

THE NATURE OF SPACE IN THE AMERICAS: REALIZING A NON-EUROCENTRIC AND NON- ANTHROPOCENTRIC THEORY OR THEORIES FOR ARCHITECTURE AND URBANISM

LA NATURALEZA DEL ESPACIO EN AMÉRICA: COMPRENDIENDO
LAS TEORÍAS NO EUROCÉNTRICAS Y NO ANTROPOCÉNTRICAS
PARA LA ARQUITECTURA Y EL URBANISMO

CLARE CARDINAL-PETT

Iowa State University of Science and Technology,
United States of America

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This essay explores recent scholarship devoted to decolonizing theories of architecture and urbanism and focuses on how alternative perspectives of the relationships between humans and the rest of the natural world can help build other, more inclusive, intellectual frameworks for understanding cultural landscapes. It argues that recognizing the patterns of spatial occupation of the Americas by various Indigenous peoples prior to colonization is a useful first step towards moving outside obstinate ways of knowing and shaping the world. The essay begins by challenging the names of things, since stepping outside Eurocentricism and anthropocentrism requires renaming and, consequently, reconceiving many things. Notably, the word *nature* must be dismantled as an inherently Eurocentric concept. For example, this essay describes how thinking differently about how Indigenous peoples manipulated the plants and animals around them to produce food and other useful materials can lead to other ways of thinking about urbanism. Finally, this essay explores the tendency of Eurocentric theories in many disciplines to be anthropocentric (as opposed to anthropomorphic) and to associate colonization and its dark side, modernism, with the inevitable, progressive improvement of humankind.

nature, space, Americas, Abiyala, indigeneity, Eurocentrism

Este ensayo se enfoca en cómo perspectivas alternativas sobre la relación entre los seres humanos y el resto del mundo natural pueden contribuir a la construcción de marcos intelectuales más inclusivos para comprender los paisajes culturales. Mediante una exploración de la producción académica reciente acerca de la decolonización de las teorías de la arquitectura y del urbanismo, se argumenta que el reconocimiento de los patrones de ocupación espacial en América por parte de diversos pueblos indígenas antes de la colonización es un primer paso útil para salir de las formas obstinadas de conocer y dar forma al mundo. El ensayo comienza con un cuestionamiento del nombre de las cosas. En particular, se sostiene que el término *naturaleza* debe ser desmantelado, ya que es inherentemente eurocéntrico. Asimismo, se describe cómo pensar de manera diferente acerca de la forma en que los pueblos indígenas manipularon plantas y animales de su entorno para producir alimentos y otros materiales útiles puede conducir a nuevas formas de concebir el urbanismo. Finalmente, se examina la tendencia de las teorías eurocéntricas a ser antropocéntricas en muchas disciplinas, y a asociar la colonización y su contraparte oscura, el modernismo, con la mejora progresiva e inevitable de la humanidad.

naturaleza, espacio, América, Abiyala, indigeneidad, eurocentrismo

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INTRODUCTION

“The master’s tools will never dismantle the master’s house” (Lorde, 1984, p. 112). Almost 40 years ago, Audre Lorde (a mixed race, lesbian poet and essayist) offered this challenge to her fellow feminist scholars. In the decades since, Lorde’s provocation that “this fact is only threatening to those women who still define the master’s house as their only source of support” (Lorde, 1984, p. 112) has inspired scholars in a wide range of disciplines to examine the integrity of their ideologies, to rethink their own tools as they seek to build more inclusive intellectual frameworks. While architecture theory has received its fair share of critical scrutiny, this particular master’s house—an Eurocentric construct—remains the discipline’s exclusive source of support.

