Bigness vs. Green-ness

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Many of the massive proposals for the World Trade Center site exhibited this past year at the Winter Garden of the World Financial Center contained references to their ''green-ness,'' but of all of the projects that made such claims, the proposal by Norman and Foster and Partners stood out. The text of Norman Foster and Partners entry to the competition claimed that the striking twin-tower proposal ''would be the biggest and greenest building ever built.'' Through a variety of building technologies and subtle articulations of architectural form, Foster would certainly be able to realize such a structure, but his statement raises several theoretical issues; why would an architect want to achieve both of these contradictory goals; and how can a building be the most massive building ever built and the most environmentally sensitive? It would seem that massive development and environmental sensitivity are contradictory projects and therefore, are not compatible. The unprecedented scale of Foster's proposal demands a rethinking of the increased weaving of what might be called the theories of the ''big'' and the theories of the ''green.'' Foster's project is not alone; recent buildings by his firm and buildings by many other firms employ environmental technologies and siting techniques at huge scales. Collectively, these projects force us to understand why and how ''bigness'' and ''greenness'' are conflated, and how we ever imagined these theoretical approaches as opposed.

Defining Bigness and Greeness: The large-scale architecture that is the wake of late 20th century globalization was first dubbed ''colossal architecture'' by Mario Gandelsonas in 1990 and then ''bigness'' by Rem Koolhaas in 1993. Gandelsonas came up with his concept of colossal architecture by examining the work of Cesar Pelli through the writings of Jacques Derrida and Saskia Sassen (a well-known chronicler of the urban conditions of globalization).[1] Koolhaas arrived at his concept of bigness as a way to describe his firm's large-scale architectural approach that was being exhibited at

MOMA in 1993 (the concept of bigness extended his critique of 20th century urbanism, first laid out in Delirious New York).[2] Both ''colossal'' architecture and ''bigness'' described building types such as skyscrapers, high-rise buildings, mid-rise buildings, large-span buildings, among numerous other large-scale constructions. Both Gandelsonas and Koolhaas claimed that these structures emerged from the economic forces of globalization, forces that demanded universal architectural solutions for living, working and the sites for the production and consumption of goods.

Using Cesar Pelli's World Financial Center and Pacific Design Center as examples, Gandelsonas described colossal architecture as an architecture of endless growth and infinite verticality: ''By cutting the towers' shafts at different heights, Pelli provides a way to indicate the concept of the infinitely tall tower…This same concept of cutting something infinitely long is present in the colossal length of the Pacific Design Center, a skyscraper on its side…the colossal implies the enormous, the immense, the excessive, the lack of limits: 'the infinite is present in it. It is too big, too large for our grasp, for our apprehension.'''[3] Koolhaas describes bigness with similar language, but in this case, bigness is described as architecture that uses technology to realize a limitless interior space, disconnected from its surroundings: ''Together, all these breaks-with scale, with architectural composition, with tradition, with transparency, with ethics-imply the final, most radical break: Bigness is no longer part of any urban tissue. It exists; at most it coexists. Its subtext is fuck context.''[4]

Between the 1960s and the 1990s, ''Green'' or ''environmentally conscious'' architecture theorists, such as Maxwell Fry, Roland Ranier, Hassan Fathy, Sym van der Ryn, and Kenneth Frampton, attacked the same buildings and building practices that Gandelsonas, and more particularly Koolhaas used to outline their vision for a new global architecture. ''Green'' building theory can

roughly be surmised as an ideology that professes the maintenance of local resources and cultural building traditions through a form of ecological and cultural mimesis. In "Natural Energy and Vernacular Architecture," Hassan Fathy argues that large buildings with their equally large air-conditioning packages are causing people to "forget" local responses to the environment. Fathy calls for the use of vernacular low-tech approaches to mitigate the financial and environmental impact of large buildings. In his book "Livable Environments," Roland Ranier derided the skyscraper's and the highway's consumption of land, calling for regionally based, small scale development. Pictures of German farmhouses and Japanese gardens were used as illustrations of a more environmentally sensitive way to build. Kenneth Frampton has repositioned the ideas in his famous "Critical Regionalism" essay in more recent and explicitly environmentalist works including his essay "Architecture and Ecosophy." Frampton continues to maintain that large-scale speculative developments are at odds with a more local, climatically and topographically based architecture, and that these developments were responsible for the destruction of unique landscapes and cultural features.[5]

Frampton, Fathy, van Der Ryn and Ranier cite the product-like nature of skyscrapers, the bull-dozing of land and the use of artificial lighting and ventilation, as symptoms of rampant international development that has gone out of control. In response, these thinkers call for humanly scaled buildings that incorporate the "intimate knowledge of specific places" and "locally-inflected tactile features," including topography, context, climate, and natural light. This combination of local features "jointly have the capacity to transcend the mere appearance of the technical," while withstanding "the relentless onslaught of global modernization."[6]

The Shared Global Agenda of Bigness and Greeness: Although the idea of a "large-scale global environmentalist architecture" would seem contradictory, within the past five years a number of architects have made claims that their projects were both "big" (in the way outlined by Gandelsonas and Koolhaas) and green (by many of the standards presented by Ranier, Fathy, van der Ryn, and Frampton). Architects such as Norman Foster, Richard Rogers, William McDonough and Kenneth Yeang claim that several of their recent projects simultaneously owed their form to the forces of international capitalist development and green ideology. Among the many projects, the Gap San Bruno Headquarters (1996) by William McDonough and Menara Mesniaga (1996) by Kenneth Yeang are significant "big and green" projects, particularly described in this way.

