & Tribe, 2008, p. 11). International development delivers monetary aid; supplies goods; establishes access to infrastructure, services, and resources; and politically intervenes on behalf of civic and environmental issues. Usually development focuses on “poor” countries, also referred to as the “Third World,” “developing,” “less-developed,” and “industrializing,” but because poverty and wealth coexist in every country, the divisions between developed and developing are often blurred. Although landscape architects have much to offer in trying to solve industrialized-world development issues, this dissertation focuses on their role in economically “poor” developing countries, especially those with a colonial history.

The SDGs and Landscape Architecture

In order to understand the current scope of international development, the SDGs offer a reliable starting point, as they are currently the most ubiquitous structure through which development operates.13 Launched in 2015, the SDG campaign assigns specific targets and measurable indicators to achieve the goals of sustainable development. The term “sustainability” is notoriously ill-defined, but the UN subscribes to the general

13 To be clear, this research views the approach, language, and assumptions behind the UN’s formation and implementation of the SDGs as problematic, especially from the postcolonial perspective; this critical view will be thoroughly outlined later in this chapter.
definition of sustainability as having three pillars: economic growth, environmental protection, and social equity—which must be balanced to maintain quality of life and livelihood for people throughout the world.

Building on the notion of "sustainability, the UN has been developing policies and approaches for "sustainable development" since 1982, when the UN General Assembly initiated the World Commission on Environment and Development (WCED). In 1987 the WCED published a report, *Our Common Future*, also referred to as the *Brundtland Report*, which defines sustainable development as meeting “the needs of the present without compromising the ability of future generations to meet their own needs” (Stephens, 2008, p. 288). The report also asserts the interconnectedness between society and the environment:

The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word "environment" a connotation of naivety in some political circles. The word "development" has also been narrowed by some into a very limited focus, along the lines of "what poor nations should do to become richer," and thus again is automatically dismissed by many in the international arena as being a concern of specialists, of those involved in questions of "development assistance." But the "environment" is where we live; and "development" is what we all do in attempting to improve our lot within that abode. The two are inseparable. (Kates, Parris, & Leiserowitz, 2005).

The report officially defined and introduced sustainability as an intergenerational concept (Kopp, 2011) that advances more effectively integrating development with strategies that improve our environment and essentially calls for a socio-environmental approach.
Rooted in the ideals of sustainability, the SDGs have outlined 17 goals which address social and environmental issues of development.\textsuperscript{14} The SDGs address aspects of the built and natural environments, such as ensuring the health and quality of ecosystems, creating safe human habitats, promoting local culture, making safe and efficient water systems, and encouraging and protecting biodiversity (See Appendix A). All of which are highly relevant to landscape architecture, and are discussed further in the following chapter.

The challenge for the SDGs is that any actions on the landscape can be more harmful than helpful, especially if they are not situated within an appropriate ethic, or if practitioners are not reflecting on how their values are being implemented in the project’s context. The project types and problems of international development may be relevant to landscape architects, but whether their solutions are “good” is up for debate. Landscape architects and international developers must understand how values—even with seemingly sound goals like “preserving important landscapes”—compete with other values, especially in contexts that are complicated by the challenges of international development. We must question our assumptions and justifications if we truly wish to make “good” changes for everyone.

Since its inception, the development agenda has promoted the idea that poorer countries could catch up to richer ones with outside guidance and a self-help perspective (Castree, Rogers, & Kitchin, 2013). Even though recent development thinking and policy increasingly relies on definitions of development that extend beyond

\textsuperscript{14} The concept of sustainable development is undeniably commendable, but many scholars argue that the SDGs, or any practices, have yet to fully implement the Brundtland Report’s notion of sustainable development (Sumner & Tribe, 2008; Swyngedouw, 2010).
income, such as basic needs, quality of life, quality of the environment, and participation, the focus on universal processes and economic growth continues to be paramount to development agendas (Castree et al., 2013). This has led some scholars and developers to break from traditional development in favor of “post development,” which evolved as a postcolonial criticism to the neoliberal and modernization approaches of goals-based development. The categorical differences of the evolving interpretations of development and development theory are discussed in the next section.

**Different Approaches in International Development**

Sumner and Tribe (2008) argue that three discernable approaches, or what they call “categories,” for international development exist, each of which operates under different theoretical premises and notions of what constitutes “good” development. The first approach of international development as “a process of structural societal transformation” reflects the dominant interpretation in the 1950’s and 60’s—the era in which “development” was created. It focuses on broad historical processes of long-term transformations regarding political structures, class, modes of production, and labor, i.e., the transition from hunter-gatherer to agricultural societies, or the transition from feudalism to capitalism, or monarchy to democracy. From the international development viewpoint in the mid-twentieth century, the idea was mostly associated with “developing” countries of the Third World transitioning from an agricultural society to an industrial-based society like those of the “developed” nations in the so-called First World.

The problem with this structural definition of development is that while “progress” is prescriptive and focused on “change,” the structural development viewpoint does little to evaluate “good” change (Sumner & Tribe, 2008). This long-term view of development
might address the big picture, but it has a limited capacity to meaningfully guide aspects of development practices like policy-making, which tend to be more detail-oriented and short-term (Sumner & Tribe, 2008).

Compared to the “structural” viewpoint, a second approach of “short-to-medium outcome of desirable targets” is technocratic, instrumental, and much narrower in definition. Currently favored by practitioners in international development agencies, this mainstream approach treats development as goals or outcomes to be implemented, measured with corresponding indicators, and compared with specific targets (Sumner & Tribe, 2008). The UN's SDGs are a prime example. Goals, such as “ending poverty” or “ending hunger” are broken down into targets such as “build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events” and "ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production” (“Sustainable Development Goals,” 2018).

They are in turn measured with indicators such as “proportion of people living below the national poverty line” and “prevalence of undernourishment” (“Sustainable Development Goals,” 2018). Attaining the SDGs is largely the responsibility of individual UN Member States, and the UN carefully monitors the SDG indicators on national, global, regional, and thematic levels to ensure stakeholder “accountability” (Schmidt-Traub, la Mothe Karoubi, & Espey, 2016).

A third approach of development is a “dominant ‘discourse’ of Western modernity.” Radically different from the first two approaches, which were based on visions of change and outcomes, development as discourse is based on the view that
development has consisted of “bad” changes by imposing Western ethnocentric conceptions of development (Sumner & Tribe, 2008). This postcolonial approach interprets development as a social construct that does not objectively exist outside its “discourse,” i.e., the body of ideas, concepts, perceptions, texts, spoken words, and theories that “discuss” what development is or should be (Sumner & Tribe, 2008).

Building on “discourse,” especially Foucault’s notion of discourse, is a foundational aspect of postcolonial work (Said, 2006; Spivak, 1988). For Foucault, discourse is subjectively constructed and firmly bound in social knowledge (Ashcroft & Ahluwalia, 2008). In this sense, “the world is not simply ‘there’ to be talked about, rather it is discourse itself within which the world comes into being. It is also in such a discourse that speakers and hearers, writers and readers come to understand each other and their place in the world” (Ashcroft & Ahluwalia, 2008, p. 14). In this sense, postcolonial scholars show how the discourse of colonialism and colonization obscures the political and material aims of colonization, and constructs identities for both colonizing and colonized subjects (Ashcroft & Ahluwalia, 2008). Discourse is not an inert structure, but as a cultural act located in the world and the relations of power in which it is produced (Ashcroft & Ahluwalia, 2008). As an example, using the terms “first world” and “third world” to describe the differences between relatively rich and poor places, even if speaking on strategies of empowering people in the subaltern, or improving infrastructure, subliminally reinforces the notion that developing places are “less than” developed.

Power relations are central to postcolonial theory, especially as it applies to development, and it is within this context that postcolonialists are especially critical of
goal-driven development like the SDGs. They argue that the approach, assumptions, and discourse used in attaining these goals often fail to address the overarching question of whose values are being expressed and implemented. Critics accuse contemporary development of adopting a paternalistic and universalist assumption about what is “good” and argue that the bureaucratically-developed goals may not be shared by many of the people who are supposedly benefitting from development (Sumner & Tribe, 2008).

When faced with this criticism, developers often argue that they are operating under humanitarian instincts and altruism. However, William Easterly (2006) has compared this benevolent attitude to “The White Man’s Burden,” a poem by Rudyard Kipling which justified colonialization on the basis that the “whites know best” and they must take on the responsibility of civilizing the world, even at the cost of using imperialist methods. Certainly in some cases colonialism improved life and livelihood, especially by introducing medical and economic advancements to the colonies (Easterly, 2006). However, even with the best of motives, colonialism, like today’s development, was fraught with bureaucratic hubris, coercive top-down planning, inadequate knowledge of local context, and little feedback from locals on what works (Easterly, 2006, p. 281).

Others are more acerbic in their criticism, and claim development is intentionally promoting “business as usual” for global corporations to exploit resources in developing areas. Samir Amin (2006), in a review of the Millennium Development Goals (MDGs),

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15 The SDGs are a marked improvement of the MDGs. In particular, SDG 17 refers to “capacity building,” “mutually agreed upon terms,” and debt relief and debt restructuring—all elements which point toward a more postcolonial understanding of development, albeit indirectly. However, the underlying structure,
the precursor to the SDGs, called the exercise “a pure hypocrisy, as pulling the wool over the eyes of those who are being forced to accept the dictates of liberalism in the service of the quite particular and exclusive interests of dominant globalized capital” (p. 6). Arturo Escobar (1996) pointedly argues that development has aggravated ecological and social crises.

Postcolonialists reject development and argue that, intentional or not, it is a homogenizing assertion of Western values in non-Western contexts because it adheres to the implicit claim that “developing” is lesser than “developed.” They criticize the bureaucratic nature of development as being too focused on broadly defined universal goals at the expense of responding to the nuances of the local context.

Postcolonialism rightfully endures some criticisms. Many postcolonial arguments are quite paradoxical in nature, in that they become the very thing they are criticizing. By broadly labeling traditional development as hegemonic and colonial, postcolonialists are essentially taking the very same universalist position that they accuse traditional developers of taking. In assuming all colonized people experience development in the same overpowering, hegemonic way, the narrative neglects the local and denies the agency of people in the developing world (Pieterse, 2000). Furthermore it fails to account for the unique and complex context-based negotiations that occur between local and global (Tsing, 2011). Like the theories that support traditional development, postcolonialism is inherently a Western philosophy espoused by academic elites. Thus, when postcolonialists advance the narrative of “the colonialized are oppressed, and we
must not presume to speak on their behalf lest we further their oppression” they are, in fact, speaking on their behalf, and they are doing so from an outside position. Even though the intention is to end oppression, postcolonialists may not actually be representing and labelling those “colonized” peoples as they wish to be represented and labeled. Development is far too heterogeneous for universalizing claims (Simon, 2006), and both the discourse and goal approaches to international development lose their power when the arguments become generalized and universally applied.

**Moving Forward**

Significant topical overlap exists between the SDGs and landscape architecture. However, most landscape architecture projects occur in the developed world, and as such, the solutions are designed for developed-world needs and originate from problematic developed-world perspectives and training. Connecting landscape architecture to international development is not simply a matter of transplanting current practice to a new context. From the postcolonial perspective, applying developed-world strategies to developing-world issues is problematic because it fails to account for the discourse and actions that reinforce colonial assumptions, namely that developed-world knowledge, strategies, and philosophies are inherently better than those found in developing places. It can be disrespectful and damaging to the political, social, historical, and physical nuances of different contexts, and directly counteract the positive intentions behind development. The solutions and mindset behind producing solutions for global problems need to be calibrated for the developing context, especially by acknowledging uneven power dynamics. The challenge is to figure out how landscape architects can tailor their existing and relevant skills to contribute to international development while not perpetuating postcolonial relationships.
Even though goal-based and postcolonial discourse categories of international development are often pitted against each other, David Simon (2006) argues that these two categories are compatible. Simon (2006) sees the relationship between goal-based and discourse international development as “a dialogue of the deaf,” with advocates talking past one another, rather than with each other (p. 10). He advances the argument against deterministic and universalizing theories in favor of a “critical, multiscale livelihoods analysis integrated with political ecology…as a practical way to bring [the two categories] together” (Simon, 2006, p. 19).

Ethnographer, David Mosse (2010), also discusses the problem of the competing goals-based and discourse approaches to international development, but he refers to them as “instrumental” and “critical,” respectively. Mosse (2010) claims that the contrasted instrumental and critical views have blocked the way for a more insightful ethnographic understanding of the relationship between policy and practice in international development. Mosse’s (2010) ethnography seeks new understandings of development by focusing on the complexity of actors in every development level, moving on from the image of the duped perpetrators and victims, and revising false notions of all-powerful Western institutions. He found that the failure “to analyse [sic] political contexts…went along with assumptions about empowerment, self-improvement, natural collective action, a present or project-bound analysis and an over-emphasis on social categories (women, the poor) rather than relationships between them” (p. 242). Mosse (2010) argues that international development practitioners must take a critical-reflective turn—not only in acknowledging privilege and difference, but acknowledging that we have helped produce and maintain that privilege and difference.
International development provides “opportunities, if not obligations, for engagement and self-critical reflection, for hope and critical understanding” (p. 243)—all of which Mosse (2010) believes are impossible without direct engagement with what happens on the ground in international development practice.

Similarly, Pieterse (2000) refers to “alternative development” which occupies “an in-between position: it shares with [postcolonial discourse] the radical critiques of [goal-based] development but it retains belief in and accordingly redefines” international development (p. 181). It is this concept of “alternative development” (Pieterse, 2000) and bringing together of goals-based and discourse development (Simon, 2006) within an approach that focuses on politics, close encounters, and self-critical reflection (Mosse, 2010) that the author believes is the best way forward for landscape architects to participate in international development.

In short, this dissertation situates the ideal form of international development in a space that encompasses both the “critical discourse” and “goals” categories. This research is rooted in postcolonial theory and takes the stance that traditional, goal-based development frequently reinforces new forms of colonialism, but rejects the postcolonial assumption that all goal-based development is inherently bad. Understanding development as “goals” in the traditional sense helps ground the approach and showcase the material overlap between international development and landscape architecture. Simultaneously considering development as discourse allows us to explore how postcolonial critiques can be used to ensure landscape architects are meaningfully promoting empowerment and justice with their practice. This space between goal-based and postcolonial international development is a relatively new
concept, and figuring out how to implement it on the ground is a challenge that should be adopted by landscape architects because their skill sets are especially primed to take on the challenge. These skill sets are discussed in the following chapter.
CHAPTER 3
LANDSCAPE ARCHITECTURE

Overview

This chapter outlines the discipline of landscape architecture in terms of projects that are typical to the discipline; values that are commonly espoused by practitioners; and skills that are expressly relevant to addressing the kinds of problems international development often faces. The goal of this chapter is to elaborate on the current condition of the landscape architecture profession from a perspective that considers the role it might play in international development, as discussed in the previous chapter, as well as lay the groundwork for understanding how environmental ethics can help with that role, as discussed in the following chapter.

This chapter is divided into three sections, each focusing on project types, values, and skills, respectively. The first section introduces landscape architecture's wide range of projects and highlights their similarities to international development topics. The second section elaborates on landscape architects' professed values of ecology, community and delight. Ideally, landscape architects express this trifecta of values in their practice as their commitment to the health and welfare of people and places as manifested in the physical landscape. Understanding how landscape architects portray their value system establishes the groundwork for discussions on ethics in subsequent chapters. The third section discusses design thinking as a particularly appropriate skill and method to deal with what Rittel and Webber (Rittel &

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16 A relatively small number of landscape architects and practitioners from allied professions like urban planning and architecture already participate in international development projects. Their projects will be discussed at length in the concluding chapter, with the benefit of first understanding concepts and themes that have been explored and elicited in the body of this research.
Webber, 1973) call “wicked problems”—complex social problems that cannot be solved by traditional scientific methods, such as those in international development. Rittel and Webber (1973) outline the complexities and challenges of wicked problems in a way that is notably similar to design problems. Thus, using design as an approach to wicked problems could enable landscape architects, who are trained in “design thinking,” to offer an innovative perspective to international development projects.

Some elements of the profession are already poised to contribute to international development. Similarity of project types, especially those that revolve around human dwelling, water resources, food production, and consideration for natural resources, suggests an opportunity to share perspectives and strategies, and landscape architects' design thinking skills could be useful in tackling the kinds of issues that are prevalent in international development. Other aspects, such as how practitioners navigate contested social and environmental values in the landscape and their understandings of the developing context, need to be further explored and refined before being able to meaningfully contribute to international development projects.

**Topics in Landscape Architecture**

According to the *American Society for Landscape Architects (ASLA) Handbook*, landscape architecture is defined as: "the art of design, planning, or management of the land, arrangement of natural and manmade elements thereon through application of cultural and scientific knowledge with concern for resource conservation and stewardship, to the end that the resultant environment serves a useful and enjoyable purpose" (Koh, 1982, p. 84). Working in the medium of “landscape,” landscape architects practice as urban designers, ecological recreationists, and everything in between. In short, landscape architecture is “about everything outside the front door,
both urban and rural, at the interface between people and natural systems” (iflaonline.org/about).

As implied by these definitions, landscape architecture is a highly diverse and ambiguous profession that is marked by its attempts to bring together seemingly opposing concepts: art and science, built and natural. Because of this, the range of projects in landscape architecture is staggering. The International Federation of Landscape Architects (ILFA) (“The Profession of Landscape Architecture,” 2018) offers a particularly thorough outline of typical projects in landscape architecture. The list is too large to include in full, but as a sampling: under the category “environmental precaution and protection in physical and regional planning,” IFLA lists tasks such as regional development; regeneration of disused industrial and settlement sites; nature protection management; decontamination; remediation; and conservation. The category “landscape tasks in urban land use; planning and sectoral planning” includes environmental assessment; landscape maintenance; planning for national parks, biospheres, and landscape protection areas; and planning for mineral extraction and reclamation. Landscape architects are also responsible for “infrastructure studies, development planning and landscape programs” such as rain water management; green corridor development; hiking, bicycling, and ski trail design; and agricultural and forestry planning. “Urban planning and village redevelopment planning” and “project planning and design” categories include sustainable development; land use plans; transportation; green spaces for residential, commercial, campuses, and industrial areas; urban development and infrastructure; squares; plazas; zoos; recreation spaces; pedestrian traffic; monuments; and memorials. Finally, IFLA includes a “project control,
monitoring and implementation” category, which features conflict management; visualizations and documentation; presentations; and public relations.

Due to the profession’s breadth, landscape architects often admit the difficulty in describing what they do (Roe, 2011). Landscape architect, Simon Swaffield (2002), has lamented the lack of a common identity and suggests that the profession’s response to landscape’s complexity appears to be an increase of internal hierarchies and specialization within the profession. Swaffield (2002) argues the discipline’s adaptation to its internal diversity is a critical challenge to its survival. Others cast the diversity in a more positive light and suggest landscape architects should take advantage of its “omnicompetent nature, as it fundamentally combines and synthesises [sic] planning, design, ecology, art, humanities and engineering subjects into its unified setting” (Kaplan, 2012, p. 64). Narrowly defined and single-purpose solutions are not a sufficient remedy for the complex environmental and social problems we face today (Kaplan, 2012). In this sense, a holistic landscape concept of “forging links between different jurisdictions, communities and physical realms” can help landscape architecture move toward the mainstream of multi-purpose approaches (Kaplan, 2012, p. 64).

Many topics and values in landscape architecture are strikingly similar to topics in international development, especially those that align with the UN’s Sustainable Development Goals (SDGs). In some cases, the SDGs have a strong connection to the ASLA’s Code of Environmental Ethics (See Appendix C). This similarity is unsurprising especially given the use of “sustainable development” in definitions of

17 Having been adopted and promoted by the UN and the World Bank, the SDGs are ubiquitous in international development.
landscape architecture ("The Profession of Landscape Architecture," 2018), and the notion that values in sustainable development and landscape architecture overlap (Thompson, 2007). Examples of overlapping concerns include: ensuring the health and quality of ecosystems, creating safe human habitats, promoting local culture, generating safe and efficient water systems, and encouraging and protecting biodiversity.

Landscape architecture is potentially relevant to practically all facets of international development because landscape embodies literal and symbolic instances of human and non-human experiences. Landscape theorist Paul Selman (2012) argues that while landscape has traditionally been understood as related to landform, aesthetics, history, and territory, contemporary theory conceives landscape as more encompassing—as a "physical and conceptual nexus in which many human and natural systems find their integration" (p. 27). Hunger is tied to issues of food production and agriculture, which are landscape processes, as well as distribution, which relies on infrastructure in the landscape (Potteiger, 2013). Poverty is connected to issues of economic viability and access to markets and economic resources. Landscape architects often weigh in on projects that affect the economy of a place through zoning and land use decisions, urban revitalization, growth management policies, as well as balancing environmental and economic public interests while accommodating private development interests (Machemer, 2006).

International development's concern with public health is also relevant to landscape architecture. Historically, one of the foundational purposes of landscape architecture was to address public health and wellbeing in relation to the surrounding built and natural environments. Frederick Law Olmsted, heralded as the father of
landscape architecture, designed Central Park in New York City as a spatial response to some of the most pressing social issues of the time, including the concern of public and environmental health in heavily industrialized urban areas (Walliss, 2012). Essentially, the landscape architecture profession emerged in response to the very same industrializing conditions that now plague the developing world.

Despite the pronounced overlap between landscape architecture and international development, and the fact landscape architects consider sustainable development, particularly key components as outlined in the SDGs, directly within the profession’s scope of expertise and relevance, practitioners from the two fields rarely work together. Sosa’s (2014) survey of landscape architecture practitioners, scholars, and students on their perception of the SDGs showed that while most landscape architects find the SDG’s very relevant to the profession, few are working towards the SDGs, especially in developing contexts. For each of the SDG targets outlined in the survey, participants indicated the degree to which they had been involved with the SDG and the degree to which they thought the SDG was relevant to the landscape architecture discipline. Goals which scored as most relevant (in descending order) are protecting marine resources (96%), reducing consumption (96%), protecting terrestrial resources (95%), human settlements (92%), and water and sanitation (89%). Overall, participants ranked the relevance of the SDGs as much higher than their involvement. Even the lowest-scoring relevance goal (gender equality, 60%) scored higher than the 18 Developed contexts are responsible for implanting SDGs as well. In addition to developed countries having their own pockets of poverty and environmental degradation, developed countries also bear responsibility for the negative effects that extend beyond their borders. For example, manufacturing and production create excess waste, and consumption of energy and resources.
highest-scoring goal for involvement (consumption and production, 47%) (See Appendix C).

Landscape architecture is directly relevant to the kinds of projects that are trying to implement the SDGs. Thus, there exists a need to scrutinize existing practices in landscape architecture and international development and the assumptions behind them. The profession is already primed to be involved given the familiarity with topics, i.e., infrastructure, agriculture, community dwelling, etc. The challenge here is that while many of the topics overlap, the contexts and philosophies do not. Although the SDGs are certainly relevant to developed contexts,\(^\text{19}\) the focus of this dissertation is the developing context as this is where the majority of the world’s subaltern people and places are located, and the majority of international development projects take place.

**Intangible Aspects of Landscape**

The topics listed by IFLA and the SDGs focus on the tangible, biophysical aspects of landscape and landscape architecture’s role in shaping physical place and environment for human use. But landscape is also an intangible arena, in which “ideas are exchanged and powers enacted” (Egoz, Makhzoumi, & Pungetti, 2011, p. 5).

Landscape straddles both realms of culture and nature; it is at once “physical – the action of shaping land and natural resources to fulfil human needs” and a “mental picture of the world that is culture and place specific” (Egoz et al., 2011, p. 5). Landscape is about “all manner of other things than just landscape” and includes

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\(^{19}\) The SDG’s are relevant to developed contexts because developing countries have responsibilities, especially regarding production and consumption. Also, subaltern places are not exclusive to developing countries.

In recognizing the importance of the intangible aspects of landscape, landscape research has recently shifted from “the ‘superficial study of the earth’ to the social processes shaping landscape as polity and place” (Olwig, 2005, p. 294). The works of Henri Lefebvre and David Harvey speak of landscape in terms like “space” and “social space” to push us to understand “the role of space in the larger debates that raged through the social sciences and cultural studies: structure versus agency, modernism versus postmodernism, Fordism versus post-Fordism” (Henderson, 2003, p. 181). Cultural geographer, Don Mitchell (2003), argues that landscape research must also include “the struggle against racism, sexism and homophobia; the never-ending battle against genocide and for a decent, healthy life for all” (p. 790). As cultural geographer, George Henderson (2003), explains, this is “landscape as discourse,” which is the idea that the “landscape is an ideological expression, particularly one that aestheticizes power and subjugation” (p. 182).