My contribution to this conversation about a non-Eurocentric theory (or theories) of space in the Americas assumes that we must step outside the discipline and its canonical ideas, at least temporarily, until we are capable of thinking otherwise. According to Brazilian anthropologist Eduardo Viveiros de Castro, “somewhere along the line ... the West got everything wrong, positing substances, individuals, separations, and oppositions wherever all other societies/cultures rightly see relations, totalities, connections, and embeddednesses” (Viveiros de Castro, 1998, p. 469). Viveiros de Castro’s condemnation stems, in part, from his work with Amerindians and non-Western concepts of nature. This paper argues that the relationship between humans and the rest of the natural world must be fundamental to any non-Eurocentric theory of space in the Americas.

THE SPACE OF OTHERS

Moving outside the master’s house is disorienting and lonely. After all, the company of others is what we seek. Human spaces are constructed through acts of assembly first—those spaces are then often marked for future reference with architecture. While it is tempting to grasp at whatever feels familiar when abandoning a comfortable place, I would argue that our common goal of rethinking Eurocentrism in American architecture and urbanism is more likely to be successful if we wander fearlessly among strange ideas. The stranger the better, I think. This paper is an attempt to posit some potential new tools for rethinking, rebuilding, and moving on.

The first strange idea might be questioning the use of the names “the Americas,” “America,” and “Latin America.” According to Aymara leader Takir Mamani, one of the founders of the Tupaj Katari Indigenous rights movement in Bolivia, “placing foreign names on our villages, our cities, and our continents is equivalent to subjecting our identities to the will of our invaders and their heirs.” Mamani proposes that Indigenous peoples use the name “Abiyala” instead. In his essay, “For Abiyala to Live, the Americas Must Die: Toward a Transhemispheric Indigeneity,” Emil Keme quotes Mamani and states, “Therefore, renaming the continent would be the first step toward epistemic decolonization and the establishment of Indigenous peoples’ autonomy and self-determination” (Keme, 2018, p. 42).¹

Although it is tempting to engage and to appropriate ideas produced by contemporary Indigenous thinkers, writers, designers, and artists, as a person of decidedly European heritage, cultural background, and academic training, I understand why I might not necessarily be invited to that party—and I have no desire to crash it. Indigenous contributions to the larger discourse are essential but I am certainly not authorized to create them. On the other hand, I am obligated to make room for those ideas—or better yet, to assimilate to them. As Arturo Arias reminds us in his 2018 essay, “From Indigenous Literatures to Native American and Indigenous Theorists: The Makings of a Grassroots Decoloniality”:

Non-Eurocentric epistemologies, together with a questioning of hierarchical academic structures, form part of strategies for decolonizing knowledges. New cognitive maps emerge continuously from within globalized Indigenous communities, or in sites of localized spaces of political struggle, generating new

¹ The opening of this essay states: “For the reader not yet familiar with the category of Abiyala, it comes from the cosmogony of the Guna population, an Indigenous nation in the region of Guna Yala (or the land of the Guna), formally known as San Blas in present-day Panama. Abiyala, in the Guna language means ‘land in full maturity’ or ‘saved territory’ ... According to Guna cosmogony, up to the present, four historical stages have occurred in the evolution and formation of Mother Earth. Each stage is designated by a different name. The first is Gwalagunyala. At this stage, after being created, the Earth was consequently hit by cyclones. The second, Dagargunyala, is characterized by chaos, disease, and fear that culminates in darkness. In the third, Dinguayala, Mother Earth is tormented by fire. Today we live in the fourth stage: Abiyala, that of the ‘territory saved, preferred, and loved by Baba and Nana’ ... Abiyala is also the name that the Guna use to refer to what for others is the American continent as a whole” (Keme, 2018, p. 42).

challenges for reconfiguring decolonial knowledges. These fluid processes taking place in the Pacific, Africa, or the global North, as much as in Abiyala, continuously challenge ongoing reflections on decolonial issues. (Arias, 2018, p. 621)

To this point, I offer my next strange idea, which forms the central theme of this paper: “nature”, as defined by Western European culture, must die so that we might realize a non-Eurocentric theory—or theories—of American/Abiyala architecture and urbanism. In *Politics of Nature: How to Bring the Sciences into Democracy*, Bruno Latour argues that

