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### **Title**

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### **Permalink**

https://escholarship.org/uc/item/7ww6h030

### Journal

Critical Planning, 22(1)

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### **Publication Date**

2015

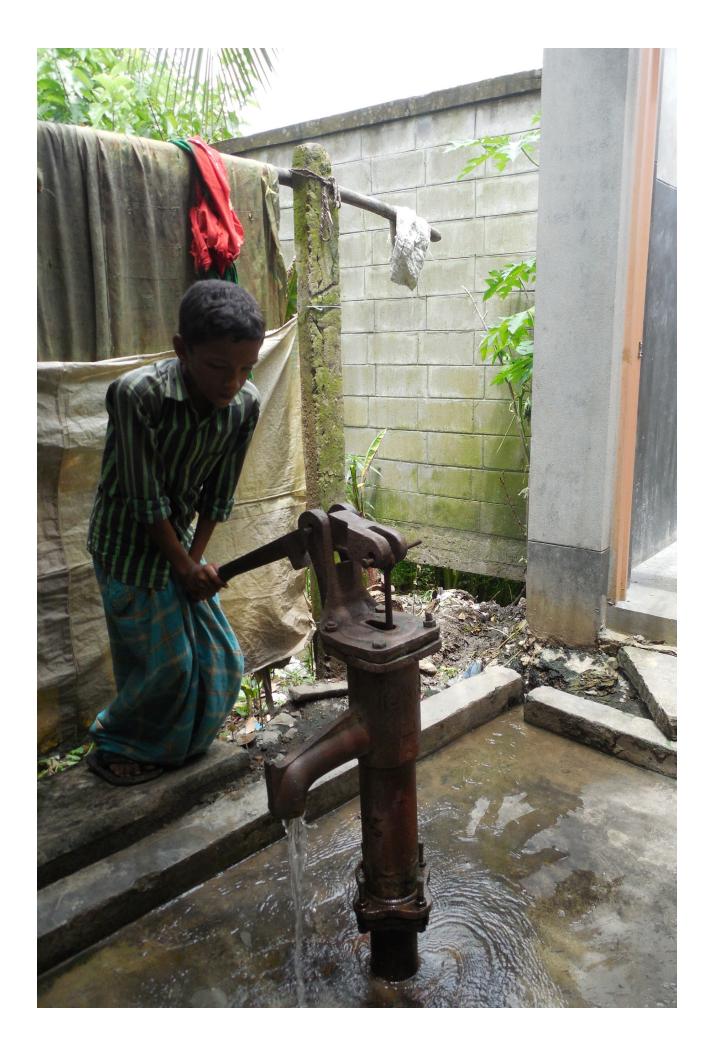
#### DOI

10.5070/CP8221025632

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# Sustainable Orientalism

Hegemonic Discourses of Environmental Sustainability and their Transmission to Non-Western Urban Habitats

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This paper analyzes the construction of hegemonic methods for evaluating sustainable urban development and their translation to non-Western cities. I propose the concept of Sustainable Orientalism to examine contemporary institutions that shape the idea of sustainability in Western cities, and how their characteristics are transmitted to non-Western contexts. This analysis is an extension of the concept of Orientalism, formulated by Said (1978), which refers to the sum of the West's representations of the Orient, a cultural and political vision of reality whose structure promoted the difference between the familiar—Europe, the West, "us"—and the strange—the Orient, the East, "them."

Since 1990, Western institutions have developed robust scientific frameworks with a series of methods to achieve sustainability in the built environment. These assessment methods are part of a cultural and political vision that separates sustainable development between the "advanced" (Western Europe, North America) and the "less-advanced" (Latin America, Africa, South Asia).

Orientalist approaches to environmental justice imply that the projection of non-Western urban environments by Western assessment frameworks not only reproduces the outlying territories; it works them out, or animates them, using narrative techniques, and historical and exploratory attitudes of scientific ideas generated in the West.

### 1. Introduction

Over the last forty years, urban habitats located outside Western Europe and North America (Canada and the United States) have experienced profound changes in size and scale, with attendant transformations in economic, social, and cultural conditions. Data from the World Bank estimates that metropolitan populations of emerging economies are expected to double between 2000 and 2030, from 2 billion to 4 billion people, tripling their physical footprint from 200,000 to 600,000 square kilometers (World Bank 2013). This paper proposes the term Sustainable Orientalism to study a current dilemma for urban agglomerations in non-Western contexts: whether to follow, adapt, or reject representations and values of urban sustainability designed in the West.