The profound and complex elements of landscape necessitate thorough theoretical investigations into how we shape and are shaped by our landscapes. Yet, landscape architects have been criticized for their lack of theoretical depth. Cultural geographer, David Lowenthal (2007), argues that most landscape architects “are too busy reshaping scenes to bother theorizing about them” (p. 640). Maggie Roe (2011) acknowledges that landscape architects are criticized for not having ‘a theory’ or discussing theory as much as other disciplines but softens her criticism by emphasizing the broad and continuously changing scope of landscape architecture. It is true that the
breadth of landscape makes both theory more difficult to develop and refine, but given the importance of landscape in all its social, political, and ecological dimensions, landscape architects should not shy away from the challenge to expand discussions on how theoretical aspects of landscape are incorporated into their practice.

When considering landscape architecture’s potential role in international development, a number of theoretical frameworks could prove beneficial, including world-systems theory and globalism. The theoretical framework of postcolonialism is used here because it attends to power relationships between developed and developing contexts, which was one of the first themes this research identified as a critical element. Postcolonialism highlights the need for landscape architects to consider how problems of inequity are problems of power, and enables exploration of those problems through not only a myriad of social and environmental concerns, but also a landscape architect’s self-critical understanding. As with any theory, postcolonialism can help designers navigate decisions in the real world by establishing a base of understanding on how the world works, assertions on how the world should work, and ideas on how to make the world better.

Postcolonialism prioritizes, that is to say, it values, equity for the subaltern to the point of taking a political stance of advocating for the subaltern. Strategies based on postcolonialism’s theoretical premise help us locate uneven power dynamics and become more self-aware of how our actions might reinforce uneven power dynamics, but many of the attempts to address power in the subaltern come from explicitly identifying the subaltern as having value and making decisions that reinforce the idea that the subaltern has value. While it is clear that actions do not flow from values in a
straightforward way (Peterson, 2006), values, whether individual or collective, play an important role in decision-making and design processes. Thus, looking at landscape architecture’s values as they are currently expressed and how they have historically evolved, provides a critical perspective on what motivates landscape architects, and how they approach decision-making.

Values

The “trifecta” of ecology, community and delight, is one of the most common ways landscape architects currently describe their values, which respectively equate to environment, society, and aesthetics. (Thompson, 2002). These values are directly related to landscape architecture’s multidisciplinary nature and speak to its interest in the relationship between human and environmental systems, as well as human’s phenomenological experience of that relationship. Given the inextricable link between humans and the environment, the goal of uniting this tripartite value system into an inclusive whole is admirable, and the idea is supported by similar goals in sustainable development and land ethics (Leopold, 1949; Thompson, 2007). Landscape architects may indeed value ecology, community, and delight, but there is little consensus on how those values should be prioritized.

Although landscape architects often describe their profession as “art + science,” the roles of art (delight) and science (ecology) are especially contested in landscape architecture literature. Such contestation is unsurprising given that in Western culture, art and science are often pitted against each other on opposite sides of a spectrum.

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20 A legacy of the Enlightenment Era, the art and science divide is responsible for the perceived incompatibility between reason and emotion, science and humanities, positivism and non-positivism,
Ideally, as the rhetoric and definitions suggest, landscape architects are meant to bridge the divide by uniting art with science. However, often the debates within landscape architecture have echoed, rather than ameliorated division. For example, Ian McHarg “believed in a grand synthesis of culture and nature yet to come…[he] was a romantic, but, unlike romanticism, it was the scientific method in the form of rational (regional) planning and not idiosyncratic, artistic inspiration that would bring it about” (Weller, 2014, p. 87). Similarly, landscape urbanism, a facet of landscape architecture that argues landscape and environmental function should dictate the organization of spaces, asserts an interest in systems and strategy over form and design (Herrington, 2010).

It is unclear if approaches in landscape urbanism are truly indifferent to aesthetics or if they simply seek a new aesthetic (Thompson, 2012), but the rhetoric is strikingly different from how landscape architect, Laurie Olin (1988), for example, argues that the most thoughtful landscape designs move beyond the programmatic and instrumental to be creative and artistic expressions. Elizabeth Meyer (2015) celebrates the aesthetics of constructed nature as a human experience—one that provides valuable cultural and societal services to humanity. Bonj Szczygiel (2011) claims that art and the humanities are fundamental to landscape architecture’s value to society at large and that aesthetics is the critical connection that joins ecology and everyday human experience.

civilized and primitive, global and local, and quantitative and qualitative in Western culture (Plumwood, 1993).
Both scientific knowledge and aesthetics play important roles in the landscape.\(^{21}\) Values of “ecology” and “delight” are commonly debated in landscape architectural practice, and landscape architecture’s current challenge is to reconcile the polarization. However, the social and political aspects of “community” are often left on the margins of the debate (Kaplan, 2012). Landscape architectural discourse celebrates the profession’s positive role in society, but landscape architects seldom engage that discourse to affect social change (Thompson, 2002).\(^{22}\) In a study that surveyed landscape architects on their practice, “only 2 of the 26 interviewees could be said to have translated their professional concerns into political engagement” (Thompson, 2002, p. 89). In a review that analyzed professional organization statements from architecture, planning, and landscape architecture for elements of “social consciousness,” Brown & Jennings (2003) found that planning was the only profession to explicitly highlight ethical approaches to social concerns, and that collective consciousness in landscape architecture has failed to recognize the inherently political nature of landscape. Crewe & Forsyth (2003) note that only 8 percent of the landscape architecture projects surveyed were classified as “plural design,” which is defined as design towards equality, justice, and empowerment. Crewe & Forsyth (2003) also argue

\(^{21}\) This is especially true in development situations where the “expert” outsider from the Western world prioritizes scientific knowledge over local knowledge, or when aesthetic values between development practitioner and local community clash due to cultural differences. Furthermore, some practitioners inadvertently espouse the colonial notion that developing places are unable to have (or are undeserving of) aesthetically pleasing environments because addressing the lack of basic services takes precedence. Aesthetics and function are not mutually exclusive, and developing places are just as deserving of beauty and aesthetic consideration as developed places.

\(^{22}\) To be clear, this concept of “social” extends beyond the scope of landscape designs intended for recreation, walkability, or public gathering spaces. Such projects certainly contribute to a healthy social fabric, but that does not necessarily equate to engaging societal concerns. The concept of “social” here speaks to fundamental social, cultural, and political issues of the human condition such as well-being; equity; livelihood; modes of production; and access and rights to natural resources.
that “politically, landscape architects have been forced to seek out the powerful to promote and subsidize their work, and have not shown themselves specifically concerned with the disadvantaged. This focus contrasts with related fields that consider themselves serving the public interest in an active political arena” (p. 50), such as urban and regional planning.

**Olmsted’s legacy of valuing social and political advocacy**

The apparent lack of social and political engagement identified by Thompson (2002), Brown & Jennings (2003), and Crewe & Forsyth (2003) is surprising not only considering the rhetoric with which landscape architects explain their values, but also given the fact that the profession of landscape architecture was born from an ethos dedicated to alleviating social woes. Frederick Law Olmsted, often heralded as the “Father of Landscape Architecture,” is renowned for implementing urban parks as a response to the concern for public health. His projects, most notably Central Park in New York City, were a result of a dedication to social reform as a response to the impoverished urban conditions of the late 19th century. Olmsted’s approach can be summarized as valuing natural beauty and social welfare. He subscribed to the 19th century City Beautiful notion that grand, beautiful places could bring about social order and remove social conflicts (Busà, 2009). Critics of City Beautiful argue that it was repressive and largely unsuccessful in bringing about positive social change (Jacobs, 1961; Szczygiel, 2003). Although arguably misguided by the theoretical premise of the time, Olmsted’s aesthetic stemmed from his drive to protect the beauty of nature and promote social well-being—values that landscape architects continue to support today.

In addition to concerns for urban social welfare, Olmsted also contributed to the abolitionist movement. His book, *Journeys and Explorations in the Cotton Kingdom*
elaborates on his explorations in the American South, which included interviews with plantation owners and slaves. His writings on the South were distributed through the New York Times and largely contributed to the abolitionist mindset in the North (Martin, 2011). He also dabbled in “scientific farming,” an approach to farming for social benefit rather than profit, and founded an organization that would eventually become the Red Cross (Martin, 2011).

Olmsted demonstrated a political advocacy for social wellbeing that landscape architects could reincorporate in their theory and practice as a means of addressing the criticisms that our work does not attend to social and political concerns as well as it could. In addition to designing urban parks, Olmsted also chaired a commission to decide what to do with Yosemite Valley, the first tract of wild land set aside by congress (Spirn, 1995). In his reports, he strongly advocated that places like Yosemite were of vital importance to the nation, and that the government should assure public access for all citizens to freely enjoy the natural beauty and its beneficial physical, mental, and moral effects (Spirn, 1995). He feared that without government protection, places like Yosemite would be monopolized as “rich men’s parks” (Spirn, 1995, p. 92). Olmsted’s devotion to public parks is a point pride for landscape architects, and some argue that his legacy of protecting the beauty and function of the natural environment needs to be reclaimed (Spirn, 1995).23

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23 I agree that public parks are an important legacy. I would add that landscape architects need to not only protect public parks as a valuable element of the landscape, but also consider other ways advocacy for their values could positively affect changes in the world. Public parks like Yosemite exist largely because landscape architects fought for them to exist.
However, despite his advocacy that all “citizens” had a right to enjoy Yosemite, Olmsted had few qualms about evicting Native Americans from the valley. He believed they were “lazy, ravenous, brutal, filthy, improvident, lying, treacherous, bloodthirsty scoundrel[s]” (Olmsted (1865) quoted from Olwig, 2011, p. 42) who marred the beauty of the valley and were undeserving of the natural scenery because they presumably did not appreciate beauty the way “civilized” people did. Here, the values of beauty as defined by the “civilized American” viewpoint trumped Native Americans’ values and rights to livelihood and home. Olmsted’s argument, rooted in utilitarianism and transcendentalism, claimed that the majority’s experience of scenery is more important that the “smaller number” of Native American peoples who would be displaced (Olwig, 2011, p. 42).

Olmsted’s approach to Yosemite may seem like an extreme or outdated example, but little difference exists between his treatment of Yosemite’s native people and the thousands of subaltern people who are routinely displaced through development efforts. The justification for such displacements is often widely accepted as valid and includes safety, economic development, even the supposed benefit to those being evicted. This example should give landscape architects pause—certainly it is important to thoroughly debate and discuss the philosophical components of “good” and “right” actions in the landscape, but we must also incorporate understandings of how values compete in the landscape, at times to the point of oppressing entire groups of people.
Summary

Landscape architecture’s strength is that it promotes and values the social, environmental, and aesthetic aspects of landscape, and the scientific and humanities-based knowledge needed to support, understand, and implement those values. Its challenge is that it has yet to integrate all three into practice. While debates and strategies revolving around ecology and aesthetics are currently well-established in landscape architectural practice and literature, it is becoming increasingly clear that landscape architects need to better orient their practice to meaningfully address social and political concerns, as they are integral aspects of the landscape and our ethical understanding of the landscape. Certainly, debates on ecology and aesthetics should continue, but those debates need to be situated within a broader understanding of social and political contexts to be effective.


However, as Mitchell and Mels (2011) highlight, it will take more than awareness or cognition of society and rights, but a practice-oriented understanding of how

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24 Postcolonial concerns regarding the conflictive power dynamics that can arise between scientific and non-Western knowledge is discussed in the concluding chapter.
landscape architects’ values affect social and political aspects of the landscape. The challenge of not only acknowledging but implementing social and political values into the landscape is acutely critical in the developing context. Landscape architects promote innovative approaches to ecology and aesthetics. However, ethically addressing the core social and political elements of landscape is a crucial challenge for landscape architects participating in international development.

**Wicked Problems and Design Thinking**

If landscape architects are to enhance international development, they will need to actively pursue integrating social concerns such as equity and justice into their theories and approaches—for the sake of both society and environment. In fact, landscape architects are already primed to contribute to solving social issues in ways that many other practitioners are not. The profession foundational roots connect society, culture, ecology, and the economy, within an ethos dedicated to social welfare. In particular, design thinking offers a means to deal with the kinds of complex social problems that Rittel and Webber (1973) refer to as “wicked problems.”

Landscape architects are trained in “design thinking” as a method of dealing with complex problems. This intuitive, non-linear, and creativity-focused approach is fundamentally different from traditional or scientific approaches often embraced in international development. To be clear, designers still rely on scientific and rational information\(^\text{25}\)—in landscape architecture incorporating knowledge from natural sciences, social sciences, humanities, planning, and engineering is imperative. Indeed, some

\(^{25}\) The tenuous relationship between scientific knowledge and local knowledge in international development will be discussed in subsequent chapters from a postcolonial viewpoint.
argue that forming rigid boundaries between design, engineering, and marketing is impossible, as is relying only one of the sciences, i.e., natural, social, or humanistic (Buchanan, 1992). The focus here is to better understand the way designers bring together those pieces of information to create and explore solutions and how those solutions are distinguished from more technocratic, universal, and linear problem-solving methods.

**Wicked Problems**

During the Industrial Age of the early 20th century, adherence to efficiency, rationalism, and professional expertise shaped urban planning, civil engineering, and the scientific management movement (Rittel & Webber, 1973). Although many today acknowledge the complexity of societal problems, most approaches to social issues are still built on rationality and the expertise of the “professional” who can diagnose any perceived problem, expose its true nature, and skillfully excise its cause (Rittel & Webber, 1973). Solutions to social problems, especially globally scaled ones, will require a fundamentally different conception of the problems; particularly one that acknowledges the challenges and inherent complexity. To this end, Rittel and Webber (1973) use the concept of “wicked problems” to help explain why the scientific basis for addressing social policy issues related to the public good and equity has failed. The intention is not to dismiss science and scientific knowledge, but to advocate for a different and more appropriate way of comprehending and framing problems. Unlike the “tame” problems that science deals with, “wicked problems” have no clear formulation or

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26 The role of scientific expertise and the expert is especially relevant in international development. See David Mosse (2010) for a poignant explanation of how outside experts, through use of technology, focus on narrowly defined problems and can often worsen the very problems they intend to resolve.
solution because they are “never solved. At best they are only re-solved—over and over again” (Rittel & Webber, 1973, p. 160). Part of what makes these problems wicked is the fact that “the process of formulating the problem and conceiving the solution (or re-solution) are identical” (p. 161).

Consider, for example, what would be necessary in identifying the nature of the poverty problem. Does poverty mean low income? Yes, in part. But what are the determinants of low income? Is it deficiency of the national and regional economies, or is it deficiencies of cognitive and occupational skills within the labor force? If the latter, the problem statement and the problem “solution” must encompass the educational processes. But, then, where within the educational system does the real problem lie? What then might it mean to “improve the educational system”? Or does the poverty problem reside in deficient physical and mental health? If so, we must add those etiologies to our information package, and search inside the health services for a plausible cause. Does it include cultural deprivation? spatial dislocation? problems of ego identity? deficient political and social skills?—and so on. If we can formulate the problem by tracing it to some sorts of sources—such that we can say, “Aha! That’s the locus of the difficulty,” i.e. those are the root causes of the differences between the “is” and the “ought to be” conditions—then we have thereby also formulated a solution. To find the problem is thus the same thing as finding the solution; the problem can’t be defined until the solution has been found (Rittel & Webber, 1973, p. 161).

Furthermore, wicked problems are “wicked” because every attempt to learn by trial and error poses another set of wicked problems; those who attempt to solve wicked problems are liable for the consequences generated, and those consequences can be far-reaching (Rittel & Webber, 1973). No criteria exist to determine when a solution has been found for a wicked problem, nor is there an ultimate test to appraise the solution (Rittel & Webber, 1973). With no well-described set of permissible operations, it becomes very difficult to select a potential approach (Rittel & Webber, 1973). Every wicked problem is essentially unique, thereby requiring unique solutions (Rittel &
Webber, 1973). Every problem can be considered to be a symptom of another problem (Rittel & Webber, 1973).

Rittel and Webber (1973) also point to the fact that diverse values are held by different groups, and a solution for one may prove to be a problem for the other. Without an overarching ethic to help determine which group should have its ends served, the traditional reconciliation approach favors professional experts and politicians (Rittel & Webber, 1973). Such a response is insufficient in answering the difficult questions associated with wicked problems because there are no value-free, true-false answers to any wicked problems (Rittel & Webber, 1973). As “professional experts,” it is critical that landscape architects reevaluate and critically self-reflect on their role in addressing such problems.27

**Design Thinking**

Design-thinking and the approach needed to address wicked problems are similar in that both are characterized by finding open-ended solutions, using non-linear processes, and connecting multi-dimensional factors. Thus, landscape architecture—a design profession dedicated to both social and environmental aspects of the built and natural environment—offers an exceptionally relevant approach and process for addressing wicked problems found in sustainable development. To be sure, as previously mentioned, landscape architects will need to expand their social and political understandings of landscape and further explore their value sets if they wish to be effective in dealing with wicked problems of international development. Once framed

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27 Critical self-reflection and accountability will be explored in subsequent chapters.
within a postcolonial ethic, landscape architects’ design thinking approach could prove to be extremely effective in finding solutions to international development problems.

Design thinking is not well defined or understood, either by the public or those who claim to practice it (Kimbell, 2011). Depending on the definition, “design thinking” can apply not only to design professions such as landscape architecture, urban design, architecture, and interior design, but also to science, engineering, business, etc. Research on design and design-thinking has gained momentum in recent decades, and non-design professional fields, especially business, have been trying to incorporate “design thinking” and “creativity” as ways to solve problems. The eagerness to apply “design thinking” to problems in many non-design professions, especially information technology (IT) and business, has created a demand models and toolboxes related to design thinking (Dorst, 2010).

One of the main divides in the literature on design thinking involves which professions qualify as a design profession and whether to include approaches in science, planning, and engineering as design thinking. Many scholars argue that design thinking does not “belong” to designers, and that other professions could greatly benefit from incorporating design thinking into their practice. Cross (2007) suggests that design thinking is applicable to general education, not just for those pursuing a professional role in design practice. Adams et al (Adams, Daly, Mann, & Dall'Alba, 2011) argue design practice is experienced across a number of disciplines including chemical engineering and physics.

Landscape architecture is firmly situated in the “design” profession category, but landscape architects often describe design and their profession as drawing inspiration
and from both “art” and “science.” If landscape architecture is justified in appropriating science in design it seems unreasonable to assume scientists and engineers cannot also incorporate design and design thinking in meaningful and productive ways. However, landscape architects have dedicated significant time and effort in honing design thinking as an innate and intuitive aspect of their skill set. Designers do not own the rights to design thinking, but the landscape architecture profession, by definition, focuses on it. Given how foundational design thinking is to the profession and this dissertation’s focus, the discussion addresses this concept from a landscape architecture perspective.

Design thinking’s abductive logic seeks solutions to open-ended problems often defined by complex and interconnected factors. Thus, design thinking employs logic differently from scientific thinking. In traditional and scientific approaches, logical frameworks of deduction and induction, as two forms of analytical reasoning, predict and explain phenomena that are already known in the world and operate within the equation of: things (the “what”) plus the working principle (the “how”) that lead to the “result” (observed phenomena) (Dorst, 2010). In deduction, we know the “what” and “how” and can safely predict the results. Induction uses the “what” and the observed “results” to develop a working principle on “how” those aspects interact (Dorst, 2010). Abduction, however, offers a logical strategy when the result is not a known or observed fact but rather an unknown and “aspired” (or aspirational) value (Dorst, 2010). In abductive reasoning, “the challenge is to figure out ‘what’ to create, while there is no known or chosen ‘working principle’ that we can trust to lead to the aspired value” (Dorst & Tietz, 2011, p. 132). Designers use strategies to work backward from the value that
needs to be created, and then working forward to see if a “thing” operating in a defined “working principle” can actually lead to the aspired value. The back and forth nature of the design process is fundamentally different from traditional methods in scientific thinking, and the results are entirely dependent on which values are selected and how they are prioritized.

Design thinking is further differentiated from “scientific” thinking in that design tends to be solution-focused, rather than problem-focused. Lawson (2007) conducted a social experiment in which two groups, one of architects and the other of scientists, were asked to arrange 3D colored blocks in a way that satisfied certain undisclosed rules. In Lawson’s study, the groups approached the problem with dissimilar problem-solving strategies:

…[W]hile the scientists focused their attention on discovering the rule, the architects were obsessed with achieving the desired result. The scientists adopted a generally problem-focused strategy and the architects a solution-focused strategy. Although it would be quite possible using the architect’s approach to achieve the best solution without actually discovering the complete range of acceptable solutions, in fact most architects discovered something about the rule governing the allowed combination of blocks. In other words, they learn about the nature of the problem largely as a result of trying out solutions, whereas the scientists set out specifically to study the problem (Cross, 2007, p. 6).

As an essential and important characteristic of design (Orthel, 2015), “creativity” involves concepts of “new, novel, original, intelligence, problem definition, and flexibility” (Pedersen & Burton, 2009, p. 28). Because designers “tend to understand the problem by framing the design statement by means of the adopted design conjectures” rather than “accepting the problem given” (Çalışkan, 2012, p. 280), designers are able to allow creativity and innovation to guide experimentation and development of ideas—often
yielding interpretations and solutions that would not have been conceived of using traditional problem-solving approaches.

The classic linear scheme of “understand the problems,” “gather information,” “analyze information,” “synthesize information and wait for creative leap,” and “work out solution,” does not yield solutions for wicked problems (Rittel & Webber, 1973). One cannot first understand, then solve a wicked problem because the information needed to understand the problem depends on one’s ideas for solving it. Problem and solution must be worked out together, just as they are in design-thinking. Lawson (2014) depicts design thinking as “the negotiation between problem and solution” as “the reflection of the other” (p. 48). While a number of activities tend to happen throughout any design process, the idea that those design activities happen in any order or that they are separate, identifiable events is questionable (B. Lawson, 2014). Similarly, Rodgers and Winton (2010) analyze a variety of design practices and find that instead of an orderly progression of steps, design thinking is conceived of as a system of overlapping spaces, namely: inspiration, ideation, and implementation.

Design thinking routinely processes highly complex and interconnected factors. “Because design problems are so multi-dimensional they are also highly interactive…it is the very interconnectedness of all these factors which is the essence of design problems, rather than the isolated factors themselves” (B. Lawson, 2014, p. 60). While multidimensionality applies to design thinking in all design professions, landscape architecture’s engagement with ecological and cultural processes makes it a particularly applicable profession for dealing with the social and environmental factors in development.
Summary

In many ways landscape architecture is aptly primed to contribute to international development. Although predominantly a developed-world discipline, landscape architecture deals with many of the same social and environmental concerns that international development addresses in the developing world. Furthermore, the breadth of expertise is arguably one of the landscape architecture’s greatest practical strengths, as it integrates and engages the complex elements of landscape. A particularly useful approach in dealing with such complex problems, design thinking offers a different perspective from the typical strategies in international development that tend to focus on social science and policy.

Still, the contexts in which landscape architects tend to work are quite different from those in international development. Landscape architecture is predominantly a developed-world profession (Thompson, 2007). As such, landscape architecture’s developed-world approaches will need to be reevaluated and tailored to the developing-world context.

The diversity and contested nature of values in landscape architecture presents a significant challenge to engaging with projects in developing contexts. The art and science dichotomy needs to be reconciled in order to strive for an approach that genuinely incorporates both perspectives. Solutions will not take an either-or position and strategies in global development will rely on practitioners who can navigate a range of contexts. Landscape engenders a rich multitude of interconnected political, cultural,

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28 Arguably, international development is also dominated by a developed-world mindset. To challenge this, Chapter 2 proposes incorporating “alternative development” models which rely on postcolonial criticisms to help landscape architecture’s involvement in international development better relate to developing contexts.
social, and physical facets. It thus requires equally rich methods, philosophies, and ethics to help make sense of it. There is room for subjective, objective, and combined ways of thinking about landscape.

The most pressing challenge is the notion that landscape architects have not devoted as much attention to the social and political aspects of landscape. Given the inextricable link between environment and society, even if landscape architects collectively decided to focus on environmental values, the solutions would not be viable without addressing social concerns as well. For landscape architects to have a positive impact on developing places, theory and practice must respond specifically to the extreme examples of both social and environmental challenges that the developing world so often faces—not just as a transfer of ideologies from the developed world, but specifically through an ethical consideration of hierarchies of power in the landscape, and ethical questions such as: who makes decisions, whose values shape the landscape, and whose interests are being served?