Non-Western cultures have never been interested in nature; they have never adopted it as a category; they have never found a use for it. On the contrary, Westerners were the ones who turned nature into a big deal, an immense political diorama, a formidable moral gigantomachy, and who constantly brought nature into the definition of their social order. (Latour, 2004, p. 43)

Many Indigenous languages have no word that offers an appropriate translation for the word *nature* as it is used in Western European languages (Scarce, 2000; Simmons, 1993). This suggests that “nature” is a cultural construct of Western thought that is “elevated to the status of a conscious principle for the orientation of human behavior” (Leiss, 1974, p. xii) and serves an important purpose: to set humans apart, conceptually, from the non-human. This is not a new critique, of course. While we might all now agree, intellectually, that humans are indeed of a piece with the universe as we know it, we do not behave as if we believe it. For example, current climate change debates often use phrases such as “in order to save the planet, we must reduce carbon emissions.” The planet, of course, doesn’t need saving. It will survive, with or without us.

For centuries, Western thought has assumed that humans are, by nature, entitled to dominion over the non-human. Thinking otherwise is difficult, but scholars across various disciplines have been exploring possibilities in earnest for decades. Some of that intellectual work has clearly modified contemporary discourses and promises to change habits of mind more generally. Two disciplines associated with the most transformative work in this regard are anthropology and environmental history. Anthropology, because it has been engaging other cultural perspectives since its formative years; environmental

history, because it has taken on the radical notion of considering the role of the non-human in historical processes. And, as always, the visual arts and literature remain a powerful source of other ways of knowing. In contrast, architectural and urban theory has not been as motivated as landscape architecture to engage new ideas. The anthropocentric bias in design history and theory remains as firmly entrenched as the Eurocentric bias.

ANTHROPOLOGY AND ARCHITECTURE

If architectural theory ever experienced an “anthropological turn,” as some scholars say happened in the 1960s and ‘70s (Clarke, 2016, p. 44), there is little evidence that it made a lasting impact on the discipline or the practice beyond the appropriation of ethnographic tools. While these tools are not uncommon in contemporary practice, they have been mainly used in academic studies of the vernacular and informal urbanization processes—or as neo-colonial tools in global economic development. The absence of contemporary attention to, or even disdain for work such as Victor Papanek’s *Design for the Real World: Human Ecology and Social Change* (1971) serves as a useful reminder of all that was quickly replaced by postmodernism’s return to formal preoccupations—that often abandoned the material world in favor of graphic images—or found lacking by critics of neocolonialism and neoliberalism: “But which world? What design? What real?” (Escobar, 2012, as cited in Clarke, 2016, p. 44).

Anthropology, on the other hand, has taken what we might call an “architectural turn”:

Over the past decades, anthropology, as well as social science in general, has taken renewed interest in space, place, material surroundings, and how the human and non-human interact and entangle. These theoretical developments have been characterized as “a spatial turn”, “a topographical turn”, “a material turn”, “an ontological turn”, or even “a post human turn”. There are varying theoretical perspectives at play in these diverse turns, but a recurring aspect is that they all took shape in the aftermath of—and are generally considered as a break with—the 1980s post-modern preoccupation with discourse, language, and metaphors. While earlier anthropologists such as Mauss, Levi-Strauss, and Bourdieu engaged with architecture as representing social structures, the new post-structuralist approaches began to

emphasize the performative and iterative nature of architectural forms: what architecture does, rather than what it represents. (Stender, 2016, p. 32)

So, thinking about architectural and urban space in the Americas from a non-Eurocentric perspective might mean thinking about these things more like anthropologists. This is certainly not a new impulse, but we could argue that the long reach of European history and theory remains robust, and most attempts to stand apart from that discourse are rejected by academic reviewers and never published. For example, in my recent attempt to construct a non-Eurocentric narrative account of architecture and urbanism in the Americas/Abiayala, I included substantial details about the development of agricultural practices in various parts of precontact Americas/Abiayala. I believed it was important to establish a narrative that was anthropologically accurate and inclusive. I offered more details and diversity than some of the book's pre-publication reviewers found relevant or meaningful. My content—gleaned from sources well outside Western architecture and urban history or theory—challenged the well-established story about the relationship between agriculture and urbanism.