This analysis is an operationalization of the concept of Orientalism, formulated in the book *Orientalism* (Said 1978). The book studies how Western colonial powers (mainly Britain and France, but also others) represented and ruled North African and Middle Eastern lands starting in the eighteenth century, and the historical mechanisms of this process. The term Orientalism refers to the sum of the West's representations of the Orient, a cultural and political vision of reality whose structure promoted the difference between the familiar—Europe, the West, "us"—and the strange—the Orient, the East, "them."

Said (1978) argues that Orientalism is a discourse and method of colonial power that produces, through different practices of representation (scholarship, exhibition, institutions, literature, painting, etc.), a form of racialized knowledge of the Other that is deeply implicated in operations of power (imperialism). He also theorizes about how colonial discourses might operate, specific to particular historical and colonial contexts. For Said, despite the formal decolonization of many countries, the persistence of Orientalist representations reinforces the notion that the imaginative machinery of colonialism does not quickly disappear as soon as once-colonized lands achieve independence, and that it can indeed endure in refreshed forms.

I extend the concept of Orientalism to the notion of sustainability in the built environment to consider a series of environmental discourses, representations, and institutions that have shaped the idea of sustainable development in urban contexts for decades. These assessment methods are part of a cultural and political vision that separates sustainable development between the "developed north" and the "developing south." Western institutions that construct methods for the evaluation of environmental sustainability exhibit a persistent determination to guide the development of lands and bodies of water in non-Western urban areas.

### 2. Sustainable Orientalism

The aspiration of establishing environmental justice in cities entails the construction of institutions that shape languages of urban and architectural sustainability. In *The Object of Ecosophy*, Felix Guattari (1999) argues that the universes of beauty, truth, and goodness are inseparable from territorialized practices of expression. Values gain an apparently universal sway only when they are determined by territories of practice, experience, and intensive power that connect them.

Institutions of society, including those focused on molding values of urban sustainability, are built to enforce power relationships existing in each historical period, including the social contracts achieved in power struggles. As Manuel Castells (1996) observes, power is a relationship between human subjects that, on the basis of production and experience, imposes the will of some subjects upon the others by the potential or actual use of violence, physical or symbolic.

Said (1978) recognizes Orientalism as a school of representation and interpretation, structured by a series of languages. He acknowledges that as a concept, the Orient expanded to encompass more than just the geographic region, but also the field surrounding the word. The Orient that emerges in Orientalism is a system of representations enclosed by a whole set of forces that brought the Orient into Western learning, Western consciousness, and later, Western empire. Said (1978) comments:

If this definition of Orientalism seems more political than not, that is simply because I think Orientalism was itself a product of certain political forces and activities. Orientalism is a school of interpretation whose material happens to be the Orient, its civilizations, peoples, and localities...So far as it existed in the West's awareness, the Orient was a word which later accrued to it a wide field of meaning, associations, and connotations. (203)

Tony Ballantyne (2006) believes that the central problem with the "cultural turn" in imperial history has been not so much a narrow focus on representation, but rather the inability of scholars to develop Said's insistence that Orientalism was a system of circulation. Ballantyne comments that rather than narrowly focusing on the rhetorical construction or ideological context of any given text, we need to begin to trace the transmission of thoughts, ideologies, and identities across space and time. In addition to being a network of circulation, the field of

Orientalism is also a "manual" for correcting practices and behaviors from non-Western contexts. Said (1978) explains:

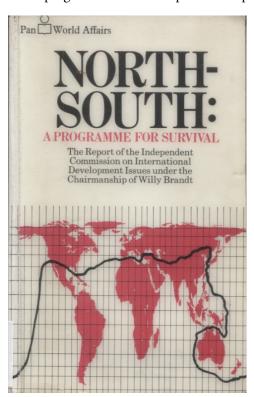
So far as the West was concerned during the nineteenth and twentieth centuries, an assumption had been made that the Orient and everything in it was, if not patently inferior to, then in need of corrective study by the West. The Orient was viewed as if framed by the classroom, the criminal court, the prison, the illustrated manual. Orientalism, then, is knowledge of the Orient that places things Oriental in class, court, prison, or manual for scrutiny, study, judgment, discipline, or governing. (40-1)

I propose the Sustainable Orientalism concept to study how Western institutions that evaluate and design sustainable environments in urban sites extrapolate their assessment methods to non-Western contexts. A key task here is to study the structure in which Western institutions circulate their thoughts on urban sustainability to non-Western cities. One method for tracing approaches of Sustainable Orientalism is to revise historical agendas for sustainable development that separate the Earth into developed/developing societies, First/Third worlds, and north/south halves. The following conceptions of territorial and economic development (both projects were visualized throughout the twentieth century) are indications of Sustainable Orientalism.

