An Architecture of Sustainability: Contested Ideologies and Identity Politics

Shweta Ranpura

Abstract
The discourse of sustainable architecture in India fails to address the agency and ideologies of the various actors involved as being influential to the practice of architecture, the production of the built environment. This paper proposes that the ways in which the practice of sustainable architecture gets perceived as a ‘collective identity’ is contingent not only on the architect’s ideologies and their decisions both of portraying themselves and their buildings but on various political, economic and social transformations occurring due to rapid globalization. The interests of the various national and transnational actors in sustainable architecture are not only political and economic but their interests also lie in forming a specific identity, one which portrays their engagement with ecological and environmental concerns albeit, at times as a mere garb. Inspite of the various forces affecting the practice of sustainable architecture, the agency of the ‘star’ architects as the master narrator sustains.

Keywords: sustainable architecture, India, local knowledge, green building, ideologies

Introduction
The built and the natural environment has been a space of constant and continuous negotiation and contestation, one that tells a specific story when referred to a developing country such as India. It’s a fickle place to tread into as it lures one into territories of cryptic past struggles; a labyrinth of environmentalism and stories of imperialism which carry its manifestations into the present environmental crisis. It’s a choreography of unrestrained motives, one that is laden with power and interests, is disputed yet contingent; the power and interests of various actors, i.e. society, state, national and transnational institutions. It is not my intention to delve into this rather volatile territory to simply tell a grim tale of North/ South exploitation but to understand the ways in which this exploitation occurs. The tread that I pull out from this tale is one that ties to ‘sustainable development’.
Within this wide contested space, I will focus specifically on the highly proclaimed emphasis on sustainability in the practice of architecture in India. I use ‘proclaimed’ with a specific intention to note that the emphasis on sustainable architecture is not a new or emerging direction but has gained attention recently with the introduction of a few high profile industry actors and stakeholders. It is important to recognize here that climate change and the energy crisis had started influencing the architectural practice but it is specifically due to a few occurrences and a few high profile actors that sustainable architecture started becoming highly proclaimed. These high profile actors, some of who are highly recognized global players, come with their specific agendas of ‘green’. This is not to exclude, of course, the local industry actors and the lead decision makers, the architects, who also pursue their particular interests. The most striking aspect of a rather complex choreography that these actors create is not their focus towards the end i.e. ‘sustainable architecture’ but the direction that each chooses to reach that end. The ideologies with which these actors operate and the parameters they choose in the implementation of sustainable architecture constitute and influence the discourses of the discipline. More often than not are these ideologies contested, negotiated and renegotiated and the buildings as the final products and manifestations of these contradictory ideologies prevail as a site of constant and continuous contestation.

The objective of this paper is to identify the ideologies of ‘green’, ‘sustainable architecture/construction’ of three major actors involved in the process of production and implementation of two buildings, i.e. transnational organisations that fund the buildings, national organisations that house the buildings and the architects in their role as key decision makers and facilitators in the production process. The interests of these actors in sustainable architecture are not only political and economic but they also lie in forming a specific identity, one which portrays their engagement with ecological and environmental concerns, albeit at times as a mere garb.

The two sites that I present as case studies are, Confederation of Indian Industries - Green Building Council (CII-GBC), Hyderabad, India and the Development Alternatives Headquarters (DA), New Delhi, India. Both of these buildings have been funded by transnational organisations, both of them house ‘national’ organisations and both are designed by high profile influential architects. The CII-GBC is a public/private enterprise initiated by USAID through its financial support and it houses the Indian Green Building Council (IGBC) which is responsible for the LEED rating system for ‘Green buildings’ in India and was designed by a high profile, ‘internationally renowned’ commercial architect, Karan Grover who has a firm in India. The second case study, DA Headquarters, is the office complex for the Development Alternative Group, which is a Non-profit organisation that works towards Creating Large scale Sustainable Livelihoods. The building is funded by the Holcim Foundation for Sustainable Construction which is a Switzerland based organisation that promotes sustainable construction. The architect of the building, Ashok Lall, is an academician with a practice in India. I choose these two buildings not only because they are ‘proclaimed’ as being the most environmentally friendly in the world or the Indian sub-continent but also because their function itself is that of promoting sustainability. The dissimilarities between the two cases lie in their ideologies about sustainable development and architecture and the agendas that inform their practices.