An accurate story about agriculture in the “New World” was unwelcome, I think, because it offered multiple patterns of spatial practices that underpinned diverse forms of urbanization. There were urbanisms that did not involve sedentary agriculture, monumental architectures built by people who managed non-domesticated landscapes, towns that moved seasonally, and communities so embedded in the lives of the plants and animals they ate that, as some suggest, it was these non-humans that domesticated humans rather than the other way around (Cardinal-Pett, 2015). These diverse patterns of inhabiting the world were not the products of environmental determinism; they were the result of a dynamic engagement of the human and the non-human—a co-evolution, an intersubjective reality. To my peers, this seemed like a strange idea to include in a book about the history of architecture and urbanism in the Americas. However, I would argue that this rejection of a more complicated history of the relationships between people, plants, animals, and environmental forces, as evidenced in the anthropological and archaeological record, renders the diverse spatial patterns that emerged in the early period of urbanization invisible.

The cosmological perspectivism of Eduardo Viveiros de Castro offers provocation, if nothing else, to challenge the anthropocentric bias in Western thought. In his explication of this anthropological theory, he insists that the idea is not the same as relativism: “In fact, it is at right angles, so to speak, to the opposition between relativism and universalism” (Viveiros de Castro, 1998, p. 469). Viveiros suggests the use of the term *multinaturalism* instead, in explicit contrast to the more familiar Western concept of multiculturalism. The fundamental argument states that, in many Amerindian cosmologies, there is no differentiation between human beings and non-humans—an idea that, in Western cosmologies, exists as a “naturalistic ontology.” The interface between nature and society is perceived as natural because humans are considered, more generically by Western science, as organisms like any other, interacting ecologically. Nevertheless, social relations only exist within human society. Western cosmologies are anthropocentric; most Amerindian cosmologies, by contrast, are anthropomorphic. In an anthropomorphic world, being human is no big deal, because it goes without saying that humanity is the original condition of all beings:

if there is a virtually universal Amerindian notion, it is that of an original state of undifferentiation between humans and animals, described in mythology. Myths are filled with beings whose form, name and behaviour inextricably mix human and animal attributes in a common context of intercommunicability, identical to that which defines the present-day intra-human world. The differentiation between ‘culture’ and ‘nature’, which Levi-Strauss showed to be the central theme of Amerindian mythology, is not a process of differentiating the human from the animal, as in our own evolutionist mythology. The original common condition of both humans and animals is not animality but rather humanity. (Viveiros de Castro, 1998 p. 472)

While this essay is necessarily limited in its effort to address other potential contributions by contemporary anthropologists to our search for non-Western and non-anthropocentric theories of American architecture and urbanism, this brief reference to the work of Viveiros de Castro hopefully serves as a sufficient argument for how anthropology can help guide the quest. In his own words:

we sure do not need anthropologists to tell us that European-born capitalist civilization is in its death throes, and is taking the planet

with it to a very bad place, as far as many species (including our own) are concerned. Anthropologists just help us focus our gaze elsewhere ('otherwise') and show what is out there—show that there are a number of other possible worlds out there. (Holbraad & Viveiros de Castro, 2016, para. 16)