The first project illustrates a gigantic colonial fantasy. At the end of 1927, the German architect Herman Sörgel began working on his lifelong Panropa project, which he later renamed Atlantropa, devising a scheme to transform the entire Mediterranean region. It was based on the observation of geographer Otto Jessen that the Mediterranean Sea was an evaporating sea (Deutsches Museum n.d.). According to the files of the Deutsches Museum, particularly those in the Research Institute for the History of Science and Technology, the project provided for the construction of a 35-kilometer-long curved dam across the Straits of Gibraltar in order to shut off the inflow of water from the Atlantic into the Mediterranean, and a second dam across the Dardanelles to cut off the water supply from the Black Sea. He envisaged a third dam—between Sicily and Tunis—which would effectively split the Mediterranean Sea in two. In Sörgel's vision of Atlantropa, however, work on the third dam would not begin for another one hundred to two hundred years (Deutsches Museum n.d.). The description of the project includes statements such as: "How can the European economy be catalyzed in an economic circuit for centuries through Atlant-Europe? An industrialized Europe is supplemented by Africa, with a virginal, raw material rich soil" (Deutsches Museum n.d.).

The exercise of territorial occupation and European colonization of vast areas of Africa and the Middle East was part of the scheme. A notion of sustainable mutual benefits between Africa and Europe was communicated in the images that promoted the project. One pamphlet that describes this idea portrays a seminaked woman standing on the African continent offering crops to a dressed man standing on the European side. The explanation of the image includes phrases in German saying "Exchange of finished goods for raw materials" next to the European man, and "Exchange of raw materials for finished goods" alongside the African woman.

The second conception of Sustainable Orientalism is the project *North-South: A Program for Survival.* This program was published in 1980 with an illustration of the Brandt Line, a depiction of the geographical division between developed and developing countries. It was part of a report conducted by Willy Brandt (for-



**Figure 1.** Map of North-South divide on cover of the book *North-South: A Programme for Survival*, 1980.

mer Chancellor of Germany and winner of the Nobel Prize for Peace in 1971), with the sponsorship of the Independent Commission for International Development Issues of the World Bank. The report included the design of international development policies such as largescale transfer of resources on both concessional and market terms to developing countries. The aim of the report was to help break the impasse in the discussions between the rich and poor nations related to economic development. Thirty-five years ago, this agenda stimulated the separation of the Global South and the Global North as a method to achieve balanced development in the world. The illustration of the Earth segmented by a permanent line implies that less-developed countries in the southern hemisphere are helped, guided, and supervised by developed countries in the northern hemisphere.



**Figure 2**. Sonoran Desert at the Mexico-United States border in 2012: the materialization of the dividing line between Global North and Global South, First World and Third World, and West and non-West.

In both projects, the way to level non-Western poor economies in relation to Western industrialized societies is to propose a Western tutelage. The proposals incorporate geographical illustrations where dividing lines differentiate high (West) and low (non-West) cultural strength for achieving economic and territorial development. How is this Western guidance articulated at the beginning of the twenty-first century?

# 2. First-World Dreams in the Twenty-first Century

The aspiration to achieve First-World living standards in non-Western countries requires intense consumption of commodity and knowledge resources. Societies of emerging economies develop that desire partly through the idea that they can achieve their dream if they will only adapt the right policies, like balancing their national budgets, investing in education and infrastructure, and so on (Diamond 2005). However, even if the human populations of the Third World did not exist, it would be impossible for the First World alone to maintain its present

course, because it is not in a steady state but is depleting its own resources as well as those imported from the Third World (Diamond 2005). Accordingly, Michael Light observes that in the two hundred years since humans began to liberate the trapped historical energy of fossilized carbon, we have unwittingly become the architect of the very planet itself, in the greatest terra-forming and geo-engineering project in history. Societies have yet to take responsibility for what they have done already, and are continuing to do with ever-increasing speed and totality, as populations and standards of living continue to rise (Light 2013).