The next chapter explores some important ethical considerations from international development studies and environmental ethics that could be incorporated into landscape architecture. The focus is on landscape architecture fundamentally engaging the wicked problems of development, so this mindset becomes mainstreamed within the profession. Thus ultimately any list or definition that explains what landscape architects do will include: “locating goodness, dispelling wickedness, and resolving problems of equity in an increasingly pluralistic society” (Rittel & Webber, 1973).
CHAPTER 4
ENVIRONMENTAL ETHICS OF LANDSCAPE ARCHITECTURE

Overview

This chapter situates landscape architecture’s ethical tenets of utilitarianism and sustainability within the discourse of environmental ethics. Doing so provides the means to explore landscape architects’ professed ethics and values in relation to a postcolonial approach to international development. The overarching goal for this dissertation is to elaborate on ways landscape architects could make better ethical decisions that combat oppressive power dynamics, when working in developing places, especially the subaltern. Understanding how landscape architects currently perceive and express their ethical stances from an environmental ethics perspective helps guide recommendations and highlights opportunities for growth.

As a normative activity, landscape architecture not only makes places, but seeks to make “good” places—a notion that immediately takes us into the field of ethics (Thompson, 2000). Ethics, defined as “the philosophical study of moral values and rules, that inform decisions about wrong and right” (Park & Allaby, 2017) help us define and determine how we should act, especially in relation to “others,” whether human or non-human. Landscape architecture features nearly inexhaustible examples of ethical issues. All decisions on the social allocation of land, such as whether to use a parcel of land for low-income housing or high-priced condominiums, or to conserve natural areas for wildlife or use areas for recreational activities, are questions of ethics (Beatley, 1991; Corner, 2014). Landscape architects constantly negotiate values rooted in environmental health, societal needs, economics, and aesthetics in both the built and
non-built world. However, few resources exist to help guide ethical practice in landscape architecture, especially within the context of the subaltern.

This dissertation mostly relies on discussions from the field of environmental ethics simply because they feature concepts relevant to the profession of landscape architecture. However, focusing on environmental ethics does not negate the concern for the human condition, nor insights from social ethics. Social and environmental ethics remain distinguished as different philosophical fields, but the often unclear delineations between the two suggest a significant overlap, as environmental ethics speak explicitly of social concerns and vice versa. The inexorable relationship between humans and the environment should be explicitly accounted for in any approach to landscape architecture and international development. As Shrader-Frechette (2005) argues, “protection for people and the planet go hand in hand” (p. 5), and as such, this dissertation examines ethical approaches in landscape architecture for both society and the environment.

Landscape architects tend to discuss ethics along with concerns for aesthetics, especially in debating whether aesthetics and form of constructed landscapes should be guided by art and human experience or by ecological function (Boris, 2012; Gobster, 1999; Reimer, 2012; Rosenberg, 1985; Sheridan & McMenamin, 2012; Thompson, 2007; Walliss, 2012). Debates regarding landscape aesthetics offer insights into the human-environmental relationship relevant to the postcolonial landscape and explorations of power. From perspectives that advocate art and experience, Jala

29 Social ethics tend to focus on the treatment of humanity through civic, social, and political institutions, and environmental ethics tend to focus on the treatment of the non-human world.
Makhzoumi (2011) shows how the beauty and scenery of our landscapes can be strong motivators for collective care and protective action even amidst hegemonic power dynamics. Amita Sinha (2010) explores how imagery in public parks can be highly political and draws upon pre-colonial vernacular to propose a more inclusive park model.

On the other side of the aesthetics debate, knowledge from scientific fields—ecology in particular—has profoundly impacted landscape architecture and remains an integral aspect of landscape architecture education and practice. Among the first to advance an ecological approach in landscape architecture, Ian McHarg (1995) brought landscape architecture into the fold of the Environmental Movement. A number of landscape architects have advanced and promoted a focus on ecology within the profession (Johnson & Hill, 2002; Waldheim, 2012). Wu (2008) argues that landscape ecology is one of the most comprehensive and effective ways to reach the goal of urban sustainability.

However, landscape architecture arguments that conjoin ethics and aesthetics are largely unhelpful for the purposes of this dissertation because they often advocate for either art or science and thus perpetuate an unproductive divide.\textsuperscript{30} Both art and science are integrated into how we perceive and understand the built and natural world,

\textsuperscript{30} The different viewpoints on art and science in landscape design and theory closely mimic the philosophical debate between cognitivism and non-cognitivism in environmental aesthetics and ethics. Cognitivists assert that natural sciences structure “true” aesthetic judgements, which not only enlighten aesthetic perceptions, but also endow them with objectivity (Brady, 2008). Conversely, non-cognitivists forefront the subjective qualities of aesthetic experience, challenge the Kantian subject-object dualism, and argue that emotional responses can play a legitimate role in the appreciation of nature (Brady, 2008). I agree that we should challenge subject-object dualism and add that all forms of knowledge must be understood in the context in which they are constructed and the context in which they will be used to inform decisions.
but when we dichotomize them, we are left with few insights that can be translated into bolstering the profession’s ability to address the wicked problems of the developing world.31 Landscape architecture’s relationship with art and science32 is deeply entrenched in the profession’s history and identity (Czerniak, 1997; Ellison, 2013; Henderson, 2003; Heyde, 2014; Koh, 1982). Rather than advocate one value over the other, we must step back in order to better engage discussions of how our implicit and explicit values shape our actions on the landscape. More specifically, we must focus our attention on how those values can perpetuate or end forms of oppression, especially for social and environmental problems in the developing context.

With the exception of aesthetics, most ethical conversations in landscape architecture have been centered around notions of sustainability and stewardship—these concepts are richly debated in the philosophical field of environmental ethics. Environmental ethics ask what humans value in the non-human world, why they value what they do, and how those values affect the relationship they have with the environment. In this dissertation, I extend the landscape architectural discussions of valuing the environment and society toward also valuing subaltern people and the places they inhabit. Thus, this chapter reviews some of the main anthropocentric and non-anthropocentric categories in environmental ethics. It then explains some of the commonly mentioned ethical models in landscape architecture and situates them within discussions of those models from the perspective of environmental ethics.

31 We need to understand art and science not as opposing concepts, but different forms of knowledge that are not hierarchized. To this end, ecofeminism’s criticism of dualisms will be discussed in more detail in the following chapter.

32 See Corner (2014) for an interesting essay on the relationship between ecology and art in landscape architecture and Christophe Girot’s (1999) argument to “reconcile our senses with science” (p. 66)
Environmental Ethics Primer

Theories in environmental ethics are categorized by how they determine intrinsic worth and by extension, which objects are worthy of moral consideration (i.e. humans, animals, plants, mountains, streams). The two broad divisions within the field, anthropocentric and non-anthropocentric, provide a basis for understanding the arguments one might encounter in environmental ethics.

Anthropocentric theories place humans at the center of the moral universe. Here “human beings are not only the only moral agents in the world, they are the only creatures with moral interests or intrinsic worth” (Thompson, 1998, p. 175). Nature only has value regarding its usefulness in meeting human needs. Anthropocentric theories can be further divided into egocentric and homocentric theories. Egocentric ethics are grounded in the self and the notion that what is good for the individual is good for society (Merchant, 1990). Egocentric ethics are generally associated with capitalism and free markets. While egocentric thinking is rarely concerned with the environment, it might make an appeal to individuals to prevent ecological harm, such as with Garrett Hardin’s Tragedy of the Commons (Thompson, 2007).

Most anthropocentric theories are homocentric, meaning they focus on society and maximizing social good. They include models of sustainability, rights-based theories of justice, or the utilitarian concern for the greatest good. While these approaches often include environmental concerns, human perspective and human experience take precedence over non-human concerns; in other words, the unit of value is humans, whether unborn, marginalized, or the majority, respectively.

Conversely, non-anthropocentric models reject human superiority and start from the position that all living things—or in some cases, non-living things like mountains or
streams—have intrinsic moral value, and as such we have moral obligations towards them. Non-anthropocentric theories are often classified as either ecocentric or biocentric.

Ecocentric ethics are grounded in the cosmos, and draw on the science of ecology for guidelines to resolve ethical dilemmas (Merchant, 1990). Ecocentric theories, most notably, Aldo Leopold’s (1949) land ethic, take a holistic approach in valuing the natural world for its complexity and interconnectedness.33 Leopold’s land ethic is a central pillar of contemporary environmental philosophy, and he was among the first to argue for an ethic that includes the biotic community. Leopold argued that ethicists should use science to frame their ethical norms, and focus on how landscapes function ecologically, rather than in terms of physical or biological composition (Freyfogle, 2009). For Leopold (1949), a thing “is right when it tends to preserve the integrity, stability, and beauty34 of the biotic community” and is “wrong when it tends otherwise” (pp. 224-225).

Leopold understood ethics as a body of normative ideals that require individuals to broaden their selfish concerns and self-interests for the sake of the welfare of other community members (Freyfogle, 2009). He believed humans are limited beings who

33 Leopold’s land ethic warrants further investigation as a potential means for landscape architects to incorporate an ecocentric perspective. However, it will not be thoroughly explored in this chapter because although Leopold’s concern for conservation, ecology, and aesthetics are often referenced in landscape architecture, there is little indication that landscape architects have moved from a homocentric to a truly ecocentric stance. Even Ian McHarg, one of the most famous advocates for ecocentrism, espouses rhetoric and philosophies that are decidedly homocentric (Herrington, 2010). This chapter addresses the kinds of ethical approaches landscape architects have most commonly adopted, especially those relevant to discussions for postcolonial and environmental ethics discussions.

34 In environmental ethics, few have taken Leopold’s reference to beauty seriously, as it was assumed too vague and subjective a concept to provide guidance (Freyfogle, 2009). However, landscape architects do tend to refer to Leopold specifically in conjunction with discussing the ethics of beauty and aesthetics in landscape design (Van Damme, 2015) (Thompson, 2007) (Perry, Reeves, & Sim, 2008).
may never understand the functioning of the land and calls for humans to act humbly and draw lessons from other species (Freyfogle, 2009). Humans are “plain members and citizens” of the biotic community, and therefore have a moral obligation to support the long-term welfare of that community (Leopold, 1949).

Biocentrist, Paul Talylor (2011b), calls for us to behave with an attitude of respect toward all living organisms on an individual basis, not a holistic one, as with ecocentric theories. Taylor (2011b) claims that all living things are “teleological” (i.e., goal-oriented) beings who pursue their own good for their own sake, regardless of their value to other beings or to the ecosystem. The biocentric outlook does not negate the interconnected relationships among species and between populations and the physical environment (P. Taylor, 2011b). However, Taylor (2011b) argues against holistic theories of environmental ethics and states that we cannot derive moral rules from our treatment of the earth as a kind of supraorganism, because doing so leaves no place for the good of individuals unless their pursuits support the good of the ecosystem. For Taylor (2011b), holistic theories cannot explain why the well-being of the ecosystem should count ethically, and there no explanation exists for why moral agents have a duty to preserve its good.

Most importantly, the biocentric outlook posits that fulfilling the duties of environmental ethics will at times require the sacrifice of at least some human
interests.\textsuperscript{35} Humans are equal—not superior—members of the Community of Life.\textsuperscript{36} Taylor (2011b) points out that conflicts between human and non-humans cannot be avoided since humans must use the natural environment and consume nonhumans to survive. Every society that has an established culture interferes with and makes use of some parts of the natural world, but the conflict is most pronounced in industrialized societies. If we deem the argument against human superiority as sound,\textsuperscript{37} then we cannot resolve competing moral claims by always siding with human interests (P. Taylor, 2011b).

Egocentric, homocentric, ecocentric, biocentric and ecofeminist models represent only a few of the broad strokes of environmental ethics. This diverse field of “deep ecologists,” “ecofeminists,” “social ecologists,” and “pragmatists” features numerous unresolved conflicts and debates over ideas about “anthropocentrism, biocentrism, rationalism, objectivism, patriarchism, dualism, hierarchy, moral rights, and ethics” (Corner, 2014, p. 268). Considering these different ethical viewpoints forces us to wrestle with foundational philosophical questions, such as: are humans a part of nature or separate from it? Are human interests above nature’s interests? Do humans have moral standing and responsibilities to the environment, and if so, why? How do humans

\textsuperscript{35} Urban Planner, Timothy Beatley (1991), suggests that landscape planners should adopt a biocentric ethic. Beatley (1991) argues that the biocentric outlook has tremendous implications for land use policy, especially in light of the expansion of human settlements and unprecedented wholesale destruction of natural habitats.

\textsuperscript{36} Taylor (2011b) offers a well-crafted argument that shows how the belief of human superiority is based on unjustified biases of qualities and capacities as well as the fact that we depend on the natural world, but it does not depend on us.

\textsuperscript{37} I agree with biocentrism’s premise that our moral claims and actions cannot be based on the false premise that humans are superior members of the Community of Life.
make ethical decisions when there is conflict between human society and the natural environment? How do we know what decisions are “good?”

Unfortunately, ethical debates surrounding such questions remain largely absent in landscape architecture (Corner, 2014). Several scholars have explicitly sought ways of integrating landscape architecture with environmental ethics, but these infrequent discussions exist outside mainstream landscape architecture. Landscape architects rarely mention explicit ethical theories, and when they do discuss ethics the focus tends toward sustainability and the utilitarian concern for the greatest good for the greatest number. These ethical stances are discussed in the following section.

**Landscape Architecture’s Ethics**

Landscape architecture is firmly a homocentric discipline (Thompson, 2002). Although environmental concerns are the hallmark of the profession, landscape architects tend to advocate for the environment from the position of how the environment benefits humanity, not based on the value of the environment or non-human life for its own sake (Thompson, 2002). Most landscape architects likely take a “weak homocentric” stance, whereby humans take priority, but the environment and non-human life are still strongly considered, albeit in second place. Landscape architects tend to rely on both the utilitarian notion of the greatest good for the greatest number and “sustainability” for ethical guidance.

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39 Utilitarian is being used in reference to the ethical model, and should not be conflated with the definition of utility that refers to usefulness or function.
Utilitarianism and Participation

Utilitarianism has significantly influenced the development of law, economics, and public policy. Based on the premise that happiness is the ultimate good, utilitarianism determines an action’s value by its means of supporting and producing happiness, which is defined as “intended pleasure, and absence of pain” (Gunn, 2009, p. 367). Utilitarians can distinguish between right and wrong if they can measure happiness; people then have a duty to calculate how much happiness any action will generate and choose the course of action which maximizes happiness (Wells & Schminke, 2001). Actions are right in proportion as they promote happiness, wrong as they produce the reverse of happiness (Gunn, 2009).

Utilitarianism faces a number of criticisms. Utilitarianism emphasizes good for the greatest number, which in certain situations means the preferences of the equivocal majority override the minority (Blanchfield, 2011). Indifferent to distribution, utilitarianism seeks to “maximize the sum-total of utilities, no matter how unequally that total may be distributed” (Sen, 1999, p. 357). Thus, if an action produces pain for one person but happiness for one hundred, it can still be justified as an ethical action. Further, the quality of the actions themselves do not matter (Nagel, 2006). The results matter, not the means by which we reach them (Nagel, 2006).

Some argue that utilitarianism demands tolerance and egalitarianism because it forbids considering people differently (Wells & Schminke, 2001). Since the amount of happiness counts, not whose happiness, utilitarian arguments would support that institutions such as slavery and racism be abolished; the intense suffering of the enslaved—although the minority—relatively outweigh the happiness of the slave owners. Gunn (2009) suggests that because utilitarianism’s egalitarianism implies
intergenerational equity, it may be an effective and practical basis for environmental policy. However, despite the egalitarian mandate, utilitarianism provides no specific guarantees that the marginalized—for example, the subaltern in developing places—will be adequately considered, especially in situations where happiness of the decision-making majority conflicts with the happiness of the minority. Happiness itself remains problematical—making interpersonal comparisons of utility is difficult, if not impossible, and no reliable method exists to quantify such a qualitative notion like happiness (Blanchfield, 2011). Furthermore, because human happiness is the moral standard, a number of environmental ethicists have rejected utilitarianism, arguing that it is philosophically hostile to developing a more respectful relationship to nature (Minteer & Collins, 2008).

In some cases, professional landscape architecture organizations have acknowledged the problems with utilitarian ethics and have advocated for “participation” as a means of ensuring minorities are a part of the community design process. In a document presented as providing a framework for building the concept of “public welfare” in landscape architecture, the Council of Landscape Architecture Registration Board (CLARB) has warned against adopting “any simple utilitarian hierarchy that equates greater numbers with greater good” (Erin Research Inc., 2010, p. 9). Following a quote by Charlie Chaplin in The Great Dictator, CLARB celebrates the notion that “we all want to help one another” and asserts that landscape architecture is “solidly rooted” in a concept of a public realm that sees no inherent ascendancy of majority over minority

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40 Utilitarianism’s value of happiness also presents issues when considering how to compare and measure happiness of animals and the environment with the happiness of humans.
issues (Erin Research Inc., 2010, p. 9). The evidence for this assertion is given in the “‘community design’ process, where the landscape architect takes on a facilitation role as opposed to dominating the design process” (p. 9).

Similarly, the European Landscape Council (ELC) advocates participation as a means by which landscape architects recognize local culture, lay knowledge, and values that often exist in the margins. The convention states that “public participation in landscape policy and management ‘should not be seen as a substitute for official decision making but as a complement to it. The objective is to draw into the decision-making process the views of all concerned groups of stakeholders, whether defined as local communities, residents, visitors, landholders, deprived groups, or specialist, alongside representative democratically elected bodies’” (Mitchell & Mels, 2011, p. 214).

Community design models focus on participation instead of empowerment and equity (Melcher, 2013). Participation has helped shift the focus of typical client-professional relations to include the public, specifically minorities, in the design process—a focus which is currently prevalent in the urban and regional planning profession, but much less so in landscape architecture (Brown & Jennings, 2003).

However, CLARB’s statement illustrates the importance of the profession collectively and rigorously investigating the role of values and power in landscape architectural practice. Taking on a facilitation role is not synonymous with opposing domination; indeed, many postcolonialists would argue that to equate the two is to perpetuate domination. Likewise, the ELC clearly prioritizes official decision making

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41 The planning profession went through a similar epistemological evolution from rational and utilitarian strategies to greater engagement with “planning ethics” and challenging the then-assumed value-neutral stance of professional institutions and governing councils (Winkler & Duminy, 2014).
over concerned stakeholders. The problem with participatory models like the one advocated by the ELC is that expert discourses (even those attempting to be sensitive to “other” voices) usually dominate and effectively exclude those less than fluent in such discourse to the point where experts exert a form of cultural imperialism and mask symptoms of deeper social conflicts (Mitchell & Mels, 2011).

Community design and participation models feature a number of postcolonial problems landscape architects currently have little means of dealing with ethically. First, even the most well-intentioned experts can inadvertently perpetuate the very hegemony they wish to avoid (Mitchell & Mels, 2011). Second, communities are heterogeneous, and when participatory models broadly categorize people as “community members,” “local” or “indigenous” the dichotomies of expert versus local, or Western versus indigenous are reinforced without recognition that these are “both polyvalent and polyvocal realms of discourse” (Shaw, Herman, & Dobbs, 2006, p. 268). Third, especially in the developing context, participatory models can risk romanticizing the local and indigenous to the point where its discourse denigrates those people and shapes limited alternatives (Everett, 1997; Thomas, 1994). Fourth, participation models require active citizenry to take the time, energy, and sometimes the risk, to participate, which often yields inadequate representation of minority groups,

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42 Urban Planning has significantly advanced discussions of postcolonial ethics, but its practices are largely based on normative ethical theories which preclude explorations of the nature and meaning of ethical values (Winkler & Duminy, 2014). Winkler and Duminy (2014) suggest re-engaging with metaethical theories that focus on critical engagement with the nature and meaning of values-based statements, attitudes and judgements embedded in planning theory and practice to find genuinely new ways of thinking about and acting in the world.

43 Polyvalent refers to many different functions and facets. Polyvocal refers to many voices.
whether based on economic, racial, political, or gender-based pressures (Braun, 1997; Sen, 1999).

In short, participation limits the ability of design to address broader social issues (Melcher, 2013). Until participation and community development efforts are situated within an ethic that explicitly recognizes how power affects the landscape—especially how outside “experts” impose their own values and biases as decision-makers, the participation model remains insufficient. Furthermore, regardless of whether the utilitarian hierarchy is “simple” or not, utilitarianism is an inadequate model upon which to base an ethic for landscape architects in developing places, even—or perhaps especially—when it is tempered with “participation.” The following section explores sustainability in landscape architecture, and focuses on two distinct components of sustainability, namely: stewardship and social justice.

**Sustainability: Stewardship and Social Justice**

The rhetoric behind sustainability is notoriously vague. Landscape architect, Ian Thompson (2007), defines ‘sustainability’ as “a portmanteau expression which can be used to describe a variety of approaches to environmental questions, but it is most often used as shorthand for ‘sustainable development’, which is essentially an ethical idea involving notions of equity and justice which extend beyond the present totality of human beings to include generations yet to be born” (p. 16). Thompson (2007) argues that sustainable development offers perhaps the most pragmatic way forward for landscape architects, by virtue of its concern for balancing stewardship and justice—specifically by seeking to address the unjust distribution of resources between rich and poor countries in the contemporary world, and the potentially unjust distribution between present and future generations. In international development, the Sustainable
Development Goals (SDGs) represent a general topical outline of the world’s current sustainability concerns. SDGs provide a good starting point for explaining the kinds of projects landscape architects can get involved with, but without a serious investigation into the assumed ethics behind notions of sustainability, we are left with very little to guide actions in the landscape.

While Chapter 2 elaborated on sustainability from an international development perspective, this chapter seeks an understanding of the ethics of sustainability. To further explore sustainability as it is relevant to landscape architecture and ethics, I will rely on Thompson’s (2007) definition of sustainability which identifies two inherent components: stewardship and social justice. In landscape architecture, stewardship is often identified on its own as an ethical model. Including “stewardship” in this dissertation’s analysis enables a more thorough interpretation of the implicit values associated with sustainability in landscape architecture discourse. Furthermore, because Thompson’s definition is also associated with social justice, the discussion will be able to make connections to societal concerns paramount in international development, as well as the need for landscape architects to better engage with social concerns that was identified in Chapter 3.

**Stewardship**

Stewardship is a homocentric ethic with two key elements: the ability of mankind to care for the earth, and accountability for that care. In religious interpretations of stewardship, humans are held accountable by God; in secular traditions, they can be held accountable by a number of human communities, such as: future generations, the international community, citizens, local or regional communities (Bakken, 2008). Ethicists frequently debate stewardship and its implications. In some cases, scholars
present stewardship more as management, or an effort to control and impose order (Bakken, 2008). Other interpretations focus on the care, love, and respect for a fellow being. Intervention and restraint represent key elements debated in the stewardship model—questioning if humans need to act on the object of management or care as a moral obligation, or not presuming that humans can or should interfere with ecological processes (Bakken, 2008).

Landscape architecture features strong historical connections to stewardship ethics, and stewardship remains a prominent element of landscape architecture education and literature (Brown & Kjer, 2007). Richard Weller (2014) states that landscape architecture’s “highest ambition” revolves around serving “as the agent of large-scale landscape stewardship leading to an ideal state of sustainability” (p. 85). Documents and statements of purpose within professional landscape architecture organizations maintain the ubiquitous idea that landscape architects should pursue the status of good stewards: “Public welfare in the context of landscape architecture means the stewardship of natural environments and of human communities in order to enhance social, economic, psychological, cultural and physical functioning, now and in the future” (Erin Research Inc., 2010, p. 13); “Environmental stewardship is essential to maintain a healthy environment and a quality of life for the earth” (ASLA, 2000, p. 1). The Ontario Association of Landscape Architects (OALA) website defines landscape architects as practitioners who “apply creative and technical skills, and scientific, cultural and political knowledge in the planned arrangement of natural and constructed elements on the land with a concern for the stewardship and conservation of natural, constructed and human
resources. The resulting environments shall serve useful, aesthetic, safe and enjoyable purposes” (OALA, 2017).

Although frequently mentioned, stewardship has yet to be adequately defined, which has led to varied notions of what stewardship means within the profession. In landscape architecture literature, stewardship is linked with “protection” (Selman, 2007), “maintenance” (Stilgenbauer & McBride, 2010), “conservation” (Hildebrand, 2013), visual cues to “care” (Nassauer, 2011), or as a means of legitimizing a “bioregional focus” (Thayer, 2008). Landscape planner, Timothy Beatley (1991) argues that ethical land use must acknowledge “our special role as stewards for the future” (p. 5), linking it to sustainability’s mandate to protect natural resources for future generations.