HISTORY AND NATURE

In 1800 CE, there were fewer people in the Americas/Abiyala than in 1491 CE. This simple historical fact may feel fictional to many—another strange idea, perhaps. While there is still some ongoing wrangling over precise numbers by researchers in various disciplines, such as archaeology, anthropology, and geography, the general truth of the matter is no longer in dispute. This historical demographic reality has many implications for the topic at hand. I will address two of the most salient. The first and most obvious implication is that human beings from Europe did not change the course of history in 1492 CE—despite all variety of narratives stating otherwise. Only an anthropocentric cosmological perspective could claim agency for the demographic apocalypse caused by the introduction of new diseases to Abiyala. The colonizers and conquistadors, unwitting hosts of viruses, parasites, and bacteria, saw their fantasies of cultural superiority mirrored in the events that followed the epidemics: the Indigenous peoples of a very old “New World” seemed physically weak, culturally unproductive, politically disorganized, and abandoned by their false gods.

The apocalypse emptied large areas of the hemisphere of human activity, left anthropogenic landscapes untended, and erased many communities, languages, and stories completely within an unprecedented period of time. Many parts of Abiyala were already “re-wilding” when European colonists and their African slaves first encountered and occupied them. In the most basic sense, this fundamental erasure created physical, conceptual, and moral space for the Western expansion that occurred over the subsequent centuries. The apocalypse cleared the way for human migration and the false narratives that accompanied those urbanization processes—stories about the triumph of culture over “virgin” nature. The concept of pristine myth, first articulated by William Denevan in 1992, still haunts our Eurocentric colonial histories (Denevan, 1992). Just to repeat, in 1491 CE, there were many more people in Abiyala than in 1800 CE. And some of those people lived in several of the world’s largest and most sophisticated cities and urban networks.

For centuries after contact, the lack of evidence of extensive inhabitation throughout the Americas/Abiayala created additional disincentive to entertain the idea of people almost everywhere. This is a second—equally profound but not so obvious—implication of the demographic collapse. The emergent practice of archaeology, functioning as an adjunct to architectural and urban history, did not bother to look for traces of human settlements that surely did not exist or, when speculation that they might exist occurred to the occasional researcher, funding agencies declined to support the necessary digs. As a result, the erasure was dramatic, precipitous, and persistent. Germs, not guns, conquered Abiayala. This does not mean there was no aggression and abuse in the colonies; rather, the encounter of Europeans and Indigenous peoples was, in hindsight, an unfair match from initial contact. Diseases, not their human hosts, changed the course of history. Denial of that reality still perpetuates the myth of European racial and cultural superiority. It also continues to repress any alternative histories of architecture and urbanism. Once again, in 1491 CE, there were many more people in Abiayala than in 1800 CE. And some of those people lived in several of the world's largest and most sophisticated cities and urban networks.

Like new developments in anthropology and archaeology, the relatively new discipline of environmental history promises to assist our project of rethinking Eurocentric and anthropocentric perspectives of architecture and urbanism in the Americas. However, the discipline struggles with its own internal debates, which include disagreements over a continued adherence to Eurocentric attitudes about nature. Some other scholars complain that environmental history lacks theoretical rigor (Sörlin & Warde, 2007). Although environmental history is most widely recognized in the United States, it has numerous intellectual ancestors in other parts of the world and owes much to developments in Western science. It came into its own in the 1970s in response to the growing environmental movement and is still encumbered by the era's contested politics. Many scholars in the field now aim to move beyond its persistent anthropocentric bias with projects such as *The City Is More than Human: An Animal History of Seattle* (Brown, 2016). This book is an example of what has been called the discipline's "animal turn." Most environmental historians adhere to a fundamental notion that humans are not the only agents of historical change. This once-strange idea is one we should consider seriously.