William McDonough describes Gap's San Bruno Headquarters as a key feature of his "green business revolution," and Kenneth Yeang received the Aga Kahn award for the way he fit IBM's regional headquarters into its Malaysian eco-system.

Numerous magazines, architectural journals, and architectural institutions have praised these projects for "tempering" the forces at work in international business that destroy context. On Kenneth Yeang's Menara Mesiniaga, the jury of the Aga Kahn prize reported: "designing with the climate in mind, it brings an aesthetic dimension to [Menara Mesiniaga] that is not to be found in typical glass-enclosed air-conditioned high rise building. The tower has become a landmark, and increased the value of the land around it. The jury found it to be a successful and promising approach to the design of many-storied structures in a tropical climate."[7] William McDonough often is praised in architecture and business magazines for showing that good business practices can incorporate green perspectives. The Christian Science Monitor wrote: "His statements encapsulate his efforts to bring about a rapprochement between corporate America and the environmental movement. One colleague in the environmental movement calls him "our great translator," because he can defend the dreams of the environmental movement with arguments that an MBA can understand."[8] The "success" of McDonough and Yeang is largely due to their ability to rectify what are presented as "opposing" forces of green-ness and bigness within contemporary business.

Yeang and McDonough should be praised for their commitment to reducing building energy consumption, their sympathy to local resource availability, and their constant incorporation of natural light and air in almost all of their projects. Yet the oppositional rhetoric that they have inherited from the early green movement, and that they and others use to describe their method of mediating "big" architecture needs to be examined. Rather than seeing projects such as Menara Mesiniaga and the Gap San Bruno building as remarkable because they adjust or "translate" between global business practices and local and ecological issues, these projects actually reveal the international, global ideology that big business and environmentalism often share. As Mark Jarzombek had so carefully argued in the pages of this journal, green technological systems became a billion dollar business in the 1990s, and companies often justified big green buildings as lowering the costs of business. These important observations, force us to re-think whether "green" architecture is a movement about corporate resistance, which is how it has been

traditionally positioned, or whether it shares some fundamental feature with the capitalist flow.

Both the Slovenian theorist Slavok Zizek and the American writer David Rieff offer a new theoretical connection between the global and the local, an explanation which could help re-position the links between the ''big'' and the ''green.'' As Slavoj Zizek noted: ''the opposition between globalization and the survival of local traditions is false. Globalization directly resuscitates local traditions, it literally thrives on them.''[9] Zizek here is talking about tourism, spice trades, language and cultural classes and other instances where business thrives off what is ''local.'' David Rieff makes a similar argument when he claims that globalization is not a form of ''westernization,'' as is so often claimed. ''Western Civilization does not occupy a sacred place in the heart of capitalism. In fact, the dominant ideal of a ''white, European male'' stands in the way of capturing whole new markets of non-white, non-European, non-male consumers…Everything is commodifiable.. .there is money being made on all the Kinte cloths and Kwanza paraphernalia.''[10]

In a related argument, Alan Calquhoun has demonstrated that the supposed ''resistance'' within a locally based, small-scale culture is often false. What are often called vernacular ''responses', ideological systems that certainly would not produce a 2,000,000 square foot office tower, are nonetheless often the very same ''products'' of cultural elites. One need not look too far back in history to see the way local and vernacular cultures are maintained as ways to maintain cultural cohesion, in the name of centralized or globalized forms of power.[11]

Using these arguments as a new interpretive framework, the supposed distance between Bigness and Green-ness might be false. Like the American business man who learns what is ''Japanese'' in order to conduct a highly competitive business in Japan, big projects now learn the particularities of the local in order to better position the needs of a business enterprise. According to a thinker such as Slavoj Zizek or David Reiff, the presence of Western corporations does not automatically result in the attitude ''f__k context,'' often corporations embrace the local, and the forces of globalization are often needed to resuscitate local features.