Scarfo (1988) takes a critical stance of stewardship’s role in landscape architecture and argues that landscape architects have failed to articulate their role as “stewards” as a result of relying too much on science and technology and a romanticized self-image of the steward.

While imagining themselves as interacting sensitively with the landscapes to which they give form and content, most landscape architects act on landscape abstractions perceived and articulated by contemporary technologies, economics, communicative skills, and business techniques. Each area of specialization has its own language rules of interaction and, therefore relationships between people in the land. None of these forms of social relationships with the land, while contributing to one’s view of the landscape and the people who inhabit it, requires personal interaction with the land or its inhabitants. However, a romantic ideal of personal involvement in the modification of landscapes pervades the manner in which contemporary landscape architects associate the land, thereby clouding the recognition of their true responsibilities (p. 60).

Scarfo’s (1988) argument portrays landscape architects as external stewards, who lack intimacy with the environment for the sake of focusing on professionalism and
technical rationality (Brown, 2002; Hildebrand, 2013). Brown (2002) finds that landscape architects’ connections to environmental concerns are particularly strained on international projects, “as frustrations with a lack of information and understanding about local conditions [result] in a more detached view of stewardship” (Brown & Kjer, 2007, p. 32).

While general notions of stewardship invoke the idea of a benevolent steward caring and tending to the land, some environmental ethicists criticize the stewardship model for its negative ecological and political implications, especially regarding the separated or “external” forms of stewardship mentioned by Scarfo (1988). Stewardship is strongly associated with a sense of humans being separate from the natural world (Palmer, 2006). Clearly human beings are the dominant species of this planet, but as Palmer (2006) argues, that is not evidence that we are set apart from it. We share genetic coding of all living species, we are part of the food chain, and we are equally dependent on the natural cycles of water, nitrogen, and carbon dioxide (Palmer, 2006).

The Judeo-Christian concept of stewardship clarifies the hierarchy of stewardship’s separations among God, man, and the earth: God ordains man’s duty “to be steward over the animals and plants of the earth” (Jones, 2011 emphasis added), “all living things” remain “under Man’s dominion” (Rosenberg, 1985 emphasis added). Critics of the stewardship model liken stewardship to a “benign dictatorship” which “presupposes a hierarchal social order of control in obedience, symbolizing and inadvertently teaching despotism rather than democracy” (Palmer, 2006, p. 79).

Defenders of stewardship counter that the ethical model “recognizes that humans are unique in their power to transform, degrade, or destroy the earth and their ability to
make individual and collective decisions about ways to use that power. For them, the concept of stewardship expresses a sense of responsibility for one’s actions as they affect, directly or indirectly, other people and the natural environment over great distances and far into the future, a sense that has become rare in a competitive, individualistic, shortsighted, profit-oriented, and anthropocentric consumer culture” (Bakken, 2008, p. 282). Many interpretations of the stewardship model can promote moral actions that do “good” in the natural world without being exploitative. For example, Wendell Berry’s (1986) effective arguments for land stewardship emphasize the need to intimately know the land upon which we directly depend in order to care for it properly.

However, the ambiguity of stewardship, especially as expressed in landscape architecture, “opens it up to being reduced more or less to anthropocentric utilitarianism” (Bakken, 2008, p. 284), which does not challenge the cultural assumptions that many have argued caused the environmental crisis (Bakken, 2008). While stewardship softens attitudes of human domination over the natural world by adding an element of responsibility, this softening potentially enables and justifies humanity’s exploitation of the natural world (Palmer, 2006). In this regard the stewardship model is reminiscent of Easterly’s (2006) critique of the “white man’s burden” where the European sense of responsibility to bring “civilization” to non-Europeans justified colonial rule. If we extend the stewardship ethic as a means of navigating actions in developing places, it potentially generates the same types of oppression that postcolonialists and ecofeminists criticize, and as such offers an inadequate approach for dealing with the socioenvironmental problems occurring in the developing world. The overall concept of
stewardship remains largely inadequate, especially given stewardship’s widely divergent interpretations and utilitarian leanings.

**Environmental justice**

A significant connection exists between landscape and justice (Egoz et al., 2011). Olwig (1996) describes landscape as a contested territory conceived as a “nexus of community, justice, nature, and environmental equity” (pp. 630-631). Mitchell and Mels (2011) argue that struggles over landscape and its transformation are always struggles over justice and that we must better understand “the very real social relations of class, race, and gender that always shape distribution” and be critical of “prevailing institutional contexts and exploitative relations of production” (p. 207). As Mitchell (2011) argues,

…the link between landscape and justice, while complex, is also indissoluble. Justice is central to exactly what landscape is. Justice is an ideal; landscape, however, is always more than an ideal. It is the very real material effect – the ‘spoor’ as Pierce Lewis (1975) called it – of social practice, as well as the basis for that practice. It is the built form of the world ‘as it really is’…even as, through representation, the meanings of that world are highly varied and deeply powerful (pp. 204-205).

Sustainability and stewardship maintain a nearly ubiquitous status in landscape architectural discourse, however, surprisingly, landscape architecture literature rarely features social or environmental justice. Several landscape architects have explored a moral imperative to address social justice. Egoz et al (2011) explore ways that landscape provides an important context for understanding human rights. They highlight that a “right to the environment” might only provide the right to a healthy physical environment, but the “right to landscape” would entitle people to a home that is more meaningful and resonates with their cultural references and meanings. Right to
landscape speaks of landscape not only as a place molded by people who inhabit it, but also a place that is “quintessential to those people’s identity” (Egoz et al., 2011, p. 11). Those identities come into being through individuals, groups, and nation states whose many voices determine and shape the social and political constructions of landscapes (Doherty, 2011). As such, landscape never exists as inert or impassive—“people engage with it, re-work it, appropriate it and contest it” (Doherty, 2011, p. 186). Thus, we live in a world shaped by others’ landscapes; a landscape exists in relationship to another landscape and to inhabit landscape “presents the challenge of acknowledging or resisting others’ landscapes” (Doherty, 2011, p. 186). “Which voices we listen to, whether we listen to one voice or many, is one of the greatest challenges of the complex practice of landscape” (Doherty, 2011, p. 195). The challenge is exacerbated by the fact that those with power “can use language and image to conceptualize and naturalize a particular and…deeply unequal way of relating to the land and to other people” (Makhzoumi, 2011, p. 229).

Equity and justice are key concerns in sustainable development. Agyeman at al (2012) argue that “sustainability can mean nothing unless development is socially just” (p. 324) and seek to better understand how sustainability and environmental justice are linked. Theories in environmental justice are particularly relevant to the specific issues of the developing world because they are concerned with how the lack of access to

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44 Although equity and justice are frequently mentioned, postcolonial scholars have argued that the structure of international and sustainable development is explicitly unjust—in some cases claiming that development entities specifically try to increase oppression for less developed people (Escobar, 2011). This perspective is covered more in Chapter 2. In this chapter I wish to focus on the ideals behind the environmental justice model, not necessarily criticisms of their implementation through particular structures.
natural resources, and exposure to environmental hazards perpetuates the marginalization of the subaltern.

At the heart of the environmental justice movement is a fight for the empowerment of subaltern groups, heretofore excluded from environmental decision-making. In recognising [sic] that the environmental health of their living spaces and families is critical to exacting any kind of improvement of their socioeconomic conditions, subaltern groups have added a dynamic new dimension to their social struggles. This counter-hegemonic struggle for ecological democracy is one of the fastest growing social movements in contemporary society (Egan, 2002, p. 21)

Environmental justice addresses the relationship between environment and society, the unevenness of power, and consequences of our decisions. From a postcolonial perspective, this model embodies ideals that are relevant to the developing world, especially in its commitment to ending oppression. Using “environmental justice” as a specified goal in landscape architecture would provide the much-needed push for the profession to better engage with the social aspects of landscape architecture and international development. However, environmental justice does not help address landscape architecture’s anthropocentrism, and we are left without a means of mitigating human dominance over the natural world. Environmental justice speaks to power and oppression of people through environment, but does not speak to human oppression of the environment.

Summary

This dissertation explores ways landscape architects can be more ethically involved in alternative development, i.e., development that addresses postcolonial criticisms of hierarchies of difference and uneven power dynamics that subjugate the subaltern. Regarding ethics, utilitarianism and sustainability are frequently mentioned in international development and landscape architecture. Utilitarianism is inappropriate as
an ethical model for landscape architects working in the subaltern context because it enables dominance by the majority, which can perpetuate oppression of minorities like the subaltern. While the mainstream concept of “sustainability” offers little guidance as an ethical model, embedded in sustainability are notions of stewardship and social justice, both of which have specific ethical implications for landscape and landscape architects.

Some conceptions of stewardship might be helpful in fostering a sense of care for the environment and holding people responsible for promoting actions that encourage health and wellbeing of the environment. However, stewardship is likely an inappropriate ethical model to deal with current social and ecological challenges because it can foster separation between humans and the environment, which can lead to hierarchies and uneven power dynamics.

From a postcolonial viewpoint, ethical models based on justice—specifically those that seek to end oppression caused by uneven power dynamics—offer particularly relevant insights for both landscape architecture and international development. Landscape embodies the literal and symbolic grounding of human and environmental relationships. Indeed, “landscapes are the hard surfaces of life—the very place of injustice or, indeed, of justice” (Mitchell & Mels, 2011, p. 209 original emphasis). Environmental justice, a particularly relevant ethical model for the goals of this dissertation, acknowledges the connection between humans and environment and specifically advocates for the well-being of the subaltern. It acknowledges the injustices that occur in communities that disproportionately suffer from exposure to environmental hazards and exclusion from access to natural resources. However, firmly
anthropocentric, the environmental justice model neglects a much-needed focus on the injustices that humans cause on the environment.

Landscape architecture practice rarely engages with the kind of deep philosophical understandings of society and environment like those presented in the field of environmental ethics. Few clear-cut answers exist in environmental ethics; “right” and “good” remain heavily contested concepts. Still, landscape epitomizes an appropriate medium for exploring current human and ecological issues, and perhaps if landscape architecture can reach toward such environmental philosophies, it can help ground ethical principles in its practice.

Environmental ethics challenge us to express our values specifically and thoughtfully. Broadly claiming to promote general aspects of stewardship, or to support the greatest good for the greatest number, is insufficient for a profession like landscape architecture that maintains such influence over the way humans interact with their environments. More importantly, the uneven power dynamics that characterize relationships between developed and developing necessitate additional considerations for landscape architecture’s ethic, if it is to be involved in international development.

Foundational ideas from environmental ethics offer helpful insights into expanding an ethic of landscape architecture. Ecofeminism’s criticism of uneven power dynamics mimics those in postcolonialism, and reinforces the idea that we need a better understanding of how implicit forms of oppression manifest in the landscape. Much of landscape architecture’s approach will revolve around addressing difference, specifically by focusing on how to reject hierarchies between developed and developing, and between humans and non-humans. The previous chapter highlighted that while
landscape architects claim to value society, little evidence exists of them incorporating social welfare issues in their work. Re-orienting landscape architecture explicitly toward environmental justice could serve as part of the solution and better enable landscape architects to make meaningful contributions to society. Additionally, holding landscape architects morally accountable for actions in the landscape will play a critical role in forming recommendations for landscape architecture, especially considering the criticisms of participation models and utilitarianism.

Throughout this research, a number of themes have emerged from the discussions in international development, landscape architecture, and environmental ethics. I have distilled these themes to include power, justice, difference, accountability, and praxis. Together they form the key concepts that can be pursued in landscape architecture theory and practice to instill a relevant, postcolonial ethic in professional practice and theory. The next chapter summarizes the themes in preparation for the final chapter, which explores examples of how those themes might be direct actions in the real world.
CHAPTER 5 
THEMES FOR AN ETHICAL APPROACH TO LANDSCAPE ARCHITECTURE IN THE SUBALTERN

Overview

The key themes of power, justice, difference, accountability, and praxis apply to the overlap in international development, environmental ethics, and landscape architecture literature. This chapter explores and builds on these themes that were elicited from this research’s analysis of critiques of international development, insights from environmental ethics, and identified opportunities for growth in landscape architecture.

This dissertation explores how postcolonial understandings of international development and environmental ethics can enrich the discipline of landscape architecture and enable it to contribute to solving the current social and environmental global crises, especially in the subaltern context. As a profession expressly committed to social and environmental welfare (Thompson, 2002), landscape architecture has obligations to tackle the “wicked problems” of development. The material, political, and symbolic nature of landscape makes it a highly effective medium through which to explore the human-environment relationship and understand how notions of power and justice materialize in the real world. Landscape architects’ knowledge, technical skills, and design thinking skills offer unique approaches and contributions to international development projects.

Thus, landscape architects should be more committed to the developing world. The severity of the social and environmental injustices necessitate action, and because the profession of landscape architecture so frequently works toward bettering the environment, and the human relationship with the environment, landscape architecture
is topically relevant to the place-based projects that occur in the developing world. Furthermore, landscape architects’ skills in design thinking offer a promising way forward in dealing with the complexities of international development projects. However, within the developing context, ethical and practical challenges exist that landscape architecture is ill-prepared to deal with. The following chapter outlines some recommendations for how landscape architects can deal with issues of power by focusing on justice as an explicit value, promoting respect for difference, recasting responsibility as accountability, and exploring how values are materially implemented in the landscape.

**Power and Justice**

Postcolonialism engages with notions of power: specifically how the developed world continues to maintain power over the developing world in the same way the colonizer maintains power over colonized. Rooted in the western approaches of the industrialized world, landscape architects must be able to combat the ways their own involvement in the developing world might perpetuate unjust power dynamics. Indeed, the oppression caused by postcolonial power dynamics is much to blame for the current state of social and environmental inequity in the developing world (Escobar, 2011). Uneven power dynamics occur through a number of structures such as government, race, gender, and development. Essentially, combating unevenness of power requires promoting a more just world. For landscape architects, this requires explicitly focusing on justice as a collective professional value. The concept of justice is complex, and there are several different types of justice. But for the purposes of this dissertation, social, environmental, and ecological justice are among the most relevant.
Iris Marion Young (1990) argues social justice comprises more than the fair
distribution of life-chances, although this is a necessary condition (Mitchell & Mels,
2011), but also “the elimination of institutional domination and oppression” (p. 15).
Young identifies five faces of oppression: exploitation, marginalization, powerlessness,
cultural imperialism, and violence. These components are relevant in studying the
subaltern and understanding how they encounter different forms of oppression on a
regular basis. Thus, landscape architects must remain aware and self-critical of how
they, in their interventions and attempts to do “good,” might be perpetuating such forms
of oppression. In envisioning theory and practice adept at dealing with oppression,
Young’s (1990) definitions have relevance to landscape studies that are explored,
studied, and drawn alongside—and with as much import—as the more tangible
concepts in landscape architecture, like access, views, circulation, and land use.

Similarly, environmental justice offers an ethical model for both international
development and landscape architecture, addressing social injustices occur through
environmental concerns like exposure to pollution, or lack of access to resources—
areas to which landscape architects are adept at attending. Further, it specifically
highlights concern for the subaltern (Egan, 2002). Landscape architecture’s focus on
environmental justice as a definitive value can help justify the wide-spread claim that
landscape architects are indeed concerned with social issues. Because environmental
justice addresses social concerns in a way that highlights the physical environment, it
speaks to landscape architecture’s strengths. However, this model does not challenge

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45 David Mosse’s (2010) ethnography offers some poignant insights on how well-meaning international
developers can perpetuate the plight of the subaltern.
the anthropocentrism that exacerbates the disconnect between humans and their environment. Perhaps in addition to social justice and environmental justice concerns, landscape architects can explore “ecological justice” as an extension of justice to the non-human realm.

An ecocentric ethical model, ecological justice “seeks to delineate human’s moral obligations to other species” and traces its scholarly roots to Aldo Leopold’s ‘land ethic’ and Rachel Carlson’s *Silent Spring*, which sought to extend ethical behavior to biotic communities” (Byrne, 2010, p. 831). Admitting non-human nature to the community of justice would require the interests of non-human nature to be considered in human policymaking, development, and everyday decisions made by landscape architects.

Ecological justice offers a critique of sustainable development and the dominant Western worldview as it argues that “sustainability can only be achieved by the provision of simultaneous social and ecological justice” (Kopnina, 2017, p. 146). Sustainability literature criticizes established corporate and political power hegemonies, yet official policies like the Sustainable Development Goals continue to promote social and economic ‘development’ as economic growth, and its anthropocentrism limits ideas on ethics, equality, and justice (Kopnina, 2015; 2017). Sustainability cannot be about further growth, and the current economic system is actively preventing us from taking actions to avert it (Kopnina, 2015). Sustainable development’s quest for social justice should continue, but incorporating an ecological justice perspective serves as the necessary next step (Kopnina, 2017). The SDGs need to be critically reexamined in light of ethical imperatives that challenge human supremacy thinking, especially in re-orienting consumption and production toward eliminating the root causes of
unsustainability, and considering the problem of human over-population within a balance of individual rights and collective reproductive responsibilities (Kopnina, 2015). The same way we must challenge human supremacy thinking, so too must we challenge developed world supremacy thinking.

Throughout this dissertation, I argue that landscape architects must further pursue their commitment to societal wellbeing and justice because evidence suggests that landscape architecture does not often account for social aspects, but does regularly engage with ecological ones. Although landscape architects are adept at working with ecological systems, landscape architecture remains an anthropocentric profession (Thompson, 2007). They may value ecological systems, but they often do so based on the environment’s service to mankind, not because those systems or non-human individuals have rights or values of its own. If we accept the premise that “good” development projects address both societal and ecological justice concerns, the challenge for landscape architects in moving forward is not a simple matter of incorporating more social justice or more ecological justice. Rather, the challenge lies with navigating the contested and value-laden process that determines who receives justice. Is it ever “good” to sacrifice the wellbeing of an ecological system for the sake of commercial development? For community development for the marginalized? What if the ecological system was only marginally compromised? Ideally, creativity and design

46 Human population control, is a massive ethical challenge that many are unwilling to approach, and it seems unlikely that landscape architecture is well-suited to address it. However, perhaps mitigating the effects of over-population and its strain on resources is relevant to landscape architecture. Interestingly, Sosa’s (2014) study ranked the Sustainable Development Goal of “Reducing Consumption” the highest for “involvement” of landscape architects and second highest for “relevance” to landscape architecture (Appendix B). While landscape architects might not interpret the SDG with the kind of values and criticism espoused by Kopnina (2015), their role here certainly warrants further investigation.
thinking can find solutions that address the many facets of justice, but it remains an incredibly difficult challenge. Landscape architects must incorporate and combine theories from both social and ecological justice if they are to meaningfully contribute to the injustices that occur, whether in developed or developing contexts.

**Difference**

In addition to promoting justice, ending postcolonial power dynamics will require ethical approaches of accounting for difference, for it is the dichotomizing of differences that has led to oppressive hierarchical and dualistic thinking (Plumwood, 1991). Postcolonial theories are founded on the observation that certain groups of people have collectively distanced themselves from those considered to be different or “Other.” The Europeans distanced themselves from the “Orient” through rhetoric (Said, 2006), the developed world builds on that rhetoric and distances itself from the developing world through policy (Kapoor, 2004). Postcolonial criticisms on international development have argued that this distancing and othering has been paired with a hierarchy of power that continuously enables the developed world to oppress and exploit the developing world—even as it operates under the umbrella of “international development” and seeks to end global issues of poverty.

Decreasing distance relies on focusing on connections, building relationships, and framing differences in a positive way—both for differences between humans and differences between humans and the environment. “The idea that humans are qualitatively different from and better than all other creatures is foundational to many environmentally destructive belief systems. If we could see connections among species rather than only differences, many hope, we might think and act with less arrogance, carelessness, and violence towards the nonhuman world” (Peterson, 2006, p. 384). The
challenge, of course, lies with how to encourage people to see those connections and respect differences.

Insights from social justice and ecofeminism might be particularly helpful in moving toward an ethic that recognizes difference without hierarchizing it. Social justice scholar, Iris Marion Young (1990), argues for a politics of difference that “requires not the melting away of differences, but institutions that promote reproduction of and respect for group differences without oppression” (p. 46). In imagining what those social relations might look like, many philosophers offer a vision of “community.” Young (1990) argues that the idea of community represses difference and that “polity cannot be thought of as a unity in which all participants share a common experience and common values” (p. 227) because such a unity erases difference and identity. She offers an alternative of “city life”—which as a realized ideal involves different groups dwelling alongside one another out of necessity; these groups are not autonomous, but empowered. The differences are not suppressed—social relations exist as a “being together of strangers” (p 237).

Similarly, ecofeminist philosophy advocates an approach that seeks to reform dominance and hierarchy. Like postcolonialism, ecofeminism is particularly critical of forms of power closely associated with oppression. The central concept is ecofeminism addresses “the oppression of both women and nature [which] is caused in part the glorification of domination and by a faulty account of rationality, one that overemphasizes purely intellectual ways of knowing” (Shrader-Frechette, 2009, p. 191). Ecofeminist, Val Plumwood (1993), argues that oppression of nature, as well as other

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47 This concept is related to Tsing’s (2011) “difference within common cause” as a form of collaboration.
forms of oppression such as sexism, racism, colonialism, stem from the same inherent logic of rationalism and dualism, both a legacy of the Enlightenment Era. In dualism, categories like man and woman, reason and emotion, humans and nature, exist as contrasting pairs, and their “qualities (actual or supposed), the culture, the values and the areas of life associated with the dualised [sic] other are systematically and pervasively constructed and depicted as inferior” (Plumwood, 1993, p. 47). Plumwood (1993) highlights a number of interrelated and mutually reinforcing dualisms, including culture/nature, reason/emotion, human/non-human, civilized/primitive, science/art, and self/other. Developed/developing, local/global, and modernity/tradition are examples of dualisms discussed in postcolonial scholarly literature (Escobar, 1992). Plumwood (1993) argues that dualistic thinking has played a key role in “the construction of a devalued and sharply demarcated sphere of otherness” (p. 41) by logically determining a domination/subordination relationship between the two elements. Indeed, it is likely that the dichotomy of human/nature, turned into rigid and excessive anthropocentrism, has caused the world-wide problems of resource depletion and social disintegration (Koh, 1982). Plumwood (1993) argues that this disabling reason/nature story has been the dominant story of western culture, and calls for us to remake the story. Overcoming dualism does not imply dissolving difference, but recognizing a distinction between the dichotomized objects; emotion need not be treated as unreasonable, and reason need not be divorced from emotion, but the two terms should be construed as “capable of creative integration and interaction” (Plumwood, 1993, p. 189). Plumwood does not advocate abandoning reason itself, “but an effort to install another, less hierarchical, more democratic and plural identity in its place” (p. 189).
We need an alternative relationship of respect that challenges dualism without denying difference (Plumwood, 1991). 48 Plumwood (1991) suggests that we not only reevaluate the “underside” of the superiority/inferiority dualisms. i.e., emotion, nature, and woman, but challenge the dualistically construed categories themselves. “So in the case of the human/nature dualism it is not just a question of improving the status of nature, moral or otherwise, while everything else remains the same, but of reexamining and reconceptualizing the concept of the human, and also the concept of the contrasting class of nature” (1991, p. 17). Here, Plumwood (1991) argues that the term “human,” is not merely descriptive, but also an evaluative term setting out an ideal. Because this ideal is extrapolated based on qualities that humans have and nature does not, it maintains sharp dichotomy and polarization by rejecting and denying of connections (Plumwood, 1991). Such a framework is oppressive in that it “justifies” a logic of domination.

Ecofeminist, Karen Warren (1990), also challenges the rational model in Western thought that produces dualisms. However, Warren (1990), only criticizes dualisms and hierarchies in situations of oppression; hierarchies like taxonomies or “value-hierarchical” thinking remain acceptable in certain contexts.49 Warren (1990) stresses that because women do not necessarily share monolithic experiences, the focus on ending the domination of women—and by extension, the domination of nature or the

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48 Although Plumwood (1991) supports Taylor’s (2011b) notions of respect toward life, she argues that he bases his ethic within a framework of the reason/emotion dichotomy.

49 An example of value-hierarchical thinking would be claiming that humans are better equipped to reshape their environments than rocks or plants (Warren, 1990).
marginalized—must be based on solidarity of shared beliefs and interests, not unity in sameness based on shared experiences and victimization. Warren (1990) conceives of ecofeminism as a contextualist ethic, “which sees ethical discourse and practice as emerging from the voices of people located in different historical circumstances” (p. 139); these structurally pluralistic voices, like a mosaic or tapestry, form not one picture, but a pattern out of the many different voices. Like postcolonial discourse, ecofeminism rejects universal answers to the problems of oppression and focuses on the voices of the oppressed (1990). Furthermore, feminist ethics make no attempt to provide an objective, unbiased or value-neutral point of view, but assert that an ethic centralizing the voices of the oppressed offers a “better” bias, less partial than approaches that exclude those voices (Warren, 1990).