In “The Theoretical Foundations of Environmental History,” José Augusto Pádua, a professor of Brazilian Environmental History at the Institute of History, Federal University of Rio de Janeiro, describes these foundations in terms that echo the cosmological perspectivism of Viveros de Castro:

Nature increasingly presents itself as something permanently under construction and reconstruction over time, a far cry from the traditional view of a fully finished reality that would act as a stable reference point for the agitation of human living. The image of a theater play is not far-fetched, where the stage set serves as a passive context to the dynamic content of the actors’ movements. After a certain point, however, this set begins to move and change with surprising intensity, forcing us to acknowledge its active presence. The play becomes an interaction between the movements of the set and the movements of the actors. The difference in today’s scientific view is that the set has always been in motion; what changed was the subjective perception of the actors. (Pádua, 2010, p. 88)

In the same essay, Pádua includes a warning to any closeted positivists:

The theoretical literature on environmental history has stressed that, when emphasizing the relevance of the biophysical world, we must not fall prey to the fallacy of believing that this world lends itself directly, positively and immediately to human perception. (Pádua, 2010, p. 93)

Pádua’s approach to environmental history seems to offer a tool (acknowledging the agency of “the set” in the construction and reconstruction of history and the limitations of human perception) for retelling the history of architecture and urbanism in the Americas/Abiayala. Unfortunately, the existing environmental literature that addresses urban issues is of limited use. Although Latin America is one of the most urbanized regions in the world, urban environmental histories focus mostly on North America and Europe (Soluri et al., 2018). One of the most prevalent spatial patterns in most contemporary Latin American cities—informality—is rare in these cases. Another deficit in the environmental history literature is its “recentism” bias, as most Latin American studies are concentrated in the 19th and 20th centuries (Soluri et al., 2018, p. 4). While we can make good use of existing tools developed by environment historians, this body of knowledge will certainly benefit from additional work in the pre-contact and

early colonial periods, especially in Latin America. A comprehensive environmental history of Lima, Peru, for example, might help us all understand how Indigenous practices formed the “spaces” of the contemporary city. Perhaps the city, especially its informality, might reveal itself as something other than what we assume and generate new theories of spatial production.

THE NATURE OF MODERNISM

Scholars in many disciplines can be counted on to associate the colonization of the Americas/Abiyala by Europeans with the early stages of what later became known as modernism. Until recently, the extension of colonialism to other parts of the world, especially by the British Empire, was seen as an inevitable and progressive development of human potential. In his essay “*The Rise of the West after Twenty-Five Years*,” William McNeill reflected on his unapologetic history of Western superiority with some regrets but did not retreat from the basic impulse to “admire those who pioneered the enterprise and treat the human adventure on Earth as an amazing success story, despite all the suffering entailed” (McNeill, 1995). Colonialism, for centuries, was understood and revered by Western culture as “the vehicle that brings modern values and institutions to the colonised world” (Bhambra, n.d., p. 1). While the idea of modernity itself remains a contested concept, recent scholarship attempts to establish a more relational-dialectical process between colonizers and colonized—and to define, more precisely, the actual contributions colonized people made in the historical process. In the case of the Americas/Abiyala, historical studies and theoretical speculation about how modernity emerged from the political and economic changes during the colonial era are now common. Some of these studies and theories admirably struggle to escape their Eurocentric bias but most do not address the anthropocentric question and, consequently, remain tethered to concepts that regard “nature” as something optional, outside the crucible of historical production.

The history and theory of architecture and urbanism, characteristically slow to learn from developments in other disciplines, are even more conservative and, despite all its attempts to “go global,” they remain firmly entrenched in the most basic form of Eurocentrism. For example, few recent studies addressing the deployment of the grid as a tool for territorial expansion and urban planning in the Americas/

Abiayala acknowledge the fact that this signature element of the modernist tendency—to reduce complex ecosystems, geographical bodies, and cultural landscapes to abstractions of political and economic systems—was already present in pre-contact urbanisms. Fernando Luiz Lara’s *Spatial Theories for the Americas: Counterweights to Five Centuries of Eurocentrism*, published in 2024 by the University of Pittsburgh Press, is a notable exception. As Lara (2024) argues, this willful disregard of historical fact can be blamed on the parochial nature of the discipline and cuts short any discussions or discoveries of what “other” agendas or meanings the grid might offer.