Andrew Sluyter (2001) comments that for centuries the colonizer's model of the world emerged as the colonial redistribution of global resources, labor, and capital became naturalized through a concomitant conceptual redistribution of categories. The West became categorized as advanced and dynamic in contrast to a backward and static non-West, Europe thus becoming the cause of everything good and non-Europe becoming empty, pristine, and puerile. Scholars and urban policymakers began to become more critical of Westernization only as incontrovertible demonstrations of the global limits to growth (Meadows et al. 1972) undermined the long-standing belief that environmental constraints would fade away as development progressed towards a Western *telos*, whether defined according to ideologies complicit with or critical of capitalism (Sluyter 2001).

As evidence has mounted of the negative social/environmental consequences of Westernization due to its seemingly inescapable contradictions, several generations of geographers and allied scholars have built a case to demonstrate that the non-West was not and is not inferior to the West. One major goal of that effort has been to test the hypothesis that the precolonial landscapes of the Americas were densely populated, intensively cultivated, and profoundly modified rather than pristine wilderness/untrammelled resources and thereby to infer the productivity and sustainability of native land uses. (Sluyter 2001, 412)

In the second decade of the twenty-first century, urban lifestyles and architectural typologies from Western Europe and North America contribute to the construction of non-Western urban imaginaries. For instance, a segment of the real estate industry in India is displaying a particular projection of urban environments. Four images captured in Bangalore and New Delhi in 2013 are examples of this pattern—billboards that illustrate real estate projects with the following slogans: "New York Living In Bangalore: The High Life Awaits For You," "Experience Greek-Style Living In Delhi," "What Do You Call An Island With A New Lifestyle At An Attractive Price ... Irresistible?" and "What do you call an Island where you stay in the sky and play in blue waters ... Inspirational?"



Figures 3 to 6. Billboards in Delhi and Bangalore, 2013.

Acknowledging the promotional nature of the advertising boards, the marketing strategy of these real estate projects suggests that architectural typologies that mimic European and North American environments are conditions for achieving the urban dream. The Western contexts of the examples are New York in the United States and Greece in the Mediterranean. These projects in India promise a new lifestyle that includes luxury, exclusivity, and isolation, three characteristics that are also associated with the sustainability concept of Ilha Pura, a real estate development that will serve the Olympic and Paralympic Games of Rio de Janeiro in 2016. I will comment on this urban project in the last section of the paper.

# 3. The Construction and Legitimation of Contemporary Canons of Sustainability in the Built Environment

The word "canon" comes from the Latin *canōn*, a word derived from the Ancient Greek *kanón*: measuring rod, standard (Oxford English Dictionary, s.v. "canon"). It means a generally accepted principle or an ecclesiastical law or code of laws established by a church council; a collection of sacred books accepted as genuine. The idea of Western canon indicates the collection of the most influential

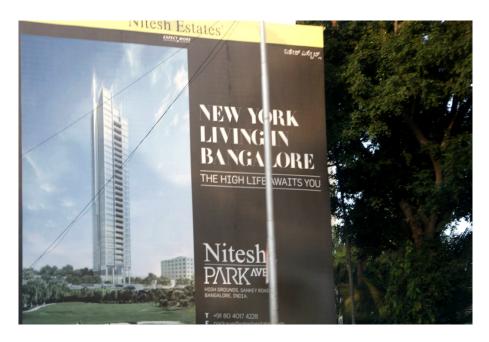


Figure 4. Billboards in Delhi and Bangalore, 2013.



Figure 5. Billboards in Delhi and Bangalore, 2013.

books, art, and science that has helped to shape the Western culture. Buddhist and Taoist canons have influenced societies in the Asian continent. Mesoamerican canons of architecture and environmental representations dictated the legacy of the cultures that lived centuries ago in the current territories of Mexico and Central America.

Canonical images in science and cartography are a medium to reinforce specific cultural viewpoints. Peter Vujakovic (2009) comments that images of the evolution of life and maps of the world show parallels in the way that they ostensibly denote scientific facts, but are also capable of creating connotations which privilege certain worldviews, for example, placing Europe or European humanity in a dominant position. In addition, the influence of pictures that narrate hegemonic concepts or worldviews can be referred to by the term canonical images, representations that symbolize an authorized viewpoint (Vujakovic 2009). Thus, for the purposes of this paper, the canons of sustainability in the built environment will be interpreted as the most influential principles of sustainable development in urban habitats.