Warren (1990) argues that ecofeminism’s pluralistic approach “presupposes and maintains difference” by denying the “nature/culture” split but affirming that humans are both members of an ecological community as well as different from it (p. 142). Being able to conceive of humans and nature or of developed and developing as different but not separate, offers a promising way forward in addressing oppression. We must recognize the interconnection of the domination of women and the domination of nature; failure to do so “perpetuate[s], rather than overcome[s], the source of that oppression” (Warren, 1990, p. 144). The same criticism extends to any ethic for landscape architecture that fails to account for postcolonial relationships.

Ecofeminism specifically addresses ending oppression of dualisms such as humans and nature, the art and science divide (that is so central a concern to landscape architecture’s identity), and the oppression of colonialism. Warren (1990)
argues that the use of first-person narratives can help reinforce ecofeminist ethics because they take relationships seriously; express a variety of behaviors and attitudes which are often overlooked in mainstream Western thought; provide a way of conceiving of ethical meaning as emerging out of particular situations, rather than being imposed on those situations; and have argumentative significance. Applying ecofeminist strategies like using first-person narratives, and explicitly challenging hierarchies and oppression could provide landscape architects with opportunities for exploring dualisms in international development such as global/local, and modern/primitive. We must question how evaluative terms, like human, developed, and modern reinforce oppression and have “split off, denied, or construed as alien” the qualities of the “other” (Plumwood, 1991, pp. 17-18). These insights on difference offer ways landscape architects can better interact with the developing world and encourage self-awareness, and critical engagement to ensure we do not allow hierarchized perceptions of difference to perpetuate any forms of oppression.50

Accountability

Landscape architects can combat postcolonial power dynamics by shifting from the idea of responsibility to that of accountability. Within the context of international development, accountability reflects a complex notion, because the professional's role is paradoxical. International development itself creates unevenness, as well as a structure through which landscape architects must work to address that unevenness.

50 From Easterly’s (2006) perspective, oppression includes attitudes of benevolence, as we, the “White Man” take on a humanitarian role to “fix” the developing world to be more like the developed world.

51 Here "professional" refers to professionals rooted in the Western context and includes landscape architects, planners, architects, and development practitioners.
Planner, Anaya Roy (2006), has situated planning in a postcolonial ethic and highlights the paradoxes of “empire” as an apparatus of both destruction and construction. 52 If empire was simply destruction, then disavowal of empire’s hegemonic practices would be simple. But empire is also “architecture, planning, and humanitarian aid,” which means complicity with empire is difficult to avoid—in fact, as Roy (2006) argues, empire is not just a backdrop to planning, but is planning’s “present history” (p. 8).

Roy (2006) outlines two myths which planners have used to deal with the paradox of empire: the band-aid myth, and the innocent professional myth. In referring to the band-aid myth, Roy references the United States’ war on terror. Roy (2006) asks, “how can one not participate in rebuilding lives in Afghanistan? How can one not participate in designing social services for the Iraqis? Would not the retreat of planners cede this territory to those less benevolent, less trained, less caring?” (p. 12). The idea that the ills of war and empire can be assuaged by the band aid of reconstruction is a dilemma because it “renders ambiguous what is complicity and what is subversion” (p. 13).

Another dilemma arises when planning “is disembedded from the context of action, when planners and architects [and landscape architects] claim that they have no responsibility for the field of power in which they operate” (p. 13). Roy (2006) gives the example of Israeli architects and planners within the context of conflict who construct

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52 Frequently mentioned in postcolonial literature, “empire” here refers to the “colonial present”. Empire is “a global order, a new logic and structure of rule—in short a new form of sovereignty. Empire is the political subject that effectively regulates [economic and cultural] exchanges, the sovereign power that governs the world” (Hardt & Negri, 2000 p. xi). In the context of Roy’s (2006) paper, empire can be replaced with the word “development,” and speaks to how international development, as a social structure, operates on a global scale and from a position of power.
Jewish settlements on the West Bank as part of the strategic transformation of the landscape. In this case, can the planner truly claim to be an “innocent professional” (p. 13)? Here professionals might be concerned with the “utilitarian cost-benefit analysis of the greatest good for the greatest number, or with the design mandate of beauty, or with the professional imperative of meeting the needs of the client” (p. 13). Roy (2006) argues that simply staking out neutrality in insufficient; instead the time of empire necessitates critical reflection on practice, an interrogation of innocence, and analysis of ruses like “freedom” and “beauty,” which depoliticize the production of space.

Roy (2006) relies on the concept of “doubleness” as a productive philosophy for exploring planning’s role in empire. Referencing David Harvey, Roy (2006) discusses how the architect is called upon to enact transformation and resist empire on behalf of the right to production of space; but the insurgent architect is not a figure of freedom. Rather he or she is a “historically constructed figure, an embodied person, an agent of social change but also a member of the professional elite” (p. 22). In other words, the architect is a product of empire even as he or she may work for or against the process of empire.

Praxis

Much of this dissertation focuses on getting the ideas right—essentially how we think about and act on understandings of power, accountability, and difference. However, because actions do not flow from values in a straightforward way, even if we get the ideas right, we have no guarantee that actions or practice will ensure that those values have any intended effect in the landscape (Peterson, 2006). Acting on values are in the landscape generates resistance from a variety of complex factors, contexts, and actors, resulting in unpredictable interpretations of those values (Tsing, 2011). Indeed,
the material conditions of ethics—the actual, earthly side of how actionable ethics are lived out in the real world—is perhaps the most challenging aspect of ethics.

Anna Peterson (2006) argues that we need to abandon the idealist logic that suggests if we get the idea right the practices will follow. Good ideas abound in environmental ethics; the problem is to figure out how to live by them (Peterson, 2006). To this end, Peterson (2006) advocates a nuanced materialist ethic—a practical ethic that is socially and ecologically grounded and does not abandon ideas, but recognizes that ideas do not exist in a vacuum. Peterson (2006) focuses on how people can find more connections to their environment and advocates experiencing the world from different perspectives, and rolling up our sleeves to participate in projects that highlight our interdependence with the natural world. Peterson (2006) argues that we must create conditions that reinforce non-exceptionalism of humans and enable us to experience “conditions in which we experience the interdependence, fragility, and humility… These conditions cannot be created in theory but only in and through practice” (p. 392). Peterson’s (2006) argument holds for ameliorating divisions between the human and natural world, as well as privileged and underprivileged humans. Here, phenomenology serves as a critical resource by emphasizing experience rather than rationality (Peterson, 2006). This insight extends to landscape architects and reinforces the need to directly experience subaltern contexts. How might we structure experiences for landscape architects that help them connect to subaltern contexts and better understand how values and actions condition lived experiences in those places?

In an ethnography of policy in international development, David Mosse (2010) argues that any coherence or success of a development project “is never a priori; never
a matter of design or of policy” (p. 9 emphasis in original). In saying a project succeeded because it was well designed and failed because it was poorly designed, we are saying nothing (Mosse, 2010). For Mosse, the “question is not whether but how development projects work; not whether a project succeeds, but how ‘success’ is produced” (p. 8). A reciprocal relationship exists between policy and practice as policies are negotiated and materialized and changed in place.

Similarly, in exploring how development works, Anna Tsing (2011) speaks of the “friction” that occurs when development goals interact with the real world. Tsing (2011) raises questions concerning hegemonic global forces, as she shows that such forces are met with and changed by the agency of people at all levels of development. This concept relates to some of the criticisms of the postcolonial discourse: despite its rhetoric of valuing the voices of the “voiceless”, empowering them, and rejecting hegemonic categorizations, by broadly labeling all the subaltern as “powerless,” postcolonialists effectively reinforce hegemonic conceptualizations. For landscape architects to combat postcolonial power dynamics they must not only attend to the negative consequences that postcolonial critique highlights, but also recognize the agency, power, and capabilities of the subaltern’s influence on international development policies and implementations.

While most examinations of practice find the connections and common ground to move forward, an attention to difference can offer significant insights. Tsing (2011) suggests that “difference within common cause” offers one of the most culturally productive kinds of collaboration. This collaboration, with friction at its heart, often results in misunderstandings, but those misunderstandings can also facilitate emergent
politics and create new agents that ultimately benefit and support the realization of the project. She sees this kind of collaboration not as consensus making but rather an opening for productive confusion, for in these moments “objects in common begin to coalesce in the space of partial agreement” (p. 262). Here, Tsing (2011) suggests that we pay more attention to such frictions rather than spending time searching for consensus, and suggests that we do not erase incompatibility, but “find out where it makes a difference” (p. 262).

Postcolonial research also advocates interactions and engagement with the subaltern—we must be in the thick of it to wrestle with and understand the difference, connections, and frictions of development projects. Ghyselen et al (2017) attempt to tackle the complexities and friction in the postcolonial landscape. They ultimately state that research will only get us so far; even the most “neutral and detached mode of engaging the landscape, mapping and surveying, produces contingent social constellations and confrontations” (p. 16), and only through ‘tactical’ engagement with the Other can we truly learn to grasp the postcolonial landscape.

In both environmental ethics and international development, a gap exists between intentions or values and what actually happens on the ground (Mosse, 2010; Peterson, 2006). We require not only robust discussions on postcolonial theory and environmental ethics, but real-world experiences that reinforce understandings of how values are implemented and resisted in the landscape. Higher education likely bears the responsibility for structuring such experiences for landscape architecture students, especially through study abroad and service learning programs that highlight self-reflection on power, difference, and accountability. Relying on the themes this chapter
outlined, the following chapter explores examples from academics and practice to better understand how to close the gap between values and actions.
CHAPTER 6
EXAMPLES OF PRAXIS AND CONCLUSION

Overview

Previous chapters explore the intersection of landscape architecture, international development, and environmental ethics to highlight some of the specific themes and theories that can help landscape architects better address place-based issues in development. Building on the themes of power, justice, accountability, and difference, this chapter explores some practical, real-world examples of relevant landscape architecture, urban design, planning, and architecture projects to help provide guidance for my recommendations to more fully integrate these themes in the profession. Landscape architecture is a discipline defined by its actions on the environment; as such, considering how these themes translate into practice will offer a means to deepen involvement with global development.

Although the inspiration for this research came from the observation that landscape architects rarely engage in global development work, a number of landscape architects and allied professionals demonstrate the ways in which the themes that are explored in this dissertation can be actively integrated into design and related policy work in the developing world. The projects outlined here are viewed through a lens that situates landscape architecture in a context of uneven power dynamics; calls attention to that unevenness; addresses ways power is manifested in the landscape by understanding how agents and structures enforce and challenge power; fosters justice;

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53 Projects and literature from allied professions such as architecture and urban planning, are included here because of the lack of relevant information specific to international development within landscape architecture. However, the projects mentioned in this chapter offer valid and helpful insights that can readily be adapted for landscape architecture.
and combats inequality by incorporating self-reflection, accountability, and respectful conceptions of difference into the heart of its practice. Each of the projects examined here exhibits its own strengths, forming pieces of the whole that can be merged together and built upon as landscape architects continue to explore their postcolonial ethic in the developing world. By connecting and grounding the ideas formulated in this dissertation toward possibilities in practice, this dissertation concludes by offering ways in which the themes explored previously can inform practice. As such, “praxis” serves as the final theme directed by and intimately connected to theory and values. Despite the significant challenges to interacting with the subaltern, landscape architects must figure out how to best connect to the developing world because there is no neutral ground; we can either be a part of the problem or a part of the solution.

Having an ethical encounter with the subaltern is possible but it will take “vigilant self-implication and painstaking ethical engagement” (Kapoor, 2004, p. 644). We must intimately inhabit and negotiate discourse from all sides so that we become more vigilant of our own practice; acknowledge complicity with hyper-self-reflexivity; un-learn our privilege, dominant systems of knowledge, and representation; stop thinking of ourselves as better or fitter; learn to learn from below by suspending the belief that the Third World is in trouble and we have the solutions; and work without guarantees by recognizing the irretrievably heterogeneous nature of the subaltern and reckoning with the impossibility of knowing it (Kapoor, 2004). We need to figure out what these criteria mean for landscape architecture and how we can ensure that they continue to influence attitudes, approaches, and design decisions throughout the life of the project.
The following sections review the notion of praxis and explore some of steps that can be taken to move the profession toward an ethical praxis in the subaltern. This chapter offers examples of educational studios that could be emulated to direct more effective engagement with these themes among landscape architecture students and elaborates on examples from professional firms working in the non-profit sector. It summarizes those discussions in a narrative and table, expands on ideas for further research, and finally, offers concluding thoughts on insights learned.

**Praxis and Attitudes**

Praxis, the connection between theory and practice, is notoriously elusive. Intentions alone do not produce “good” results in the real world since actions do not follow ideas in straightforward ways (Peterson, 2006). In some cases, the problems are simply too complex, too “wicked” (Rittel & Webber, 1973) for projects to function as imagined, and agents and structures abrade and reconstruct our attempts so that our original intentions are unpredictably and inconsistently realized (Tsing, 2011). Furthermore, because international development often reinforces colonial power dynamics, when we participate in its processes, even with the intention of “fixing” hegemonic aspects, we can inadvertently perpetuate the very problems we are attempting to address. When it comes to working within the structure of “empire,” little distinction exists between actions that are subversive and actions that are complicit (Roy, 2006).

As a means of addressing the gap between theory and practice, the literature referenced in this dissertation suggests deepening connections and understandings through meaningful experiences that de-exceptioalize our ethic (Peterson, 2006); immersing ourselves in the muddled, fragmented, incompatible, and divergent
conjunctures of global connections (Tsing, 2011) (i.e. the connections between developed and developing); and confronting the difficult questions of expertise, privilege, accountability, and benevolence (Roy, 2006). Overwhelmingly, the advice distills into taking action toward ameliorating the divide between “us” and “them” with on-the-ground experiences that intimately challenge our preconceived notions about ourselves, our beneficiaries, and the way the world works.

**Education**

Certainly, the task of addressing attitudes and preconceived notions of the next generation of landscape architects falls to educators. In this global era of inequality and increased interconnectedness, we must more fully integrate ethical understandings and actions as part of landscape architecture education in both domestic and international settings. Renowned postcolonial scholar, Gayatri Spivak (2004), argues that if we truly desire to address the challenges of the subaltern, education must be conceived of differently, so that we become unmoored from “elite safe harbors” (p. 526). Spivak (2004) considers her greatest pedagogical task to be educating American students that their benevolent attempts to “help” the subaltern are an instrument of “othering”—of creating hierarchical distance between “us” and “them.” As William Easterly (2006) poignantly argues, the fallacy “is to assume that because I have studied and lived in a society that somehow wound up with prosperity and peace, I know enough to plan for other societies to have prosperity and peace” (p. 26).

In large part, shaping students’ attitudes of benevolence requires recasting responsibility as accountability. Our duty involves not just intervening, but insisting on

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54 Spivak’s notion is reminiscent of Peterson’s (2006) de-exceptionalism argument.
accountability, on an “answering to” those who are the objects of our responsibility” (p. 25). Thus, we must teach “not to the victims of oppression but rather the dispensers of bounty” (Roy, 2006, p. 25). By addressing landscape architects as the “dispensers of bounty,” I hope to shape “the imaginaries of its practitioners so that their conduct can begin to resist rather than reproduce the dynamics of imperialism” (Rankin, 2010). We are not by default trying to change the behavior of disenfranchised people to make them more environmentally aware or teach them new skills or new appreciations. Rather, we are teaching the developed world new perspectives on interconnectedness, humility, morals, power, and accountability, not so they can be responsible for, but rather be responsible to the developing world (Spivak, 2004).

Planner, Katherine Rankin (2010), builds on Roy’s (2006) arguments to suggest directions for planning in light of the conditions of postcolonialism. Rankin suggests planning theory must cumulatively recognize and engage four key concepts in order to strengthen its critical and normative stances: structures of imperialism, agency and resistance among ‘beneficiaries’, subjectivity of planners, and the condition of collective action. Rankin offers these recommendations as a means of connection the postcolonial theoretical discussions by Roy and Spivak with practice in the real world. Her suggestions were not explicitly explored in practice, but they coincide with and reinforce some of the ideas in this dissertation. As we move forward with a postcolonial practice, these are the things we should be looking at must become an integral part of landscape architecture education and practice.

55 By “dispensers of bounty,” the authors mean to address those who have the agency, access, and power to support their decisions that determine who gets what in international development, i.e. most often, those with Western cultural and educational backgrounds.
Design studios, especially those that focus on service-learning, provide an exceptional opportunity to explore ways design education experiences can be structured on a postcolonial understanding and ethic. When reinforced with environmental ethics and critical development concepts and seminar classes, such design studios can reinforce culturally aware attitudes and behaviors. Landscape architecture is a profession defined by its actions on the landscape; by what practitioners do and how they change, interpret, reveal, create, or remove. Because it is oriented toward practice and experiences in the landscape, the profession is already primed to use those experiences as a means of learning and testing ideas on how to ameliorate divides in a practice-based way that is bolstered by ideas and theories about power, justice, difference, and accountability. The challenge now is to reimagine how to structure those experiences based on understandings of de-exceptionalism (Peterson, 2006), friction (Tsing, 2011), and empire (Roy, 2006), that will help landscape architects make meaningful contributions to the unevenness in the world.

Education in landscape architecture is notoriously stretched thin, with curricula including everything from technical skills like construction, grading, and drafting, to design considerations in settings ranging from urban and rural at both detailed and regional scales. While some of the ideas and skills needed in the developing context will require the addition of new and distinct classes, the idea here is not necessarily to add another set of separate skills, but to embed the elements of power, justice, and accountability into the discipline. Students can still learn technical skills while considering how technology and local knowledge can work together on site; and whether an urban plaza or ecological restoration project, students can be encouraged to
consider their role in power dynamics, or wrestle with notions of social and ecological justice in their design. Students can learn about the importance of accountability while exploring Sustainable Development Goals in a semester-long design project.

Structuring landscape architecture curricula to include aspects of social and ecological justice is also likely to attract the current generation of millennials to the discipline. US Millennials are more ethnically diverse and politically engaged than the previous generation (Milkman, 2017). They are affected by soaring levels of class inequality, political influence of corporations and wealthy individuals, and millennial activists have adopted the term “intersectionality” to highlight the interconnectedness of race, gender, sexuality, and class (Milkman, 2017). Millennials comprise the bulk of those involved in social movements such as the Dreamers Movement, Occupy Wall Street, and Black Lives Matter; they also tend to support “left leaning” issues such as gay rights, same-sex marriage, pathway to citizenship for immigrants (Milkman, 2017). In short, US Millennials are embracing liberal, hope-endorsing campaigns and are redefining political and social activism (Talman, 2017). To attract this generation to the discipline, as well as ensure that landscape architecture remains relevant and timely, educators should look for new and creative ways to structure a landscape architecture curricula dedicated to addressing the current social and environmental challenges the world faces.

This dissertation focuses on the critical need to prepare developed world practitioners, educators, and students to ethically interact with the developing world, largely because the typical development scenario revolves around wealthy developed countries aiding developing countries, and significant challenges remain regarding the
manner in which such interactions occur. However, it should be noted that not all
development and education efforts rely on such a scenario; many indigenous people
are establishing their own means for development by building on South-South
relationships and generating the knowledge and training they need to shape their own
communities. With regard to landscape architecture education, several programs
already exist outside developed places; examples include Institut Teknologi Bandung, in
Indonesia; the University of Lagos, in Nigeria; and Universidad de la República, in
Uruguay. MASS Design Group, a non-profit architectural firm that will be discussed in
more detail later in this chapter, has helped establish the African Design Centre, a
design school in Rwanda, that complements formal architecture education. More
emphasis should be placed on promoting landscape architecture, architecture, and
planning programs and departments in developing places because they are an intrinsic
and genuine form of empowerment, where local people can learn, teach, discover,
design, and build their communities by sharing their own perspectives and narratives of
their culture, history, and environments. Supporting indigenous professional training and
education remains an important aspect for further research.

The following section will explore how to better develop and refine the way
developed world landscape architects and allied professionals learn about and design
for the developing context. The section relies on two examples of studios that
encourage landscape architecture students to interact with some of the challenges in an
international development context: Kyle Brown and Tori Kjer’s (2007) studio in Tijuana,
Mexico as an example of how to increase critical awareness by exploring local
consequences of globalization in an informal community, and Joerg Rekittke’s studios
on “foot soldiers” of design offer an example of the importance of on-the-ground experiences.

**Critical Awareness**

Brown and Kjer’s (2007) design studio was a result of a joint effort between Habitat 21, a project for sustainable settlements through the John T. Lyle Center for Regenerative Studies at California State Polytechnic University, Pomona, and Corazón, a non-governmental relief organization with a long record of service in Tijuana. Situating their project within a multidimensional context of globalization, Brown and Kjer (2007) suggest that while landscape architects have certainly benefitted from global economic development, many marginalized and informal communities have not. In questioning who benefits from global connections, the authors argue that landscape architecture education must carefully consider the extent to which the profession either maintains and reinforces existing power structures or how it transforms social and power structures to address inequities and injustices. Such consideration arises from a foundation of what the authors describe as critical awareness or critical consciousness.

Brown and Kjer (2007) base their understanding of critical awareness on the work of pedagogical theorists, Paulo Freire and Ira Schor, whereby students are encouraged to view themselves as embedded in an historic context defined by dynamics of power, privilege, and oppression. The authors suggest that incorporating literacy of such dynamics forms the basis for social change and can equip students with the necessary analysis of power and critical questioning skills. Emphasis for developing these literacy skills revolves around lived experience, where the connections made between daily life and larger power structures then lead to actions that challenge the status quo. Brown and Kjer (2007) stress the need for students to engage in real
communities to address real situations so that students and community members can respond to local conditions and existing power structures.

Brown and Kjer (2007) rely on field work and participatory models aimed at countering the disconnect between landscape architect and the day-to-day life of community members. Specifically, they employ Participatory Learning and Action (PLA) methods that include visual analysis, interviewing and sampling, and group and team dynamics. This method focuses on everyday experiences and desired changes in the life of the community, breaking down traditional roles of expert and community member with the goal of researchers and residents becoming activists in the sense that lived experience guides their actions and investigations.

Students collaborated with community members through workshop-style meetings to produce cultural mapping and transect walks. Students, with the help of community members’ input, made recommendations on the issues of waste in the community by including proposals for a bi-weekly garbage collection schedule, community-wide garbage clean up days, and education on proper waste disposal. In response to issues of crime, students made proposals for security gates and a bulletin where community members can report crimes. Finally, proposals included open spaces and programmed places for children to play.

I strongly support the direction of Brown and Kjer’s work, as it is an example of landscape architects wrestling with community engagement in light of the unevenness in global economic development. Their emphasis on day-to-day experiences, activism, inclusion of women in workshops, gender roles, and a call for broader understanding on behalf of landscape architects is admirable and provides a foundation from which
landscape architects can further pursue and explore the role of design education in subaltern contexts.

However, some of the subtleties in their approach are not as congruent with the postcolonial ethic previously discussed in this research, specifically with the PLA methods and emphasis on facilitation. Brown and Kjer (2007) rely on Mitlin and Thompson’s interpretation of a successful facilitator in the PLA framework: “[community members] learn about their own knowledge and capacities, and communicate their ideas and priorities to themselves and supportive external facilitators” (p. 35). The communication and learning in turn, fosters a “sense of empowerment” among locals whereby they “realize and fully appreciate the value of their own knowledge and gain increasing confidence in their capacity to be important agents in development” (p. 35).

Though the authors’ intent is to break down traditional roles and value community member’s perspectives, the language used in the definition of the PLA framework employed is problematic. First, community members’ lack of awareness of their capacities is not the core problem in development; oftentimes locals are, indeed, aware of and value their knowledge and abilities. Even if community members are not aware of their agency, the critical problem from the postcolonial perspective is that they are denied their agency and their voice because of systemic social and political power hierarchies—often a result of professional experts and organizations who seek to speak on their behalf. While communication is certainly an important step toward development, it is not the point of development. Failing to focus on the systems of development, and the facilitator’s role in perpetuating those systems, will do little to advance equity and justice in the developing world. Secondly, residents communicating their ideas to
“supportive external facilitators” does little to foster true empowerment and change the hierarchy of power. While it is certainly constructive that facilitators are aware and supportive, the result is not necessarily “actual” empowerment, but, as the definition states, a “sense” of empowerment. In short, the definition of PLA that Brown and Kjer (2007) use relies on assumptions highly criticized by the postcolonial viewpoint: namely, the assumption that the Western expert possesses adequate knowledge and expertise to guide the subaltern.