Menara Mesiniaga and Gap San Bruno have brought attention to the unique architecture and climatology of Malaysia and California. Menara Mesiniaga and Yeang's other realized Malaysian towers, such as ABN-AMRO, incorporate traditional methods of air ventilation found in traditional Malaysian houses and they incorporate

local plant species, all in a skyscraper format. Gap San Bruno's habitat roof for local birds and plant life, has brought increased attention to its local Californian ecosystem, and put wildlife firmly within the matrix of corporate experience. Another big and green project, East Gate, located in Zimbabwe and designed by the Pearce Partnership, is based upon termite mounds found in Zimbabwe, which use a form of natural air-conditioning to keep the mound cool. The architects studied the termite mounds, local houses, which also use local cooling methods, and incorporated them into a massive office and shopping mall building made from locally available resources and covered with native plant species.[12]

In an effort to affirm the inherent resistance that green architecture theory is supposed to offer, many Green theorists might argue that what is being recovered is not the ''real'' culture, just the one that big business enterprises find useful. The wind-catching techniques that Kenneth Yenag claims are based on Malaysian traditions are not the ''real'' wind-catching techniques used by ''real'' Malaysian builders, because they are only being used for resource efficiency and their cultural meaning has been lost. The designers of Eastgate are not interested in maintaining local ecology and are not operating within a business format that resist the impact of capitalist production. The local cultures that Alan Calquhoun refers to are not the type green theorists want to revive, and so on. But what philosophical system could possibly sort through these types of divisions without resorting to a problematic epistemology? These are difficult questions that big and green projects raise and that must be addressed for those green thinkers that continue to position themselves against the ''big.''

A critical Big and Green project is not impossible even thought there are contradictions located within contemporary big and green theory. It is virtually impossible to argue with any architect who is interested in mitigated the environmental impact of buildings, especially large ones. Recent buildings such as MVRDV's ''Pig City,'' a multi-story slaughterhouse, begin to operate on an ideological plain that acknowledges the interdependence of Bigness and greenness in contemporary forms of capitalism. The architects of this building do not emerge as ''enobled'' subjects who have tamed global forces by making an environmentally sensitive place to destroy thousands of animals. Rather, their building uses ecological thinking to put us in touch with the brutality of contemporary agricultural practices. MVRDV demonstrate how efforts to be ''good'' environmentally, result in a larger and more massive factory environment. Similar thinking is behind their ''stacked

garden,'' realized as the Dutch Pavilion at Expo 2000. In this exhibition pavilion regional natural forms actually ''de-naturalize'' a global building type toward its surroundings, exposing the global ideology of environmentalism, while making a very environmentally responsible building, nonetheless.

The fact that environmentalism can so easily be incorporated or extend out of 21st century forms of global business practice may cause some environmentalist or politically active architects to shrink away from the big and green project. The fear is that one might be participating in some larger unstated corporate project, yet the linkages between what are imagined as opposed theories can be embraced as part of an evolving critical site of action. Hopefully we will be able to look to many more architects who examine the inter-dependence of the forces of globalization and environmentalism on some critical level. There is still much need for an architecture that brings attention to the destruction and maintenance of international material conditions and the functions of international business. The ideological issues and conflicts of Big and Green projects should not result in an abandonement of the cause, but in its constant re-thinking and re-evaluation.

NOTES

1 ''Conditions for a Colossal Architecture.'' Mario Gandelsonas, in Cesar Pelli, Paul Goldberger, Rizolli: New York.

2 ''Bigness'' in S,M,L,XL, Rem Koolhaas/OMA and Bruce Mau, 1993, Monacelli Press: New York

3 ''Conditions for a Colossal Architecture.'' Mario Gandelsonas, in Cesar Pelli, Paul Goldberger, Rizolli: New York; pg.12

4 ''Bigness'' in S,M,L,XL, Rem Koolhaas/OMA and Bruce Mau, 1993, Monacelli Press: New York; pg. 502

5 Hassan Fathy, ''Natural Energy and Vernacular Architecture: Principles and Examples with References to Hot Arid Climates,'' From Theories and Manifestoes of Contemporary Architecture, Charles Jencks, Karl Kropf (eds.), pg . 145, Academy Editions, 1975. Kenneth Frampton, ''Critical Regionalism: Six Points for an Architecture of Resistance,'' In The Anti-Aesthetic'' Hal Foster, 1986, MIT Press; pg. 17. Roland Ranier, ''Livable Environments,'' Verlag, 1972.

6 Fathy , pg. 145; Frampton, pg. 17.

7 Aga Kahn Prize, Jury Report, 1996; http://www.akdn.org/agency/akaa/sixthcycle/malaysia.html

8 ''Making the Business case for Going Green,'' Michael Fainelli, Christian Science Monitor, October 18, 2001.

9 ''From Western Marxism to Western Buddhism,'' Slavoj Zizek in Cabinet Magazine, issue 2

10 ''Multiculturalism's Silent Partner: It's the New Globalized Consumer Economy, Stupid.'' By David Rieff, Harpers Magazine, August 1993, 62.

11 Alan Calquhoun, ''Critique of Regionalism,'' Casabella Magazine, 630-631, pg. 51-55

12 In a similar development, books such as ''Sol Power,'' interpret all local, indigenous, regionalist architecture through the lens of Western energy use. Malaysian long houses are ''good'' because they do not require air-conditioning; igloos and grass houses of the steppes are ''good'' because they do not require heat. The actual economic or cultural conditions that shaped these buildings are ignored in lieu of a Western search for indigenous smarts. Interpreting local architecture based on the thrifty use of commodities that a building's inhabitants never even had the opportunity to use to heat or cool their homes is a questionable enterprise.