To put the discourse of sustainable architecture in a broader framework, I use the lens of political ecology to analyze the political, economic and social forces that affect sustainable development, to understand how economic changes, international political interests inform the ideologies of the transnational and ‘national’ organisations and how these ideologies get legitimized as standard practices. In Chapter 1, I will discuss how these political, economic and social forces affect the decisions and strategies of the actors in their response to sustainable development issues and the solutions thereof.
The following chapter is a discussion of the two case studies each consisting of subsections. In the discussion of the case studies, I’ll start with a discussion about the ideologies of the transnational funding organisations followed by the ‘national’ organisations. In understanding the architect’s perspective, I will start by understanding the kind of projects, publications that he is involved with, the kind of awards that he has received and his firm’s philosophy. Following this discussion is the investigation of his viewpoint about sustainable architecture.

Chapter 1

Transnational organisations: Sites of knowledge production - Political and economic interests of ‘green’

The role of transnational organisations in shaping the development project in India has been tremendous and one that has been of constant political contention. Of the large number of transnational and multilateral organisations, the World Bank has been one of the most influential. With its liberalizing agenda that ‘encourages less state intervention in the economy in favor of local and transnational businesses,’ the operations of the world bank have been condemned widely. Of late, there has been a tremendous increase in the number of such transnational organisations operating in the developing world. With the neoliberal agenda of the Indian government and an increase in privatization, the reach of these transnational organisations has increased to wide areas of interest. The rapid growth of the urban areas, the unsustainable ways of growth in India have been heralded by Europe and the US, both of which have several multilateral organisations operating in the global south. Sustainable construction is one more arena where these transnational actors have begun their operations. These organisations have created, as Goldman describes, ‘a new regime of environmental practices that involve(s) civil-society actors from development organisations, environmental groups, academic institutes and state agencies’. This partnership of the transnational and national actors works in rather discursive ways through intervening in the national constitution to change laws, restructure state agencies and regulatory authorities. Under the garb of promoting sustainable development, these actors promote the agenda of neoliberalism and use it as a ‘powerful framework for intervention in the global south’. These political and economic interests of ‘green’ is what Goldman terms as ‘green neoliberalism’ which suggests the convergence of seemingly divergent worldviews of neoliberalism, social justice and environmentally sustainable development into one agenda.

By creating regimes of power and knowledge production, these organisations engage in shaping and legitimizing their agendas and activities of economic and political power. Science and technology are the tools that they deploy to create knowledge and disseminate them as universal truths.
These practices of imposing knowledge as universal truths come with a caveat of homogenizing of cultures for which Miller warns, ‘science and expertise allow for the removal of arbitrariness, discretion, subjectivity and judgement’. This removal of subjectivities when put in the context of sustainable development alludes also to the dismissal of ‘local knowledge’.

Global solutions to local problems in the environmental discourse have repeatedly come under heavy criticism. With the implementation and failure of global solutions, scholars have stressed upon the need to involve local actors into environmental governance. ‘Environmental politics...have historically been a politics of the local’. This stress on ‘local knowledge’ has led scholars to scrutinize what local knowledge means. Lindblom and Cohen (1979, p.12) as quoted by Corburn, define local knowledge as ‘knowledge that does not owe its origin, testing, degree of verification, truth, status, or currency to distinctive... professional techniques, but rather to common sense, casual empiricism, or thoughtful speculation and analysis’. This definition of local knowledge proposes a resistance to hegemony of professional knowledge and contests the commonly accepted notion of ‘legitimate’ knowledge as one that arises from research institutions or laboratories. Borrowing from Geertz (1983, p.75), Corburn offers another definition of local knowledge as ‘...practical, collective and strongly rooted in a particular place’ that forms an ‘organized body of thought based on immediacy of experience’. This definition emphasizes the knowledge characteristic to a particular context and location and one that arises from everyday experiences and practices.

In emphasizing the importance of local knowledge, while also denying to reify it, Corburn suggests that ‘local and professional should never be understood as invariant, monolithic and distinct categories but rather as useful frames for capturing different approaches to knowledge production’. The importance of this suggestion lies in its premise that knowledge needs to be seen as a continuous process rather than static information. Especially in seeking solutions for sustainable development, ‘practices must find new ways of expanding the knowledge base and fusing local and professional knowledge, not on deciding which alternative –professional or local- is best’. The discourse of ‘local knowledge’ now is also a global category. In it, it is also a discourse that emerges out of the very institutions that once professed universal solutions to local problems. As Miller suggests, ‘local knowledge has become more than just a basis for competing knowledge claims; it is now also a tool for exercising voice in global politics’. In offering resistance to the homogenizing effects of globalization, critics have emphasized the importance of location specific solutions to create responses for environmental problems. How this local knowledge gets implemented in different sustainable development issues, is a matter of time and the opening of future research.