Furthermore, the way the authors discuss the studio’s approach to power dynamics does not imply an incorporation of accountability. They explain that background research was conducted to better understand the “political, economic, and social history of Mexico the economic policies that have helped shape informal settlements similar to the case-study community…[which] allowed us to make connections between these daily struggles and the larger power structure within Mexican society” (p. 36, emphasis added). It is possible that the authors faced publishing restrictions that prevented them from elaborating further on the process, but describing the power dynamics “within” Mexican society suggests that students were distanced from exploring their own role in those power dynamics.

I do not mean to imply that learning how to see, interpret, analyze, and address the complex power dynamics within the society and region of our projects is unimportant. Such analysis of power skills are undoubtedly critical for landscape architects in the developing world, and an aspect that Brown and Kjer (2007) have explored in their studio on globalization. Similarly, landscape architect, Amita Sinha (2010), analyzes how colonial power structures affect the landscape in Lucknow, India
and offers suggestions for how to mitigate its hegemonic effects. Looking to the use of colonial imagery in urban parks, Sinha (2010) explains colonial expressions of power within the urban fabric. Recommendations for dealing with colonial imagery include awareness of colonial history; relying on local vernacular precedents; engaging not only aesthetic, but also productive aspects of indigenous traditions and relationships with the landscape; and designing with collective symbols that respect diverse visual cultures in the public realm.

Brown and Kjer (2007) and Sinha (Sinha, 2010) offer good suggestions for an initial step of awareness and analysis of power dynamics and actively argue for its importance. Now the next step is to critically examine ourselves as landscape architects, as practitioners rooted in Western processes, biases and assumptions, and figure out how our actions promote or subvert the power dynamics we witness on site.

**Foot Soldiers and Practicality**

In 2008, Rekittke (2009) co-led a sustainable development studio with Kelly Shanon. Students from the Master of Landscape Architecture program at Wegeningen University joined Master of Human Settlements students from the University of Leuven explore how landscape architecture and design could address some of the urban and environmental development problems in Khulna, a secondary city in Bangladesh. Students considered a wide range of factors, including regular devastating flooding; rapid urbanization; informal settlements; crop rotation between rice and shrimp; rail transportation; the transition of a water-oriented economic system to a road-based structure; and the evolution of a peripherally situated university campus to a core area of development.
In the Khulna design studio, landscape architecture is used to identify and plan for the protection of and future use of valuable ground, provide interim functions such as “instant parks,” address flooding with simple concrete infrastructure, and improve accessibility and sense of place. Students proposed tactics like shoreline stabilizations; footway connections; vegetative planting for shade and food; and access to water. One student’s design focused on bolstering the informal public transport systems that occurred on the rivers—a strategy that despite the apparent necessity of the river transportation system to the functioning of the city, received no investment on the part of city administration. Proposals included increased illumination around docking areas for safety; a system to distinguish ingoing and outgoing boats to increase efficiency; stairs and platforms to accommodate boarding boats despite the significant tidal range of the rivers; and general improvements to make the boats, more effective, and convenient.

Rekittke’s (2009) work is particularly relevant to this dissertation because it pushes the idea that landscape architecture should not be confined by the "gilded cage of luxury design" (p. 667) but that it should be used as a helpful and necessary tool for day-to-day challenges. His grass-roots approaches encourage students and practitioners to be on the ground understanding the physical conditions of subaltern places and participating in global urbanization processes. In the spirit of this on-the-ground “dirty-work,” Rekittke et al (2008) argue for a new generation of designers to specifically work in developing places, not as “do-gooders” (p. 188) but as practitioners who recognize that the most considerable urbanization processes will occur outside of Western nations.
Although not discussed explicitly as a goal, the practicality and pragmatism of Rekittke’s approach likely combats what Spivak (2004) criticizes as the “benevolent attitudes of othering.” Rekittke’s approach relies less on convincing landscape architects to get involved in global development for humanitarian purposes; rather the functions from a more basic motivation – there is a job to be done, and landscape architects have the practical skills needed to do it. This pragmatic approach is reminiscent of Elemental\textsuperscript{56} architect, Alejandro Aravena (Winston, 2016), who advocates “looking at facts in a very cold-blooded way…in the sense that you’re not just…a romantic trying to change the world. That’s necessary but it’s not enough.”

Joerg Rekittke (2009; 2008) uses technological advancements to gather information for mapping projects in informal settlements. Advocating computer, aerial, and modelling technology, Rekittke et al (2008) explore methods for preparing sufficient pre-information and simple but effective landscape-urbanistic working models to combat the problem of global workers not having enough time and leisure to explore site conditions. Rekittke’s research highlights the effectiveness of technological tools like drone footage, satellite imagery and 3D modelling, but emphasizes the importance of augmenting this technology with fieldwork. Rekittke focuses on grass-roots experience in the practical sense of requiring information; being “foot-soldiers” of design allows the gathering of necessary data of the site conditions at a scale not available by other means. For example, during fieldwork for a studio project along the Ciliwung River in

\textsuperscript{56} Elemental is an architecture firm that specializes in the public process, and will be discussed in more detail later in this chapter.
Jakarta, Indonesia, a student discovered a homeless camp under a bridge only by climbing down a ladder and exploring the site.

Rekittke’s work, and the work of his students seek effective solutions to issues in subaltern contexts, and a number of their recommendations are creative and effective strategies that could be helpful in other projects, especially the focus on daily life concerns and technological contributions. However, from a postcolonial perspective, any instance that promotes science and technology as tools and strategies in developing contexts, requires particular attention to the kind of dualistic thinking that can arise when Western based technology might silence indigenous methods and knowledge. While Rekittke (2009) argues that if design will count in the future, it must pursue “social impact and the collective profit concerning quality of life” (p. 672), generally, for Rekittke work, social impact and quality of life concerns do not engage with postcolonial concerns for more even and just power dynamics. It is true that landscape architectural strategies can work toward solutions that alleviate injustices in the developing context without ethical considerations of power, difference, or hierarchy. However, by not examining the way our involvement, technology, and actions combat or reinforce colonial hierarchies, we risk perpetuating the cause of the inequity we are trying to end. Concerns remain that scientific knowledge might dominate subaltern and indigenous communities, or that even simple strategies to include or consult local knowledge and perspectives to inform designs with not occur. If landscape architects are to develop ethical theories and practical responses to the subaltern, we cannot rely exclusively on science and technology to inform designs, but must address other ways of knowing and the dualistic relationship between Western and local knowledge.
This dissertation previously discussed ecofeminist theories on the nature of difference and hierarchy, especially regarding eliminating oppression that occurs from dualisms like developed and developing or colonizer and colonizing. Science and technology are associated with the oppressive side of the dualistic fault line between categories like man-reason-civilized-quantitative and woman-emotion-primitive-qualitative. The fact that science falls on the oppressive side of this dichotomy does not mean science is inherently or always oppressive, just as “primitive” or “indigenous” does not always have to be situated as dominated or weak (Tsing, 2011). Further, I would not argue against the use of science or technology in development solely on the basis of its historic relationship with conditions, like colonialism, that are antithetical to the postcolonial viewpoint. The problem that needs to be addressed, especially by technocentric professions like landscape architecture (Thompson, 1998), is that like “colonizer” and “developed,” science and technology have enjoyed a broadly accepted worldview that has largely been perpetuated through major power dynamics.

Developers’ engagement with indigenous knowledge typically involves technical issues of cultivation like water preservation, medicinal plants, and soil conservation because they fit the scientific technical worldview; much less engagement occurs with the principles underlying this knowledge such as social justice, gender relations, and familial responsibility (Briggs & Sharp, 2004). Sometimes indigenous knowledge is assimilated into the project as justification that the project respects local knowledge, or as a means of “displaying” that people have been consulted (Juarez & Brown, 2008) when really its inclusion functions more as appropriation that benefits the developer’s benevolent image rather than indigenous knowledge actually challenging and changing
a dominant world-view. Indigenous knowledge can be of equal, or greater value, but it tends to be dismissed. From the postcolonial perspective, Western knowledge dominates not through privileged proximity to the truth, but as a set of conditions caught up in the geopolitics of power (Briggs & Sharp, 2004).

Local knowledge needs to be able to challenge the Western scientific mindset, and the uncritical assumption that science and technology can answer—or ask—all the questions of development. Rekittke’s (2009) combined approach of modelling and satellite imagery with on-the-ground reconnaissance remains a promising approach in gathering information necessary to make design decisions. An interesting way to build on Rekittke’s work would be to test the technical knowledge in landscape architecture, understand how that specific type of knowledge produces specific types of design recommendations or strategies, and consider how indigenous knowledge might challenge or support the technical knowledge produced by Western means.

Any situation where technology is being used as the dominant strategy to solve problems or communicate ideas presents an opportunity to employ ecofeminist approaches such as using first-person narratives to explore experiences that connect us to other people and places, and explicitly calling out hierarchies as we find them throughout the design process to form a new, non-dualistic approach to scientific and indigenous knowledge and ways of knowing. Any effective strategies in development will certainly rely on both scientific and indigenous knowledge. As architect, Alejandro Aravena, explains, “we have one type of wisdom and they have another. Normally the

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57 Situations also arise where some forms of local knowledge, for example, slash-and-burn-agriculture or female circumcision (Briggs & Sharp, 2004), are truly problematic from an ethical standpoint and little guidance on how to navigate these situations exists.
problems are so complex that with just one we won’t solve the problem” (Winston, 2016).

Professional

Perhaps one of the greatest challenges in development-focused education for landscape architects is that while development-focused design studios offer rich experiences for the students, these studios and interactions are impeded by extremely strict time constraints. The benefits for Western students are clear: through experiences in development they can gain skills such as critical awareness and cultural competency. But constraints inherent to studio education call into question what the supposed benefactors of the studio gain from an experience often marked by very short analysis and design periods and abrupt endings. Ideally, development projects will receive the full time and attention necessary—this includes not only the research, design, community engagement, and implementation, but also the analysis that occurs post-occupancy. Because projects change through time as people and cultures modify them, post-occupancy studies are helpful in recognizing how our design intentions unpredictably interact with the realities of place—an understanding which is crucial for those who work in development (Tsing, 2011). Furthermore, exploring how projects change through time is necessary to ensure that if our intentions and designs did not realize desirable consequences that we take the necessary actions to learn from failures and make things right.

It may not be feasible for educational experiences to escape the time constraints of the semester. Unless we can develop a curriculum with a rolling time frame where students from each semester or each cohort contribute to successive phases of the same project, most studio experiences will be limited to smaller projects and initial
phases. Studio education that addresses systemic postcolonial concerns is imperative to adequately prepare landscape architects, but it will be difficult to use educational design studios to effectively address those systemic issues in the real world and explore accountability to our beneficiaries at the same time.\textsuperscript{58} Here, we turn to the professional and non-profit realm for insights from architects and urban designers\textsuperscript{59}, who are still encumbered by financial burdens of time, labor, and materials, but are not constricted by the semesterly turnover of students. The following section explores concepts from Massachusetts architecture firm, MASS Design Group, and its approach to accountability; Chilean-based architecture firm, Elemental, for its work with participatory processes; and, operating in a space in-between academics and the profession, a systems-based approach of “informal armatures,” developed by David Gouverneur.

**Accountability**

Architects, Michael Murphy and Alan Ricks, co-founded the non-profit architectural firm, MASS, after working on a hospital project in Rwanda, and the firm has since pursued many public health-oriented projects that embody simple but creative solutions to problems. MASS specializes in designing and constructing infrastructure such as

\textsuperscript{58} I do not mean to imply students should be “held” accountable per se. It is important to recognize and be sensitive to the possible scenario of Western students benefitting from a developing world studio project by gaining knowledge and experience, while the local population suffers through university’s learning curve. Naturally, such a scenario should be avoided, but in all cases, accountability should serve as an embedded and critical element of the learning experience.

\textsuperscript{59} Very little relevant information exists about professional landscape architecture firms doing work in marginalized communities, either internationally or domestically. Kounkuey Design Initiative’s work is relevant, but their limited published information did not enable further analysis or discussion of their philosophies and approaches. I maintain that the architecture and urban design examples are directly relevant to landscape architecture, and interpret the lack of readily available professional development work in landscape architecture as representing an opportunity for the discipline to expand.
hospitals and maternity waiting rooms in poor communities that otherwise would not have access to those facilities.

MASS strives to deliver common-sense and inexpensive solutions to problems without sacrificing aesthetic considerations or ability for the local population to be involved in meaningful ways. For example, as described on the MASS website (massdesigngroup.org), MASS designed and built the Butaro District Hospital (see Figure 6-1) in Rwanda with open-air hallway circulation on the outside of the building in response to patients getting sick from interior, cramped hallways that harbored infection. Instead of wrestling with unreliable and expensive ventilation mechanics, their building featured natural ventilation. Local laborers and craftsmen were employed to excavate and lay stonework. Local designers created patterns for screened areas of the building that were scaled up and applied to the project.

Being heavily architecturally focused, the type and scope of projects MASS pursues are less applicable to landscape architecture than other examples mentioned in this chapter, but their approach toward design, accountability, and investing in the dignity of the people they serve are directly relevant. MASS explicitly expresses their values, philosophy, and approach which includes the acknowledgement that architects can either be part of the problem or part of the solution. MASS co-founder, Michael Murphy (2016), argues that architecture can be a transformative engine for change; “[b]uildings are not simply expressive sculptures. They make visible our personal and our collective aspirations as a society.” In a particularly inspiring vein, the non-profit firm outlines their views on agency, values, power, and social justice, concepts that are not often explicitly addressed in architecture and landscape architecture:
Architecture is not neutral; it either helps or hurts. Architecture is a mechanism that projects its values far beyond a building’s walls and into the lives of communities and people. To acknowledge that architecture has this kind of agency and power is to acknowledge that buildings, and the industry that erects them, are as accountable for social injustices as they are critical levers to improve the communities they serve. The stakes are too high, and the accountability too low, not to insist that architects do something to address these challenges (MASS, n.d.).

The firm’s concise statements on its values and perception of the world should inspire landscape architects to wrestle with their own ideologies and come together to figure out what matters. It is especially interesting that MASS dedicates much of its rhetoric to accountability and the lack of neutrality in the profession. MASS bases its approach on tenants that uphold what is essentially a postcolonial position, and has successfully integrated itself into the non-profit sphere.

MASS has established some guidelines for their human-centered approach, which they call the Lo-fab, or “locally fabricated” method. Its core tenets are: 1.) hire locally, 2.) source regionally, 3.) train where you can, and 4.) invest in dignity (Murphy, 2016).

Relying on local labor and local materials are not particularly new concepts in landscape architecture. Integrating community members into the process incorporates local techniques which, along with sustainably sourcing materials regionally, contributes to the genius loci of the place. However, “training” and “investing in dignity” are relatively novel concepts that should be considered in landscape architecture.

MASS argues that hiring locally not only generates jobs and income for a community, but perhaps more importantly, also enables members of that community to

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60 These concepts strongly relate to the ideas espoused in Ananya Roy’s (2006) postcolonial argument.
contribute their skills and efforts into the process of rebuilding, resulting in a strengthened social structure in the community. Put simply, often times people feel good about being a part of something that improves their community and their neighbor’s lives. Dedication to community members’ dignity is expressed by valuing, incorporating, and celebrating community members’ creative contributions; MASS respects their capacity, learns alongside them, and empowers them to make their own changes in their own neighborhoods. In places where local knowledge and social capital might be limited, by training locals in construction techniques, design, or furniture making, MASS further enables community members to access new means of income and livelihoods after the project is finished.

MASS’s Lo-Fab approach prioritizes dignity of the people and the communities they inhabit and can inform landscape architecture’s approach to participation, regionalism, and—perhaps most interestingly—a discussion on how actively respecting the dignity of subaltern peoples might change our actions and practice to move beyond traditional concepts of participation and facilitation toward a genuine shift of power, and fostering of respect and connection. How could landscape architects strengthen connections to the people who will inhabit their projects? How can we increase collaboration with local designers and craftsmen? In what ways might sharing our knowledge of landscape benefit community members and sustain elements of livelihood after we have left the project? How can we ensure that the community genuinely feels valued and respected by our actions or our design proposals? Answers to these

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61 Certainly this question is strongly coupled with the goal of preventing hegemony and being aware of ways in which expert knowledge can silence local knowledge.
questions will vary with every project and every place, but from a postcolonial viewpoint, MASS’s insistence on supporting the community’s dignity is a mindset that would translate well into accountability goals for landscape architecture.

**Participation and Finding the Right Question**

Founded by Alejandro Aravena, an architect who won the 2016 Pritzker Prize, Elemental is a Chilean-based “do tank” that focuses projects of public interest and social impact, and provides insight on how we can improve on traditional notions of participatory processes. Its project on post-tsunami recovery of Constitución, Chile offers insights on how participation can help find the right questions to ask in development (Aravena, Arteaga, Cerda, Torres, & Oddo, 2018).

On February 27, 2010, Constitución, Chile was hit by an 8.8 Richter scale earthquake and tsunami. Nearly 80% of the city was destroyed and over 100 people lost their lives. Basic services collapsed, with no access to water, food, electricity, or communications. Massive looting added to the social unrest and insecurities over fear of another earthquake or tsunami.

Elemental immediately started work to deliver solutions (see Figure 6-2). Two days after the tsunami, Elemental began designing and constructing emergency shelters that not only provided what the alternatives lacked, but also featured panels that could be reused for permanent housing solutions later. Thirty days after the tsunami, Arauco, a forestry company, and primary industry in the region, donated a plan for sustainable reconstruction to the government. Arauco contracted a group of professionals including Elemental to create a master plan for the entire city in 100 days. Elemental quickly partnered with a strategy communications company to conduct a city-wide participatory design process. They met with nearly every public department
involved and carefully considered every project constraint. Through these meetings, Elemental discovered that for the community, even more disturbing than fear of another tsunami, were the difficulties faced by yearly flooding due to inadequate drainage, a lack of public space, lack of public access to the river, traffic jams caused by an inefficient street grid, and many more concerns over daily life.

Elemental offered three proposals on how to move forward in the aftermath of the Tsunami. The first was to prohibit construction in the affected areas. This proposal was inadequate mostly because people, especially fisherman, would install themselves on ground zero anyway, leading to an urban disaster of unsafe informal structures. The second alternative was to build a wall along the river; this was deemed irresponsible because as demonstrated in the 2011 tsunami in Japan, infrastructure that tries to resist nature will almost certainly fail. The third, and ultimately selected, alternative proposed a mitigation forest to be installed between the edge of the city and the river. The principal used here was “against geographical threats, we must have geographical answers” (citation needed). Rather than resist the waves, the forest would dissipate wave energy by introducing friction. The plan also addressed the annual flooding, the historical urban debt of public open space, public access to the river, and escape routes in the event of another tsunami. The forest proposal was by far the most difficult to implement because it required land appropriation along the river. The local fishermen were the most reluctant to give up their land, but ultimately agreed as long as they were treated fairly, i.e. that the wealthy land owners also relocated.

Elemental’s approach to the public process most closely aligns with that advocated by Anna Tsing (2011), where the focus is not on connection but
disconnection; it is at the points of friction and the discord where we can understand the messiness of global and stakeholder connections. Aravena (2014) explains, “participatory design is not a hippie, romantic, let’s-all-dream-together-about-the-future-of-the-city kind of thing.” He recognizes and embraces the difficulties in the participatory process. Aravena laments that architects are not “taught the right thing in university”—they are taught to deal with architecture for other architects and not how handle the everyday situations that every citizen faces: insecurity, pollution, segregation, congestion (Winston, 2016). Some architects come with the question in advance and are trained to listen to what they want to listen to. For Aravena, the goal is to start a project as far away from architecture as possible. You are not trying to ask people for the answer, but trying to envision the question, because “there’s nothing worse than answering the wrong question well”—a poignant explanation of the problems that arise when unaware experts help the developing world (Winston, 2016).

By diving into the difficulties, and embracing a painstaking process, Elemental was better able to identify the right questions, and they learned that the solution for Constitución needed to accommodate much more than tsunami resilience. Much of Elemental’s approach relied on leaving behind preconceived notions about what needed to happen; taking all the time and energy needed to understand the stakeholder’s perspectives; being good listeners so they could absorb and respond to the concerns of the community; and not taking shortcuts for the sake of finding consensus, but wrestling with the parts of the process that were highly contested. Existing approaches to participation are far from perfect, but with Brown and Kjer (Brown & Kjer, 2007) laying the groundwork for education in critical awareness, and Elemental demonstrating the
positive results of wrestling with contention, continuing to pursue these approaches with a postcolonial ethic and an intense critical self-reflection will enable the next generation of landscape architects to make a marked difference in the world, to shift power dynamics, and contribute to social and environmental justice.

**Addressing Systemic Issues and Informal Armatures**

The developing world has distinct issues and developed-world practitioners must explicitly and sensitively respond to them in ways that are often quite different to and more complicated than approaches for a project in developed contexts. While it is important to recognize and respond to marked cultural, economic, historic, and physical differences between developed and developing contexts, it is equally important not to stray into the approach of designing for the “other.” A number of apps, jackets, temporary shelters, and lights have been designed for the “homeless,” “displaced,” and “indigenous,” that may have temporarily alleviated issues, but such micro solutions fail to address systemic causes (Fairs, 2017). Rather than finding quick fixes and relying on temporary solutions rather than permanent ones, we should focus on how our design proposals interact with the larger systems at play and anticipate future needs. For example, from an architects’ perspective, rather than designing a new tent for refugees in camps, we should be designing better cities with better infrastructure and social structures that can support the ever-increasing number of migrants (Fairs, 2017). Development work is not about designing for refugees, or for the poor; it’s about designing for people and the environments we inhabit, depend on, and affect.

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62 I do not mean to imply that landscape architecture projects in the developed world would not also benefit from discussions on power, justice, accountability, and difference. The themes discussed in this dissertation are relevant to every project, foreign or domestic.
As designers trained to work with landscape systems, landscape architects are already primed to find solutions for socio-environmental problems in the developing world. Their focus on how multiple layers comprise landscape and how natural and social systems function as complex processes that interact with and are derived from such layers, is in part what makes landscape architecture seem so relevant to wicked problems of the developing world. Operating in a space in-between professional practice and academics, urban designer, David Gouverneur (2014), developed the Informal Armatures (IA) approach as a proactive systemic strategy to informal housing issues (see Figure 6-3).

Of the professional examples discussed in this chapter, the IA approach is the most compatible with landscape architecture, indeed, most elements are indistinguishable from landscape architectural practices and design strategies. The IA approach represents a thorough practical approach specific to the seldom-explored condition of informal settlements. The core premise of the IA approach lies with its preemptive measures in planning and designing before informal settlement occurs.

For Gouverneur (2014), informal settlements are not seen as a problem, nor are they fetishized and romanticized. Rather, informal settlements are considered a consequence of historic and structural deficiencies with the potential to be dynamic and balanced urban environments (Gouverneur, 2014). This view finds a middle ground that prevents attitudes towards the subaltern as somehow “less than” the developed world,

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63 Gouverneur’s IA approach was developed and refined in educational settings. Because the strategy is not pedagogical, but practice-focused, Gouverneur’s work does not neatly fit into the education or professional categories.

64 Gouverneur is an urban designer and architect, currently Professor in Practice in the Department of Landscape Architecture at the University of Pennsylvania.
and it also avoids attitudes of complacency that enable us to skirt our responsibilities in solving the all-too-prevalent crises of humanity. Gouverneur incorporates both the positive and negative aspects typical to informal settlements in his strategy: informal settlements are personalized, vibrant places with a self-made identity and diverse spatial configurations and aesthetics and often they represent the opportunity to have shelter when many cannot access it through the formal market (Gouverneur, 2014). However, such positive aspects are counterbalanced by deficiencies in the public realm such as mobility, infrastructure, open space, services, and amenities (Gouverneur, 2014).

The IA approach merges the best solutions from both informal and formal design strategies and preemptively acts to prevent problems before informal occupation occurs. The primary obstacle in addressing these problems concerns the prejudice and biases against informal. Both formal and informal development have strengths and weaknesses, and the IA approach tries to merge the best of both. Informal growth performs very differently from formal urbanism, which uses land use code and zoning ordinances that direct planners to approve or reject plans. Informal urbanism operates with the opposite logic and takes a fraction of the time to become realized. Settlers first take over the land, then they consolidate and expand their shelters, often without any services or infrastructure such as roads and water. Later, gradual improvements to infrastructure and services can occur, often supported by the public sector and institutions.