Most frequently considered a sign of colonial occupation and commodification of occupied lands by Europeans, the grid certainly did not serve that agenda in its most famous and elaborate pre-contact form: the urban and territorial grid of Teotihuacan. While we still do not know much about the political and economic space of that city, its urban form clearly shared some of the open-system attributes and distributed socio-cultural governance structures associated with places like Savannah, Georgia. At the very least, the well-documented multicultural demographics of the city in its heyday, 600 CE, should provoke scholarly curiosity about how the use of the grid in this place at that time is or is not unique in world history.

A recent publication by Vera S. Candiani, a native of Argentina who studied history at UC Berkeley, is an excellent example of how the tools of environmental history might help us rethink the nature of modernism’s origins in the crucible of colonial Americas/Abiayala. According to one reviewer, her study of Mexico City’s Desagüe project—the centuries-long attempt by the Spanish to drain the lakes that once characterized the city’s environmental context—“decolonizes historical (mis)understandings of the Desagüe and, in the process, pushes back against narratives of progress and advancement that tend to come with looking at scientific change over time” (Candiani, 2014, as cited in Dym, n.d., para. 1). Candiani’s book, *Dreaming of Dry Land: Environmental Transformation in Colonial Mexico City*, “works at the intersection where social, economic and environmental history meet with the history of technology” (Princeton University, n.d.). Her scholarship strives “to delve into the role of human interactions with the material world of dirt, plants, animals and energy through work and everyday objects in broad historical processes” (Princeton University, n.d.). The book deals with many aspects of a very complex

period of history that can be read as a microcosm of the Spanish colonial enterprise.

While Candiani's research presents several potential topics relevant to this discussion, my essay shares a few of her observations regarding the differences in the spatial practices between the Spanish and Indigenous peoples of the Aztec Empire regarding urban water. This example, I hope, bolsters my argument for using the tools of anthropology and environmental history to develop alternative theories of space. Water, an especially powerful force in historical processes, is not invisible—unlike the pathogenic seeds of demographic collapse it can transport—in Eurocentric and anthropocentric theories of architecture and urbanism. It is, however, filtered through the conceptual framework of modern science and, in its disenchanted, rendered abstract—the ultimate expression of that process being the descriptor H_2O .

Candiani introduces her research with a brief description of Tenochtitlán, a lacustrine urban landscape managed by people who were clearly comfortable with the dynamic hydrological conditions of the Valley of Mexico. When the Spanish arrived, they almost immediately began to dream of dry land. The carefully balanced hydrological engineering of the valley by the Indigenous peoples allowed for too much ambiguity between water and firm ground (Candiani, 2014). The city's property lines could not be counted on to correspond to the maps the colonizers drew up. The protracted process of erasing the lakes and stabilizing the Earth is still ongoing; floods and flash floods continue to plague the city, even though many inhabitants lack reliable access to clean water. Candiani's narrative exposes the work of the *Desagüe* as a combined effort by colonizers to remake the city by draining its watery essence and by the colonized to preserve its essential spatial practices. The Spanish relied heavily on Indigenous labor and knowledge to manage—yet ultimately undermine—the hydrological nature of the basin. The results of this contestation and collaboration shape the contemporary reality of modern Tenochtitlán/Mexico.

In addition to its forever fluid water systems, the Aztec city also presented the Spanish with an unfamiliar ambiguity between the urban and the rural: much of its residential sectors consisted of artificial islands, known as *chinampas*, organized in gridded neighborhoods devoted to agricultural production. Except for camelids in the Andean

region, there were no large mammals suitable for domestication in the Americas/Abiayala before 1492. As a result, agricultural practices relied exclusively on human labor and scaled in those terms. In Tenochtitlán, this labor was mostly distributed into small incremental specialties—such as flowers, fruits, vegetables, maize, birds, and fishing—that were traded in large central markets. The largest of these, located in Tlatelolco, included products from local producers as well as more exotic commodities from many parts of the empire and beyond. The diversity of food, materials, and manufactured products available to ordinary people far outstripped that available to European. The *chinampas* can be seen as a sophisticated evolution of a longstanding Mesoamerican practice of integrating farming, fishing, and household activities in landscapes subject to the whims of water. The origins of this pattern can be traced back to the early Olmec period (Cardinal-Pett, 2015).