Figure 6. Billboards in Delhi and Bangalore, 2013.

Who are the contemporary authors of the canons and ideologies of urban sustainability in the world? Where do those canons (their values, technology, and representations) originate? In the book *Evaluating Sustainable Development in the Built Environment* (2011), Peter Brandon and Patrizia Lombardi have identified contemporary methods for assessing sustainability in different contexts. These assessment frameworks are technical and scientific procedures for expressing a judgment, based on values, about the impacts of a policy on the built environment.

This recognition has led to the development of many methods that focus on energy and material flows, addressing both resource usage and waste arising across a wide range of urban activities. This has in turn led to the development of multi-criteria analysis as a key method in environmental assessment. Examples include ATHENA [developed in Canada], BREEAM [developed in the United Kingdom] and BEES [developed in the United States], which address material flows and impacts associated within individual buildings, and the ecological footprint and environmental space methods which can express consumption patterns of cities, regions or countries relative to clearly defined environmental sustainability thresholds. (Brandon and Lombardi 2011, 94)

Brandon and Lombardi (2011) have elaborated an inventory of technical and ideological approaches that have been developed by institutions from different countries. This extensive directory culminated in the categorization of sixty-one methods currently used by planners, architects, engineers, and surveyors for the design and construction of sustainable projects. Among these sixty-one environmental impact assessments, seven are the most influential forms of evaluation in the world (see Figure 8). Institutions that construct these environmental methods, like the Building Research Establishment (BRE) in the United Kingdom, the U.S. Green Building Council (USGBC) in the United States, and le Centre Scientifique et Technique du Bâtiment (CSTB, Scientific and Technical Center for Building) in France, have established complex computer-based urban models, often within Geographical Information Systems (GIS), used to consider alternative development options within a sustainable framework (Brandon and Lombardi 2011). A review of their genealogy is significant to understanding the language of sustainability that has been constructed by these institutions.

Figure 8. Seven environmental impact assessment methods

Method	Country and year of development
BREEAM: Building Research Establishment Environmental Assessment Methodology	United Kingdom (1990)
BEES: Building for Environmental and Economic Sustainability	United States (1994)
CSTB: Centre Scientifique et Technique du Bâtiment (Scientific and Technical Center for Building)	France (1996)
ATHENA: Life Cycle Impact Assessment of Building Components	Canada (1997)
SPARTACUS: System for Planning and Research in Towns and Cities for Urban Sustainability	A collaboration among Finland, Spain, Italy, and Germany (1998)
<b>LEED</b> : Leadership in Energy and Environmental Design	United States (2000)
CASBEE: Comprehensive Assessment System for Built Environment	Japan (2001)

From 2000 to 2013, the LEED certification from the United States performed the guidance, training, and supervision of thirty-eight countries through thirty-eight editions of green building councils. Among the countries that host buildings and urban plans with LEED accreditation are Mexico, Brazil, India, China, and Russia (U.S. Green Building Council n.d.). In addition, since it was first launched in 1990, 425,000 buildings have been certified by BREEAM assessment ratings and two million have been registered for assessment (BREEAM n.d. "What is BREEAM?"). This method has developed the term Country-Specific BREEAM Schemes. The institutional description of this process is: "BREEAM's aim is to promote and influence sustainable construction practices across the globe. As part of this, we engage directly with selected organisations to assist them in developing their own national sustainability assessment method" (BREEAM n.d. "National Scheme Operators"). BREEAM defines this adapting process with the following steps:

A national scheme will be adapted to local social, cultural, climatic etc conditions, translated in the local language with local assessors and aligned with the country's building regulations. Such schemes can act as a mass market driver to influence the local construction industry to go above and beyond building regulations. Once we have approved a new scheme for a specific country, we will sign a Framework Agreement with a National Scheme Operator, which may be a government body, a national Green Building Council or other relevant organization. (BREEAM n.d. "Country-Specific BREEAM Schemes")

A contemporary urban project that appeals to Western legitimation for establishing sustainability in the built environment is located in Brazil. This project belongs to the infrastructure that will assist the Olympic and Paralympic Games of Rio de Janeiro in 2016, and is called Ilha Pura (Pure Island, in Portuguese). It is a real estate development with urban proportions currently under construction in Barra da Tijuca, a growing neighborhood in Rio's West Zone.