Gouverneur (2014) outlines that sustainable habitats require a set of dignified living conditions, including: flexibility for growth; income-generating activities;
empowering communities to build according to their needs; adequate resources; relationships with existing neighborhoods; a robust public realm; community services; and environmentally sensitive management of existing natural resources. These conditions rely heavily on social, cultural, and political systems of life and livelihood, and embody the Informal Armature approach and its goal of fostering a more equitable and environmentally balanced global society.

IA’s design components are organized into three general categories of Corridors, Patches, and Stewards (See Figure 6-1); each operates both individually and as a system, and at a variety of scales. Corridors organize the public realm and can take two forms: Attractors and Protectors. Attractors are centrally located, accessible, and highly visible. They intensify activity and serve as gathering spaces for the community, as well as provide public services and utilities with the aim of evolving to service new expanded districts and balancing the performance of the broader urban system. Protectors, on the other hand, slow the energetic expansion of informal settlements by protecting environmentally sensitive areas, wetlands, archaeological sites, and unique ecosystems. They can take the form of a network of open spaces, waterways, flood control and drainage, or agricultural land; and can incorporate local mobility systems such as bike paths and pedestrian walkways.

Patches refer to the urban infill of where people live, shop, and produce. While Patches are constructed predominantly by the community, they also require external support from publicly-driven initiatives and developer operations. The first sub-category of Patches, Receptors, refers to human-scaled areas where informal occupation is expected to occur and provide an opportunity for the creation of strong and vibrant
neighborhoods. The second sub-category, Transformers, interact with Corridors and Receptors and are meant to be economic drivers that provide good jobs and sources of income. These spaces adapt over time and can accommodate important functions and activities such as shopping, education, health, and sport.

Finally, Stewards are meant to safeguard the public realm as it transitions through the different phases of settlement. Stewards can be individuals, institutions, or community organizations, who operate at focalized points within the Corridors and Patches. These points are performative spaces of management, meant to engage the community, especially regarding representation of political and social pillars of local culture. The formal sector’s legal management strategies like zoning and ordinances do not work in informal environments, as unused spaces quickly become occupied by individual settlers, and the ability to address collective needs is lost. Thus, Stewards, as spaces and as agents, represent informal counterparts to addressing managerial, emotional, and communal needs of the neighborhoods.

IA’s design components are purposefully broadly defined, to enable their adaptation into the inevitably heterogeneous situations in which landscape architects and planners find themselves. In pursuit of dignified living conditions for sustainable habitats, each design component influences each other morphologically, experientially, and functionally to support a network of physical and performative relationships.

Although the IA approach has yet to be implemented, Gouverneur (2014) outlines a series of interdisciplinary academic case studies that have both informed and relied on the IA approach. These serve as hypothetical examples and have been prepared unbound by bureaucracy, developer, or the necessary interaction with and
input from community members and leaders. Gouverneur stresses the importance of monitoring physical and non-physical transformations, novel approaches to on-site explorations, and means of representation and communication that can easily be followed by all co-participants of the IA experiment. Such interactions and engagements will only happen through real-world applications of the IA approach, however, turning to some of these academic case studies will enable a better understanding of the IA approach’s and landscape architecture’s potential in global development.

In one example, project coordinators, Thabo Lenneiye and David Gouverneur, led students from the School of Design at the University of Pennsylvania, to study and develop design proposals for growth Harare, Zimbabwe and its informal settlements. Strong rural-to-urban migration trends and low income demographics indicate that informal settlements, in which 60-70% of the population currently reside, will likely increase in the near future.

Harare’s terrain is fragmented by a mosaic of shallow but wide seasonally flooding wetlands called damsos. The damsos play an important role in feeding streams and aquifers, as well as Lake Chivero, the city’s main water supply, which is considered to be one of the most polluted lakes in the world. Due to food shortages, low-income farmers are encroaching on the damsos, with domestic wastewater and fertilizer compounding the pollution problems in the damsos and on Lake Chivero.

Harare is socially and economically segregated due to its recent colonial past. The Central Business District (CBD), a dense and commercially active area, separates the northern, wealthy suburbs from the informal settlements in the south, which will likely expand over the next few decades, further increasing the spatial segregation.
Local postcolonial discriminatory bylaws prevent commercial and income-generating activities from occurring within neighborhoods, including low-income areas. Gouverneur and his team discussed with local planning officials the positive effects seen in Venuzuela and Colombia when mixed-use districts and flexibility for the enlargement of dwellings created favorable conditions for low income communities. The local planners agreed to test the idea with pilot studies but did not envision that the bylaws would be changed.

Mobility in Harare is also a problem, which consists of an inefficient system of privately operated minibuses and buses that suffer traffic congestion and leave many areas poorly serviced. Community services are generally strong but Harare significantly lacks public space.

The studio organized a workshop at the Mayor of Harare’s office, which included city employees, professionals, community representatives, and local students working in teams with Penn Design students. The workshop asked teams to ask three questions and map the results: a.) what positive aspects of the city should be protected and enhanced?; b.) what are the most relevant problems?; and c.) what programs, projects, or initiatives should be prioritized?

The students’ projects envisioned how Harare could deal with population growth in informal settlements. They proposed which areas should be safeguarded and where densification could occur, and developed extensive landscape strategies to protect and use the dambos as civic spaces and landscape infrastructure that organizes urban development. Green infrastructure was proposed to clean and recharge aquifers, and
Dambos could be used for productive activities such as alternative sources of energy, eco-tourism, non-contaminating agricultural practices, and recreation.

Students proposed a more compact and socially integrated urban system aimed at balancing the growth in less affluent areas and in the vacant zone between the CBD and informal settlements in the southern periphery. In the formal city, offering the middle class more urban alternatives to large suburban homes could help achieve higher densities, and a stronger network of transportation connections would strengthen ties among growing urban areas and create a system of local centers that could decrease dependence on the CBD.

Proposals looked at both the informal and formal sector and the variety of strategies associated with two distinct approaches. Informal and formal are expected to work as a system, benefitting from their proximity and sharing their infrastructure and services. Students developed their proposals in more detail, with three pilot projects on the following topics: helping displaced communities from former settlements; integrating formal and informal settlements in productive districts; and enhancing water management and food production. Their proposals are multi-scalar, rely on simplicity, take advantage of limited resources, and go beyond the spatial into the fulfillment of basic human rights. In short, the Harare case study, along with the other four described by Gouverneur (2014), are ideal examples of how landscape architecture and urban design can contribute to addressing problems typical to developing places.

**Summary**

To address the gap between intentions and results landscape architects must more thoroughly branch out into and rely on practices and theories from trailblazers in
landscape architecture and related fields that specifically address the wicked problems of development.

I envision that the majority of the recommendations in this chapter will be best implemented in higher education: generally speaking, universities are designed to be environments where the next generation of professionals are challenged to think critically, and self-reflect. Throughout the literature, meaningful experiences are often cited as imperative to bridging the divide between the developed and developing world and design studios provide an exceptional opportunity to explore how to structure those experiences. Design studios, in particular, offer a unique opportunity to create, learn, and explore.

Education takes center stage but the suggestions and ideas discussed are by no means limited to students. Both education and practice can benefit from further exploration on cultural awareness and sensitivity, community engagement methods, paying attention to the day-to-day aspects of life and livelihood, understanding how different forms of knowledge compete, and testing and expanding on some of the specific recommendations from practice.

The resounding theme throughout this dissertation has been to highlight uneven power dynamics. The goal of postcolonial development is to foster empowerment and change the hierarchy of power. Here, critical self-reflection is an important first step in having an ethical encounter, and one that I advocate be included in landscape

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65 I would not dismiss providing continuing education for professionals interested in international development practice. However, I believe that becoming effective postcolonial practitioners will require significant effort—an effort that benefits from students who can devote a matter of years to their learning endeavors and who are not yet accustomed to a particular way of doing things.
architecture studios. When paired with seminars that encourage students to explore theories from environmental ethics and critical development, studios can be specifically designed to foster students’ cultural awareness (Brown & Kjer, 2007) and ethical attitudes that are responsive to the subaltern; they can challenge students to unlearn their privilege (Kapoor, 2004) and identify their biases. We should focus on methods that encourage designers to view themselves embedded in the historic context defined by dynamics of power, privilege, and oppression (Brown & Kjer, 2007). MASS design group also challenges us to be more self-critical, and argues that we should adopt an attitude that explicitly respects the dignity of the communities we serve.

Methods used in the design process, especially for community engagement, need to be further refined. Augmenting participation methods, like the PLA method from Brown and Kjer’s (2007) studio, to include ideas on how friction and contention realize intentions in development (Aravena, 2014; Tsing, 2011), or how benevolence is a form of othering (Spivak, 2004), can help us break down the traditional expert-local barrier.

Development revolves around problems of daily life, so landscape architects, whether students, professionals, or instructors, need to be well-versed in issues of pollution, congestion, segregation, insecurity (Winston, 2016); Along similar lines, both Amita Sinha (2010) and David Gouverneur (2014) highlight the importance of accommodating productive landscapes. Preferably the understanding of life and livelihood issues will come from conducting on-the-ground fieldwork so landscape architects can become competent in not shying away from the messy work of development (Rekittke, 2009).
Development problems are wickedly complex, and we need to creatively and sensitively employ all the strategies at our disposal. Both technology (Rekittke, 2009) and indigenous knowledge have a place in development and strategies from formal and informal planning can contribute with their own particular strengths (Gouverneur, 2014). The challenge lies with ensuring that our decisions on how we combine and augment these strategies are sensitive to our understandings of the postcolonial present. We need methods and precedents to help us navigate when and where to use what strategy, or perhaps develop new synthesized forms of these strategies.

Some educators and practitioners have delineated explicit guidelines for interacting with the subaltern. Gouverneur’s (2014) Informal Armatures approach is among the most relevant to landscape architecture with calls for designs that feature flexibility, maintain relationships with other neighborhoods, accommodate public and civic services. MASS’s lo-fab approach also gives specific and straight-forward guidelines of hiring locally, sourcing locally, training, and investing in dignity. These recommendations are relevant and offer good starting points. In moving forward, it will be interesting to see how employing these guidelines in different situations might generate new insights and more refined guidelines. The specific recommendations from this and previous chapters have been collected and organized according to theme in Table 6-1.

Table 6-1. Table of Recommendations in this and other chapters organized by theme.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Recommendations</th>
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| Power  | - Employ Spivak’s suggestions for ethically engaging the subaltern:  
  o intimately inhabit and negotiate discourse from all sides so that we become more vigilant of our own practice  
  o acknowledge complicity with hyper-self-reflexivity |
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<th>Theme</th>
<th>Recommendations</th>
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<tr>
<td></td>
<td>o un-learn our privilege, dominant systems of knowledge, and representation</td>
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<td></td>
<td>o stop thinking of ourselves as better or fitter</td>
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<td>o learn to learn from below by suspending the belief that the developing world is in trouble and we have the solutions</td>
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<td>o work without guarantees by recognizing the irretrievably heterogeneous nature of the subaltern and reckoning with the impossibility of knowing it (Kapoor, 2004)</td>
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<td></td>
<td>• Challenge uncriticized assumptions by questioning our biases and explicitly delineating our values</td>
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<td></td>
<td>• Pay attention to the ways we represent ourselves with language</td>
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<td></td>
<td>• Develop methods that rely on visual analysis, interviewing and sampling, and group and team dynamics (Brown &amp; Kjer, 2007)</td>
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<td></td>
<td>• Focus on everyday experiences to break down traditional roles of expert and community member (Brown &amp; Kjer, 2007)</td>
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<td></td>
<td>• Encourage landscape architects to embed themselves in historic context of power, privilege, and oppression (Brown &amp; Kjer, 2007)</td>
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<td></td>
<td>• Equip landscape architects with analysis of power and critical questioning skills to respond to existing power structures (Brown &amp; Kjer, 2007)</td>
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<td></td>
<td>• Explore ways Young’s (1990) categories of oppression manifest in the landscape:</td>
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<tr>
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<td>o exploitation</td>
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<td></td>
<td>o marginalization</td>
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<td></td>
<td>o powerlessness</td>
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<td></td>
<td>o cultural imperialism</td>
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<td></td>
<td>o violence</td>
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<td></td>
<td>• Expand on Sinha’s (2010) recommendations for dealing with colonial imagery:</td>
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<td></td>
<td>o awareness of colonial history</td>
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<td></td>
<td>o rely on local vernacular precedents</td>
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<td></td>
<td>o engage productive aspects of indigenous traditions and relationships</td>
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<td>o design with symbols that respect diverse perspectives</td>
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### Justice
- Work towards the elimination of social injustices as a core value in landscape architecture through education and landscape architectural institutions like the ASLA and IFLA
- Harness power of institutions like ASLA and IFLA to promote respect for group differences and imagine new concepts of community (Young, 1990)
- Develop ethical approach to environment and non-human species as an ecocentric approach to sustainability, as with Kopnina’s (2017) concepts of ecological justice

### Accountability
- Treat ethics of accountability as endemic approach in education
- Incorporate the explicit goal of “increasing dignity” into approach (massdesigngroup.org)
- Develop responses to the band-aid and innocent professional myths with an acute awareness of complicity (Roy, 2006)
- Teach developed world students about interconnectedness, benevolence, humility, morals, and power (Spivak, 2004)
- Strengthen the profession’s critical and normative stances by engaging with:
  o structures of imperialism,
  o agency and resistance among ‘beneficiaries’
  o subjectivity of planners
  o the condition of collective action (Rankin, 2010)
<table>
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<tr>
<th>Theme</th>
<th>Recommendations</th>
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| Difference | • Employ ecofeminist strategies such as first-person narrative, identifying hierarchies, rejecting oppressive dualisms (Plumwood, 1991; Warren, 1990)  
• Structure experiences that de-exceptionalize our ethic (Peterson, 2006)  
• Work to understand friction and disconnect in development (Tsing, 2011)  
• Reject universal answers |
| Praxis | • Rely on design thinking as an approach to the wicked problems in development  
• Learn by doing—by forming connections to people and places through experiences (Peterson, 2006)  
• Employ the IA approach (Gouverneur, 2014):  
  o Use formal and informal strategies  
  o Be proactive, not retroactive  
  o Make design flexible to allow for growth  
  o Include income-generating activities  
  o Empower communities to build according to their needs  
  o Provide adequate resources  
  o Build relationships with existing neighborhoods  
  o Provide structure for robust public realm  
  o Include community services  
  o S sensitively manage natural resources  
  o Produce multi-scalar solutions  
  o Rely on simplicity  
  o Take advantage of limited resources  
  o Go beyond the spatial fulfillment of human rights  
• Leave behind preconceived ideas about design practice by focusing on finding the right question, not the right answer (Winston, 2016)  
• Continue to provide platform for competitions that explore landscape architects’ role in the developing world  
• Refine and develop a landscape architecture code of ethics that connects to issues of power, justice, accountability, difference, and praxis.  
• Develop ways of connecting to clients like governments from developing places, and NGO’s and non-profits  
• Increase overall awareness of power, justice, accountability, and difference by pairing structured studio experiences with seminars in environmental ethics, critical development, and anthropology  
• Provide instructors with the time and resources necessary to formulate strong connections with communities serviced by design studios.  
• Teach students how to handle everyday situations that citizens face: insecurity, pollution, segregation, and congestion (Winston, 2016)  
• Treat landscape architecture as a profession not bounded by the “guilded cage” of luxury design, or a humanitarian cause, but a practical approach to the day to day problems of the developing world (Rekittke, 2009).  
• Do not rely exclusively on technology and science to solve problems  
• Engage indigenous knowledge not as appropriation, but explore it on its own merit  
• Consider gender roles |

**Additional Recommendations**

In addition to the insights from education and practice, I recommend that we call on professional organizations to work with educators and professionals in deepening
and refining professional discussions and statements on values and landscape architecture’s role in society and environment. As mentioned in previous chapters, The ASLA Code of Environmental Ethics already features strong connections to the Sustainable Development Goals (SDGs) and can be further refined to include tenets dedicated to accountability, power, and difference. Both professional firms and educational programs rely on national and international professional organizations like ASLA for guidance, and those organizations must wrestle with the current ethical and political challenges of our world and help solidify and connect the goals of education, practice, and ethical engagement with the subaltern.

The International Federation of Landscape Architects (IFLA) has been promoting international development, working towards solving the global environmental crisis, and addressing social inequity by promoting educational standards and fostering the exchange of knowledge, especially by hosting international conferences and student competitions. The theme of this year’s student design competitions was recently announced as “Landscapes of Power: Design for Social Justice” (“IFLA 2017 Student Design Competition,” 2018).

Hopefully other organizations and educational programs will take note and encourage further discussions on the relevance and critical importance of power and social justice in landscape architecture, as well as facilitate access to projects for landscape architects to explore ethical approaches in international development.

Recently, the Landscape Architecture Foundation (LAF) has exhibited exemplary leadership in addressing landscape architects’ role in the world’s social, political, and environmental challenges. The LAF 1966 Declaration of Concern, in which Ian McHarg
and several colleagues articulated concerns about the crisis on the natural environment, present critical and optimistic reflections on landscape architecture’s role in averting environmental destruction (McKee, 2016). On the 50th anniversary of the declaration, in June of 2016, the LAF hosted a conference to promote contemporary responses to the most pressing issues that landscape architects will face over the next 50 years. Inspired by the Declaration of Concern, landscape architects including Anne Whinston Spirne, Kate Orff, Christophe Girot, Anuradha Mathur, and Alpa Nawre expressed their visions for the future of landscape architecture—many of which speak to the need to incorporate the political and social into new approaches to address global socio-environmental crises.

**Further Research**

Certainly, this dissertation’s recommendations (see Table 6-1) beg for further investigation. Ideas about praxis and accountability were introductory, and landscape architects will need a much deeper investigation into power as it relates to landscape. To be sure, each individual recommendation on power, justice, accountability, difference, and praxis could easily support more research. Strategies for grounding these themes in education and practice will need to be tested and measured for their capacity to prepare landscape architects for ethical encounters with the subaltern. Further exploring the debate between indigenous and scientific knowledge, especially as it relates to the art versus science debate in landscape architecture, dualism, and ideas about universal truths and rights will also benefit the profession and help landscape architects to more effectively and ethically navigate their practice. The idea of benevolence as othering, and postcolonial criticisms of humanitarianism has potential to
influence discussions of ethics in development, especially as related to study abroad and service-learning experiences.

Aside from further developing the ideas already presented in this dissertation, a number of opportunities exist to answer related questions that, if time and resources allowed, I would have liked to explore more fully. In particular, further research could be pursued to better understand the way this internationally-focused research could be applied to domestic projects, practical concerns for landscape architects trying to enter the international development world, and the role of globalization in landscape architectural development projects.

**Domestic Versus International**

I frequently refer to the notion that a number of aspects in the developed world, such as excessive consumption, and over production of waste, produce negative outcomes in the developing world. Further, poverty and marginalized communities also certainly exist in developing places. Such concerns suggest significant opportunity exists to research domestic concerns in landscape architecture, however, the focus of this research is on the international and developing context for two reasons: first, the global poverty and issues surrounding it disproportionately affect the developing world; second, landscape architecture at the international level is my core academic and professional interest. Starting with the international context directed the research toward theories and ideas that help us understand the relationship between developed and developing. Because the essence of postcolonial theory and the discussions in this dissertation revolve around power dynamics, the specific recommendations offered here can still hold significant relevance for development problems internal to developed
places, and it will be interesting to see how future research might translate these strategies into working with disenfranchised groups in the United States, for example.

While I believe the themes elicited in this research are relevant to the developed context, for research that focuses on the developed context of the United States, I would consider other theories and aspects before relying on postcolonial theory. For example, critical race theory, and analysis of the history of slavery in this country would provide a helpful framework for understanding current racial divides and geographical unevenness of the United States, especially in urban centers and the rural South. Within environmental ethics, I would look to the role of Christianity and associated ideas about stewardship, and explore its manifestation in law, policy, and cultural interpretations. Like postcolonialism, critical race theory is also based on a critique of power dynamics, and because both theories are rooted in Marxist philosophical concepts, it is likely that themes elicited from these two viewpoints would be similar. Still, in addition to exploring postcolonial theory to understand domestic development concerns, it would also be interesting to explore the intersection of landscape architecture, Christian environmental ethics, and critical race theory—or perhaps other frameworks—as they pertain to poverty and development in the United States, and see how the recommendations might differ from those in this dissertation.

**Entering the Development World**

Professionals in development face significant ethical challenges, especially regarding complicit participation in the “doubleness” of empire (Roy, 2006). In addition to these challenges, landscape architects must also handle practical challenges as they enter the complex world of international development. Thousands of NGO’s operate in the developing world, often under restrictive guidelines, policies, and bureaucratic red
tape. Although navigating the international development world is daunting, there is room for landscape architects in the international development community, but we need to further explore and better understand the daily operational aspects of how international development functions before we can effectively insert ourselves into it.

Humanitarian and development work is often associated with being unprofitable. It is true that when dealing with poverty, budgets are often small and payout can be unattractive to professionals who could otherwise profit from the private sector. Many NGO’s and projects are only able to exist because of volunteer and pro-bono efforts. Certainly, I encourage landscape architects to seek out pro-bono projects, but if landscape architecture is to influence the developing world at the scale at which am advocating, contributing labor and resources without pay is simply not a sustainable option. But certainly not all international development precludes economic gain. Various governments collectively spend billions of dollars in foreign aid for development projects each year. By the broadest definition of foreign aid, which includes military and security assistance, the US alone spent nearly $49 billion in 2015 (Tarnoff & Lawson, 2016).

If landscape architects are to become active members in the international development community, they will need to advocate their role to professional developers, who likely have little—if any—knowledge of landscape architecture’s potential value to their efforts. It will also require extensive research into the political, and non-governmental systems that manage development funds. What are some of the more relevant grants to pursue and organizations to pair up with? How do landscape architects market themselves to the people in charge of doing development work and

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66 In the US, military and security account for 35% of the foreign aid budget.
allocating its funding? International development services a very different type of client than the private developers landscape architects tend to have. Exploring how to shift from private developer to marginalized communities, developing countries, governments, and organizations will require significant effort.

**Globalization**

Opportunities for future research include examination of globalization theory, especially to challenge the way globalization is presented in landscape architecture, which is usually with the dichotomy of global=bad, local=good. Such a black and white interpretation is neither accurate nor helpful in furthering understandings of how global forces affect the landscape, whether those forces are interpreted solely in globalization theory or in conjunction with postcolonial theory.

Much of the theoretical discussion on globalization elucidates the “macro scope of the phenomenon” (Inda & Rosaldo, 2007, p. 7). To be useful to the field of landscape architecture, we must situate these theories within the articulation of the global, the local, and the in between—especially in regards to how everyday places shape and are shaped by these processes, both in social and environmental terms. Focusing on what exists in between global and local can help us better understand the “concrete attentiveness to human agency, to the practices of everyday life, in short, to how subjects mediate the processes of globalization” (Inda & Rosaldo, 2007, p. 7).

Globalization does not just involve an outpouring of hegemonic force, but spaces of resistance and negotiation. Understanding how landscape architecture participates in and interacts with those global spaces could have significant implications for helping landscape architects to understand their role.
Concluding Thoughts

The examples discussed in the chapter have helped outline some applicable elements for landscape architecture projects in developing contexts. They have shown how some of the themes that emerged from environmental ethics and postcolonialism might be applied in real-world scenarios. These are solid starting points in what I hope will be a long exploration for landscape architects as they seek meaningful engagement with the developing world.

Whether through education, practice, or institutions, I believe that landscape architects must work collectively toward the goal of integrating a socio-environmental ethic in theory and praxis, whether in the developed world or the developing. As argued previously in this dissertation, topical diversity is a strength for landscape architecture, but diversity of values is problematic. While international work need not be the only focus for landscape architects, it is imperative that landscape architects collectively explore guidelines, approaches, and a code of ethics to address concerns such as accountability, justice, power, and difference, for such concerns affect every level of landscape architecture, whether domestic or international.

Because postcolonial notions permeate society, development, and indeed landscape architecture, if we do not actively challenge our biases and assumptions, and in turn encourage our students to do the same, we will most likely perpetuate the very causes of global inequity. Cultural awareness and social consciousness are not happenstance occurrences—they are the result of purposeful and powerful experiences. We need to introduce students to the difficult philosophical questions that force us to specify our biases and values. We must foster more educational experiences that engage real communities and address real solutions that emphasize field work and
counter the disconnectedness between the landscape architect and the day-to-day-life within informal communities. With that foundation, those landscape architects will be able to enter the academic and professional realm to create firms like Elemental and MASS Design Group that implement and develop strategies like Informal Armatures.