The *chinampas* in the basin of Mexico also functioned as flood control devices, absorbing excess water like giant sponges while creating estuary zones for fisheries. Periodic flushing of *chinampas* with fresh water in parts of Lake Texcoco allowed food production in this most saline lake in the system of interconnected waterways. In hindsight, it appears that the Aztecs' command of their social and ecological empire might have been unsustainable (Candiani, 2014). While we cannot be sure, the effects of deforestation and population growth might eventually have intervened and redirected the course of history. Nevertheless, what is clear is that the environmental history of Tenochtitlán and its replacement, Mexico City, demonstrates that urban water needs rethinking as a hybrid entity, a bio-hydro-social process that is forever fluid, much like nature itself, which is “permanently under construction and reconstruction over time” (Pádua, 2010, p. 88).

The spatial patterns of urban life in Tenochtitlán were inextricably bound to seasonal rain, groundwater flow, and the biochemistry of the lakes, i.e., to the fundamental ecological context. People constituted one element of this context, making and remaking themselves over time, building not only physical patterns but cosmologies. Tlaloc and Chalchiuhtlicue, the Aztec god and goddess of water, were both revered and feared by the inhabitants of Tenochtitlán. In *The Death of Aztec Tenochtitlán, the Life of Mexico City*, art historian Barbara Mundy discusses how water and its associated deities were powerful cultural forces for the Aztecs. Tlaloc commanded rain and storms, while

Chalchiuhtlicue controlled lakes, rivers, and streams. She was a life-giver, like amniotic fluid, but she was also responsible for drownings. Her capriciousness was legendary. Mundy carefully points out that representations of water in Aztec art and literature were numerous and diverse. As she notes, “there were different kinds of water, dependent upon origin and hydrography. They had different smells, colors, and tastes... But all of them were manifestations of Chalchiuhtlicue, whose unpredictable violence lay right beneath her calm, mirrorlike surface” (Mundy, 2015, p. 44). Needless to say, we would be wise to remember water’s agency in human imagination. Water, in many ways, makes a good synecdoche for life itself. In *H₂O and the Waters of Forgetfulness: Reflections on the Historicity of Stuff*, Ivan Illich declares: “Water remains a chaos until a creative story interprets its seeming equivocation as being the quivering equivocation of life” (Illich, 1985, p. 25). Similarly, Jamie Linton, in *What is Water? The History of a Modern Abstraction*, reminds us that “water is what we make of it” (Linton, 2010, p. 3), further remarking that “ever since Narcissus, we have tended to mistake water for something else—something other than a reflection of ourselves” (p. 43).

CONCLUSIONS

This essay offers no unified theory or theories of spatial production that will definitively critique those Eurocentric and anthropocentric traditions that erase Indigenous histories of architecture and urbanism in the Americas/Abiyala and prevent the formation of new narratives about the nature of modernism. It does, however, hope to present some useful tools that encourage experimentation with strange ideas. I have offered a few examples from anthropology, environmental history, and one final example from the work of an art historian whose research is richly interdisciplinary. Because the current and conventional theories fail to take into account the actual histories of the Americas/Abiyala—as defined by other disciplines—and cling to anthropocentric notions of historical production, they will forever perpetuate Eurocentric myths and false narratives of the architecture and urbanism in the Americas/Abiyala. We are the stories we tell. This master’s house has been dismantled many times before. With the help of strangers, let’s build something new.

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