This project has been awarded the first LEED ND (Neighborhood Development) certification in Latin America. Phase 1 of Ilha Pura will consist of 3,604 apartments with two, three, and four rooms for more than 18,000 athletes in the Olympic and Paralympic Games. The project includes a public park of 72,000 square meters. Thirty-one buildings, seventeen stories tall, will be constructed on the project site that covers 870,000 square meters. The apartments will be sold and delivered to customers within one year after the games (U. S. Green Building Council. 2014).

The name Pure Island emphasizes the creation of an environment isolated from the rest of Rio's urban context. The project is self-contained with lakes, parks, playgrounds, sports facilities, work spaces, and bicycle paths. Mariana de Cillo Malufe Spignardi, the Sustainality Manager of Ilha Pura, has expressed her view about the LEED certification of the project:

LEED gave us the certainty we are going in the right direction. A sense of how far we could go towards creating a truly sustainable environment for our clients and community. LEED also gave us guidance with the highest efficiency standards. The Olympic Games will go quickly. So, what comes afterwards? The buildings on this site will exist for 50 to 100 years. We wanted to make sure they are energy-efficient and healthy structures that stand the test of time. (U. S. Green Building Council. 2014, 14)



**Figure 9**. The construction of the Olympic Village, Ilha Pura, and a billboard with the following notice in Portuguese: *Ilha Pura: The First Neighborhood in Latin America with the LEED ND Certification of Sustainability.* Rio de Janeiro, November 2014, Google Street View https://goo.gl/maps/T2AL7.

The developers of the project promote it as an example of urban sustainability that will last until the twenty-second century. The marketing strategy continually refers to the legitimation of an influential Western institution through the LEED ND certification. The Olympic and Paralympic Village will become a luxury real estate project that offers social exclusion. A battery of images via 3D renders and promotional videos portray dozens of buildings surrounded by utopic urban environments with gardens and artificial lakes. The image of a clean island is a subtle mechanism for enforcing urban lifestyles and architectural atmospheres that avoid pollution (impurities) from the rest of Rio de Janeiro. The LEED accreditation of the project validates the association of urban sustainability with isolation and luxury. As Edward Said notes, just as none of us is beyond geography, none of us is completely free from the struggle over geography. This struggle "is not only about soldiers and cannons but also ideas, about forms, about images and imagining" (Said 1993, 7).

### 4. Conclusion

I have used the term Sustainable Orientalism to analyze contemporary Western institutions that forge the idea of sustainable development in cities and regions of non-Western contexts. Since 1990, these institutions have developed a series of methods regarding sustainability in urban contexts that I refer to as canons of sustainability in the built environment. They are not only technical schemes but also discursive frameworks nourished by representations of architectural languages in urban environments. These assessment methods are part of a cultural and political vision that differentiates sustainable development between "advanced" and "less-advanced" countries.

Since the concept Sustainable Orientalism is an operationalization of the term Orientalism, it traces the circulation of thoughts, ideologies, and identities regarding environmental sustainability across space and time. It is useful for studying the structure that allows the extrapolation of Western assessment methods of environmental sustainability to non-Western urban contexts. I have analyzed urban projects and environmental agendas that were proposed in the twentieth and twenty-first centuries as a method to study forms of Sustainable Orientalism.

Despite the formal decolonization of many national states, the imaginative machinery of Sustainable Orientalism endures in refreshed forms. The desire to achieve First-World living standards is nourished by conceptualizations of urban fantasies. As seen in the example of India, the dream of living North American and European lifestyles is communicated by imagined urban environments. The sustainability concept behind the urban project Ilha Pura proposes an urban island, which is separated from the rest of Rio de Janeiro. This idea and its architectural characteristics have been legitimized by LEED, one of the most influential Western assessment frameworks of urban sustainable development in the world.

With the Sustainable Orientalism concept I argue that the practices of sustainability in the built environment are formed and illuminated by canons of taste, value, and goodness. If the transmission of Western conceptions of sustainability to non-Western contexts is justified by the distortion and manipulation of the latter's urban environments and local cultures, it eventually frames these cities as mysterious, less developed, chaotic, and in need of corrective study and tutelage from the West.

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# Lead Photograph

Dhaka, Bangladesh. In peri-urban slums, water-related disasters (waterlogging, flooding, drought, contamination) exist as the most dominant factor influencing the health and economic stability of urban slum residents. In particular, groundwater sources (pictured here) are the most at risk for contamination and over-use. Photograph by Ana Luna