Perhaps the current push for justice, equity, and civil rights; the fights to end racism and gender discrimination; efforts to halt global warming; and the debates on what constitutes free speech; are indicating the direction of our current era—perhaps, in looking back on the early 21st century, people will analyze how national and global discussions of justice and civic rights pushed landscape architects to embrace new and relevant considerations for ethics and morality that addressed contested elements of power, oppression, and resistance. Landscape architects have an obligation to uphold and pursue what is “right” and “good,” not as mitigators, stewards, facilitators, or “band-aid” professionals, but as critically aware, accountable, and humble citizens who constantly seek ways to empower the powerless, better the environment, and celebrate difference.

The recommendations presented are offered as a starting point. A tendency exists in landscape architecture to rely on a “tool box” of methods, or a checklist of strategies that can be applied to make a project more accommodating to social elements or ensure that we are collecting the appropriate information. Certainly, learning which strategies work in certain situations is valuable information, and I hope that as landscape architects continue to pursue work in the subaltern that new and helpful ideas will be plentiful and shared—not just among our professional peers but also the communities we serve.
In moving forward, it becomes important to recognize that the situations endemic to the subaltern are wickedly complex and defy simplification and replication. Although tempting to reduce problems into manageable chunks and develop replicable strategies, each situation needs to be addressed according to its unique needs and opportunities. Even so, I believe that the ideas discussed in this dissertation, especially how to cultivate cultural awareness; increase critical self-reflection; respect the dignity of the subaltern; as well as design-specific recommendations such as the Informal Armatures approach; are strategies that are flexible enough to respond to the wicked problems of development and are ready to explore, implement, and test.

Ideally, the profession will be able to inextricably embed critical social consciousness; attention to power; approaches to hierarchy and difference; and community engagement as an inseparable component of landscape architecture; one that intimately defines and directs praxis. Dedication to social and ecological justice is not a plug-in to be used in particular situations to augment practice; it is not a specialization or a category of landscape architecture like residential design or ecological restoration. Socio-environmental inequity and the power inherent to landscape are parts of an ever-present reality in every aspect of landscape. As such it is our responsibility to prioritize and pursue the social and ecological well-being we value.
Figure 6-1. Photograph of MASS’ Butaro District Hospital (MASS, n.d.).

Figure 6-2. Image board of Elemental’s Constitucion project (Elemental, n.d.).
Figure 6-3. Conceptual design components of the Informal Armatures approach. From top to bottom: Corridors, Patches, Stewards, Ensemble. Sketches by David Gouverneur (2014)
Because international development is primarily concerned with economic issues (Castree et al., 2013), Goal 1 of the SDGs is to “end poverty in all its forms everywhere.” Targets include creating sound policy frameworks at multiple levels that are pro-poor and gender-sensitive, as well as reducing the poor’s exposure and vulnerability to climate-related, economic, social and environmental shocks and disasters.

Targets for Goal 2, “end hunger, achieve food security and adequate nutrition for all, and promote sustainable agriculture,” call for increased agricultural activity and incomes of small-scale food producers, ensuring secure and equal access to land,
resources, inputs, knowledge, financial services, markets and opportunities. Targets seek to maintain the genetic diversity of seeds, plants and domesticated animals and their related wild species—this includes seed and plant banks managed at regional and international levels that promote access and sharing benefits from utilization of genetic resources. Food production systems should be “sustainable” and “resilient,” which in this case is defined as embracing practices that increase productivity, help maintain ecosystems, strengthen capacity for adaptation to climate change, and progressively improve land and soil quality.

Goal 3, “attain healthy life for all at all ages” includes targets such as reducing maternal and newborn deaths and ending epidemics such as AIDS, tuberculosis, malaria, hepatitis, and other water-borne and communicable diseases. It promotes access to universal healthcare coverage, especially for sexual and reproductive health services, medicines, and vaccines. It seeks to strengthen prevention and treatment of drug and alcohol abuse and reduce the number of deaths caused by traffic accidents. Targets also highlight the need to reduce of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Goal 4’s mission is to “provide equitable and inclusive quality education and life-long learning opportunities for all” and includes targets such as ensuring primary and secondary education for boys and girls, and vocational and technical education for men and women. It seeks to ensure all learners acquire the skills needed to promote sustainable development, which includes education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity. Targets also
include upgrading facilities and infrastructure that support education and increasing the numbers of teachers and teacher training.

Goal 5 focuses on achieving “gender equality and empowerment of all women and girls.” Targets seek to end violence, discrimination, trafficking and other types of exploitation. It seeks women’s full and effective participation in a number of spheres, including economic, political, and public life. The goal also mentions reforms to ensure women’s access to ownership and control of land, financial services, inheritance, and natural resources.

Goal 6 is to “ensure availability and sustainable management of water and sanitation for all.” Targets include achieving universal access to safe drinking water, globally reducing pollution and increasing water use efficiency to reduce the number of people suffering from water scarcity. It also calls for expanding local communities’ participation and implementing transboundary management.

Goal 7, “ensure access to affordable, reliable, sustainable and modern energy for all” focuses on expanding and improving infrastructure for renewable and efficient energy supply. It calls for cleaner energy technology and modern energy services for all.

Goal 8, is to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.” It covers targets for youth employment, increased access to banking and financial services, as well as equal pay. Targets call for an end to slavery, human trafficking, and child labor, especially child soldiers. One target also specifically calls for “sustainable tourism” that creates jobs and promotes local culture and products.
Goal 9 seeks to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.” It promotes infrastructure that enables research, communication, and technology to flourish and reiterates some of the targets from Goal 7 by emphasizing resource-use efficiency and clean and environmentally sound technologies and industrial processes.

Goal 10, “reduce inequality within and among countries” addresses social, economic and political inclusion. It seeks to eliminate discriminatory laws and adopt policies that promote greater equality irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. It includes considerations for financial flows, and improved regulation and monitoring of markets and institutions.

Goal 11 seeks to “build inclusive, safe and sustainable cities and human settlements.” Focusing on housing, transportation, and green and public spaces, this goal seeks improved quality for urban, peri-urban, and rural environments. It supports participatory planning and safeguarding the world’s cultural and natural heritage. It supports policies that contribute toward inclusion, resource efficiency, adaptation to climate change, resiliency, and holistic risk management at all levels, especially protecting the poor and vulnerable from disasters.

Goal 12, “ensure sustainable consumption and production patterns,” addresses all countries but recognizes the need for developed countries to take the lead on reducing waste and ensuring sustainable public practices. It calls for people everywhere to have the relevant information needed to promote awareness for sustainable development and lifestyles in harmony with nature.
While “climate change” has been mentioned in several other goals, Goal 13 specifically promotes taking “urgent action to combat climate change and its impacts.” It calls for increased capacity in dealing with climate-related disasters and integrated climate change policies, strategies and planning.

Goal 14 calls for us to “conserve and sustainably use the oceans, seas and marine resources for sustainable development.” It calls for reduced pollution (especially from land-based activities), and seeks to actively restore the health of marine ecosystems. It advocates increased scientific knowledge, marine technology, and promotes small-scale fishers and their access to resources and markets.

Goal 15 focuses on terrestrial ecosystems: “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.” Perhaps the most immediately relatable goal to landscape architecture, Goal 15 seeks to increase reforestation and achieve a land degradation-neutral world. It especially focuses on increasing biodiversity, calling on us to protect and prevent extinction of species, integrate biodiversity values into national and local planning, to increase financial resources to promote biodiversity, and to promote sharing, access and benefits arising from the utilization of genetic resources.

Goal 16, “promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels” speaks to an idealized view of global governance and society. It seeks the end of illicit financial and arms flow, violence, abuse, exploitation, trafficking, corruption, and bribery. It calls strengthening participation in institutions of global governance, and
strengthening national institutions to build capacity for preventing violence, terrorism and crime.

Finally, Goal 17 calls on us to strengthen “the means of implementation and revitalize the Global Partnership for Sustainable Development.” It organizes this partnership in sub-categories of finance, technology, capacity-building, trade, and systemic issues. It calls on all countries to fully participate and strive toward the goals outlined by the SDGs.
APPENDIX B
RESEARCH POSTER

Developing Landscape Goals: Why Do The United Nations' Sustainable Development Goals Sound So Familiar?

Figure B-1. Research poster presented by Lauren Sosa at College of Design, Construction and Planning Student Research Showcase, 2016.
APPENDIX C
TABLE OF SDG INDICATORS AND ASLA CODE OF ENVIRONMENTAL ETHICS (COEE)

The following table shows a side-by-side comparison of the United Nations’ (UN) Sustainable Development Goals (SDGs) indicators (UN.org, n.d.) with the American Society of Landscape Architects (ASLA) Code of Environmental Ethics (COEE) (ASLA, 2000). Qualitative interpretations on the level of direct or indirect connections were based on wording similarity, but ultimately were determined at the discretion of the author.

Table C-1. Table comparing SDG indicators with ASLA’s COEE

<table>
<thead>
<tr>
<th>SDG Indicator</th>
<th>Direct Link to ASLA Code of Environmental Ethics</th>
<th>Indirect Link to ASLA Code of Environmental Ethics</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>END POVERTY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve access to productive employment for all demographic groups</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Secure land tenure and rights to resources for marginalized</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Mitigate climate-related disasters for the poor</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Integrate biodiversity conservation into development strategies, planning</td>
<td>ES3.1 Strive to maintain, conserve, or re-establish the integrity and diversity of biological systems and their functions. Restore degraded ecosystems. Use indigenous and compatible materials and plants in the creation of habitat for indigenous species of animals.</td>
<td>N/A</td>
<td>SDGs explicitly seek biodiversity with the intent of poverty reduction; ASLA COEE does not specify, but it is assumed that biological systems are valued in their own right, and for the extended benefit of humankind.</td>
</tr>
<tr>
<td>processes and poverty reduction strategies</td>
<td></td>
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<tr>
<td>SDG Indicator</td>
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<tr>
<td>END HUNGER increase small-scale food production</td>
<td>N/A</td>
<td>ES1.6 The rural landscape is a limited resource that is vital to the well-being of the earth's life forms; the rural landscape's essential qualities should be conserved as the competing needs of a growing population are met.</td>
<td></td>
</tr>
<tr>
<td>Increase access to resources, services and markets for small family farmers/fisheries</td>
<td>ES2.1 In developing design, planning, management, and policy, identify and invoke stakeholders—both communities and individuals—in helping to make decisions that affect their lives and future; ensure that they have appropriate access to relevant information, presented in an understandable form, and create opportunities for them to contribute to solutions.</td>
<td>N/A</td>
<td>SDGs focus on “small scale” markets while ASLA CoEE seems to imply “all” stakeholders and includes topics not necessarily related to “hunger.”</td>
</tr>
<tr>
<td>Develop sustainable food systems that minimize adverse impacts without compromising food security</td>
<td>N/A</td>
<td>ES1.6 The rural landscape is a limited resource that is vital to the well-being of the earth's life forms; the rural landscape's essential qualities should be conserved as the competing needs of a growing population are met.</td>
<td></td>
</tr>
<tr>
<td>Implement resilient and adaptive agricultural practices</td>
<td>N/A</td>
<td>ES1.14 Transgenic plants should not be used until the best available science indicates there will be no adverse environmental effects caused by their use.</td>
<td></td>
</tr>
<tr>
<td>Achieve protection and sustainable use of agricultural biodiversity through enhanced application of indigenous practices</td>
<td>N/A</td>
<td>“</td>
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</tr>
<tr>
<td>SDG Indicator</td>
<td>Direct Link to ASLA Code of Environmental Ethics</td>
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<tr>
<td>Improve effectiveness of addressing humanitarian food emergencies</td>
<td>N/A</td>
<td>“</td>
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<tr>
<td><strong>IMPROVE HEALTH</strong></td>
<td></td>
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</tr>
<tr>
<td>Reduce death from non-communicable diseases, including road traffic deaths, maternal health issues, and substance abuse</td>
<td>N/A</td>
<td>ES6 Actively engage in shaping decisions, attitudes, and values that support public health and welfare, environmental respect, and landscape regeneration.</td>
<td></td>
</tr>
<tr>
<td>Increase opportunities for living a healthy lifestyle</td>
<td>N/A</td>
<td>“</td>
<td></td>
</tr>
<tr>
<td>Ensure universal access to safe medical treatments</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Decrease deaths from indoor and outdoor pollution</td>
<td>N/A</td>
<td>ES6 Actively engage in shaping decisions, attitudes, and values that support public health and welfare, environmental respect, and landscape regeneration.</td>
<td></td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide marginalized people with access to inclusive education, skills development and vocational training</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Integrate education for sustainable development within programs and curricula</td>
<td>N/A</td>
<td>ES5 Seek constant improvement in our knowledge, abilities, and skills; in our educational institutions; and in our professional practice and organizations.</td>
<td></td>
</tr>
<tr>
<td>Ensure healthy, safe and inclusive learning environments</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
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<tr>
<td>SDG Indicator</td>
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<tr>
<td>WATER &amp; SANITATION</td>
<td>Provide universal access to clean drinking water</td>
<td>ES1.10 Water resources should be equitably allocated, available water supplies should be efficiently used, all forms of water pollution should be eliminated, and land use should conserve and protect water resources and related ecosystems to sustain a high-quality standard of living and the maintenance of the quality of ecosystems.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Provide universal access to safe sanitation and sewage systems</td>
<td>*</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Improve water quality by reducing pollution and toxic materials and improving wastewater management</td>
<td>*</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Improve water-use efficiency and reuse</td>
<td>*</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Implement trans-boundary water management cooperation</td>
<td>ES1.12 The natural and cultural elements of waterways and their corridors should be protected through the systems of national, state, and local designation of rivers and greenways to ensure their integrity and use by this and future generations.</td>
<td>N/A</td>
</tr>
<tr>
<td>SDG Indicator</td>
<td>Direct Link to ASLA Code of Environmental Ethics</td>
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</tr>
<tr>
<td>Protect and restore natural aquifers</td>
<td>ES1.10 Water resources should be equitably allocated, available water supplies should be efficiently used, all forms of water pollution should be eliminated, and land use should conserve and protect water resources and related ecosystems to sustain a high-quality standard of living and the maintenance of the quality of ecosystems.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Decrease mortality from water-borne illnesses</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Provide facilities and infrastructure for productive water use and mitigating impacts of water-related disasters</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**ENERGY**

<table>
<thead>
<tr>
<th>SDG Indicator</th>
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<th>Indirect Link to ASLA Code of Environmental Ethics</th>
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<tbody>
<tr>
<td>Increase clean energy technologies</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Encourage solutions to sustainable energy</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Expand and upgrade energy infrastructure</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
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</tbody>
</table>

**SUSTAINABLE INDUSTRIALIZATION**

<table>
<thead>
<tr>
<th>SDG Indicator</th>
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<th>Indirect Link to ASLA Code of Environmental Ethics</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Respect policy and circumstances for industrial development, especially in developing countries</td>
<td>N/A</td>
<td>ES4 Develop and specify products, materials, technologies, and techniques that conserve resources and foster landscape regeneration.</td>
<td></td>
</tr>
<tr>
<td>SDG Indicator</td>
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<tr>
<td>Increase industrial diversification including through enhanced domestic processing of raw materials and commodities and through new product development</td>
<td>N/A</td>
<td>“”</td>
<td></td>
</tr>
<tr>
<td>Promote indigenous technology development in developing countries</td>
<td>N/A</td>
<td>“”</td>
<td></td>
</tr>
<tr>
<td>Retrofit existing industries with clean technologies and improve resource-efficiency</td>
<td>N/A</td>
<td>“”</td>
<td></td>
</tr>
<tr>
<td><strong>REDUCE INEQUALITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce social and environmental inequalities</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Empower and promote social and economic inclusion of the poor and marginalized</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Promote and respect cultural diversity</td>
<td>N/A</td>
<td>ES1.7 Historic sites, districts, and cultural landscapes should be identified, inventoried, evaluated, classified, protected, and enhanced to ensure that they are available for the education and enjoyment of this and future generations.</td>
<td></td>
</tr>
<tr>
<td>SDG Indicator</td>
<td>Direct Link to ASLA Code of Environmental Ethics</td>
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</tr>
<tr>
<td><strong>SAFE CITIES &amp; SETTLEMENTS</strong></td>
<td></td>
<td></td>
<td>While the ASLA CoEE may not explicitly address human dwelling, there are likely other documents in landscape architecture that do.</td>
</tr>
<tr>
<td>Ensure universal access to adequate and affordable housing and eliminate slum-like conditions</td>
<td>N/A</td>
<td>N/A</td>
<td>ES4 Develop and specify products, materials, technologies, and techniques that conserve resources and foster landscape regeneration.</td>
</tr>
<tr>
<td>Provide access to safe, affordable, accessible and sustainable transport for all</td>
<td>N/A</td>
<td>N/A</td>
<td>ES1.6 The rural landscape is a limited resource that is vital to the well-being of the earth’s life forms; the rural landscape’s essential qualities should be conserved as the competing needs of a growing population are met.</td>
</tr>
<tr>
<td>Enhance integrated and sustainable human settlement planning and management for all, especially developing countries</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strengthen positive economic and social links among urban, peri-urban and rural areas</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase number of human settlements that have resilience and adaptation plans to address climate change and natural disasters</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Ensure that all cities are accessible and offer opportunities for persons with disabilities</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>SDG Indicator</td>
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</tr>
<tr>
<td>Protect and safeguard the world’s cultural and natural heritage</td>
<td>ES3. Respect historic preservation and ecological management in the design process.</td>
<td>ES1.7 Historic sites, districts, and cultural landscapes should be identified, inventoried, evaluated, classified, protected, and enhanced to ensure that they are available for the education and enjoyment of this and future generations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ES1.9 The character and condition of the visual environments is as important as that of natural, historic, and cultural resources and should be maintained and enhanced and safeguarded from actions that degrade or destroy critical scenic resources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSTAINABLE CONSUMPTION &amp; PRODUCTION</td>
<td>ES1.6 The rural landscape is a limited resource that is vital to the well-being of the earth's life forms; the rural landscape's essential qualities should be conserved as the competing needs of a growing population are met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieve sustainable management and efficient use of natural resources to enhance human welfare within the carrying capacity of ecosystems</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decouple economic growth from environmental degradation</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>SDG Indicator</td>
<td>Direct Link to ASLA Code of Environmental Ethics</td>
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</tr>
<tr>
<td>Reduce release of chemicals and hazardous wastes to air, water, and soil</td>
<td>ES1.10 Water resources should be equitably allocated, available water supplies should be efficiently used, all forms of water pollution should be eliminated, and land use should conserve and protect water resources and related ecosystems to sustain a high-quality standard of living and the maintenance of the quality of ecosystems.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Reduce per capita waste through prevention, reduction, recycling and reuse</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Redouble efforts to create a culture of sustainable lifestyles, including through education, and awareness raising</td>
<td>N/A</td>
<td>ES4 Develop and specify products, materials, technologies, and techniques that conserve resources and foster landscape regeneration.</td>
<td></td>
</tr>
<tr>
<td><strong>CLIMATE CHANGE</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Build resilience and adaptive capacity to climate induced hazards in all vulnerable countries</td>
<td>N/A</td>
<td>N/A</td>
<td>It is surprising that “climate” is not once mentioned in the ASLA CoEE.</td>
</tr>
<tr>
<td>Integrate climate change adaptation and mitigation strategies into development plans and poverty reduction strategies</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Introduce instruments to encourage low-carbon solutions</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>SDG Indicator</td>
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</tr>
<tr>
<td>Improve education and awareness on climate change impact reduction</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>MARINE RESOURCES</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Reduce marine pollution and acidification</td>
<td>N/A</td>
<td>ES1.10 Water resources should be equitably allocated, available water supplies should be efficiently used, all forms of water pollution should be eliminated, and land use should conserve and protect water resources and related ecosystems to sustain a high-quality standard of living and the maintenance of the quality of ecosystems.</td>
<td></td>
</tr>
<tr>
<td>Sustainably manage, restore and protect marine ecosystems</td>
<td>ES1.1 The coastal zone and its resources should be preserved, developed, and used in a carefully planned, regulated, and responsibly managed manner. ES1.12 The natural and cultural elements of waterways and their corridors should be protected through the systems of national, state, and local designation of rivers and greenways to ensure their integrity and use by this and future generations.</td>
<td>N/A</td>
<td>From a postcolonial perspective, it will be important to consider whose management decisions are implemented. Forestry management literature highlights the oft-encountered contentions between indigenous and expert.</td>
</tr>
<tr>
<td>Support small-scale fisheries and aquaculture</td>
<td>N/A</td>
<td>N/A</td>
<td>See note above from “Sustainably manage, restore and protect marine ecosystems”</td>
</tr>
<tr>
<td>Conserve at least 10% of coastal and marine areas</td>
<td>ES1.1 The coastal zone and its resources should be preserved, developed, and used in a carefully planned, regulated, and responsibly managed manner.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Implement participatory coastal management</td>
<td>N/A</td>
<td>N/A</td>
<td>As discussed in this dissertation, the &quot;participation&quot; model is inadequate from a postcolonial viewpoint.</td>
</tr>
<tr>
<td>SDG Indicator</td>
<td>Direct Link to ASLA Code of Environmental Ethics</td>
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<tr>
<td><strong>TERRESTRIAL ECOSYSTEMS</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Halt the loss of biodiversity and protect threatened and endangered species</td>
<td>N/A</td>
<td>ES1.3 Public lands should be maintained and administered in a manner promoting ecosystem health, while recognizing special issues relating to stewardship and long-term sustainability inherent in wildland environments.</td>
<td>As discussed in this dissertation, the “stewardship” model is inadequate from a postcolonial viewpoint.</td>
</tr>
<tr>
<td>Ensure conservation and sustainable use of ecosystems with particular attention to wetlands</td>
<td>ES1.11 Wetlands are essential to the quality of life and the well-being of the earth’s ecosystems; wetland resources should be protected, conserved, and enhanced and site-specific development and management efforts should allow for compatible land use, while preserving the ongoing functions of wetland resources.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Ensure sustainable management of forest and mountain ecosystems</td>
<td>N/A</td>
<td>ES1.4 State, regional, and local governments should continue to build on the strong nationwide legacy of parks and other protected public areas to preserve lands of significance for future generations and provide safe and healthful outdoor recreational opportunities for all citizens, while conserving landscape character and natural, historic, and cultural resources.</td>
<td>The idea of working across political boundaries applies to SDG 17 to “strengthen the means of implementation and revitalize the global partnership for sustainable development.” SDG 17 is not listed in this table because few aspects are directly relevant to landscape architecture.</td>
</tr>
<tr>
<td>Reduce loss and enhance forest cover worldwide</td>
<td>N/A</td>
<td>ES1.3 Public lands should be maintained and administered in a manner promoting ecosystem health, while recognizing special issues relating to stewardship and long-term sustainability inherent in wild-land environments.</td>
<td></td>
</tr>
<tr>
<td>SDG Indicator</td>
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</tr>
<tr>
<td>Halt and prevent land degradation, reclaim land affected by drought, and improve land productivity and soil quality</td>
<td>N/A</td>
<td>ES4 Develop and specify products, materials, technologies, and techniques that conserve resources and foster landscape regeneration.</td>
<td></td>
</tr>
<tr>
<td>Reduce invasive species</td>
<td>ES1.15 Non-native invasive species adversely impact the ecological function of natural systems worldwide. Non-native invasive species should not be introduced where those species could contribute to the degradation of the environment and long-term maintenance and management programs should be established to control or remove non-native invasive species from land and water.</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Ensure informed consent of indigenous peoples and local communities in natural resource management decisions and promote use of traditional knowledge</td>
<td>ES2.1 In developing design, planning, management, and policy, identify and invoke stakeholders—both communities and individuals—in helping to make decisions that affect their lives and future; ensure that they have appropriate access to relevant information, presented in an understandable form, and create opportunities for them to contribute to solutions.</td>
<td>N/A</td>
<td>Theories and methods that support this goal need to be further developed in landscape architecture. As mentioned in this dissertation, the participation model is largely insufficient.</td>
</tr>
<tr>
<td>Integrate natural resources and biodiversity values into national and local planning and development processes</td>
<td>ES1.5 Open space preservation should be incorporated into every planning effort, from the regional to the site level.</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF REFERENCES


Altheide, D. L., & Schneider, C. J. (2012). Qualitative Media Analysis. SAGE.


Aravena, A. (2014). My architectural philosophy? Bring the community into the process (pp. 1–6). TED. Retrieved from https://www.ted.com/talks/alejandro_aravena_my_architectural_philosophynbring_the_community_into_the_process


http://doi.org/10.1177/1473095209357870

http://doi.org/10.1080/18626033.2012.746092


http://doi.org/10.1177/1473095206061019


*Landscape Journal, 7*(1), 60–68. http://doi.org/10.3368/lj.7.1.60


BIOGRAPHICAL SKETCH

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