‘National’ organisations: Sites of knowledge dissemination - Borrowed ideologies of ‘green’

Two types of ‘national’ organisations come across as prominent actors in the discourse of sustainable development in India; the ‘green’ business centers and the environmental non-profit organisations. These two seemingly disparate actors play an important role in the development of ‘green buildings’ and wield tremendous power and influence in developing the flow of knowledge and capital. I will discuss the agendas of these two key local actors and in doing so, I will engage in portraying not only the disparities but also the similarities in their agendas. Though one follows the purely capitalist agenda of capital accumulation and the other a more philanthropic non-profit agenda, both operate on similar political and economic ideologies and the latter i.e. the environmental non-profit organisation, uses its ‘non-profit’ status as a garb for legitimizing its economic and political agendas and ideologies. Both these ‘national’ organisations are connected more to the global stakeholders investing in them and less to the consideration of local interests thus acting as ‘agents’ of first world interests. With their global
connections these organisations exploit their position to their own ends which, as Bryant & Bailey describe, is like ‘putting the foxes in charge of the chicken coop’.

The first type of ‘national’ organisations, the local ‘green’ business centers, have arisen as Indian businesses and corporations compete to woe and satisfy global market trends. These ‘green’ business centers offer services to promote the construction of ‘green buildings’ and to increase the market for green products in the construction trade. With the corporations under high scrutiny from environmental organisations and governments, it is not a choice but a compulsion to ‘green’ their means of production and operation. This is where the ‘green’ business centers come into picture with their technical ‘expertise’ to offer ‘green’ credentials to the economic activities of the corporates. These corporations then go to ‘great lengths to publicize the ‘greening’ of their businesses and buildings as part of a long-term campaign to develop green credentials with officials and private citizens alike’.

These initiatives of the corporates reflect not only their need to connect to the larger global economy but also the threat that they face due to increasing environment awareness. The Indian Green Building Council (IGBC) is one of the local ‘green’ business centre which is the counterpart of its US institution, the United States Green Building Council (USGBC). It is important to situate these ‘green’ business centers in their role as mediators between the global and local economy and as sites of knowledge dissemination. These ‘green’ business centers operate mainly through the market strategy of competition. Deploying media as a tool to publicize their business as being associated with the international market and also one that is based on ‘international standards’, they create competition amongst corporations to get the ‘highest’ green credentials. Hence, initiating a ‘rat race’ with every national/ transnational corporation jumping on to it, in hope of the appellation; ‘greenest in the world, greenest in the Indian sub-continent’, so on and so forth. They offer these credentials through the use of rating systems, borrowed from their foreign counterparts, as standards to evaluate the ‘greenness’ of the buildings, hence allowing the exchange of technical expertise and knowledge.

The second type of ‘national’ organisation, the environmental non-profit organisations (ENGOs) started coming up in the 1980s. These ENGOs are mainly ‘concerned with development issues, notably the promotion of social justice and equity for marginalized grassroots actors’. Yet, what often distinguished them from regular ‘development’ NGOs such as Oxfam and the Grameen Bank, is their emphasis on the need to pursue such objectives via the mechanism of environmental conservation.

As Bryant, Bailey (1997) suggest, this type of organisations differ from the other businesses in their agendas in it they are ‘seemingly unprepared to sacrifice environmental quality for the often ephemeral benefits associated with economic growth in the way that states, business and multilateral institutions, for example, frequently seem willing to do’. Through these ‘non-capitalist’ intentions that they profess these ENGOs come to be perceived as ‘defenders of values’ that the ‘green’ businesses are too willing to compromise for economic gains. This goodwill that they earn from civil society is a means that they deploy to exert political influence in their practices. As Bryant & Bailey suggest, there are four different ways in which these ENGOs exert political influence. One is through intervening in environmental policies and practices that affect businesses, multilateral institutions and states. Second is through direct action by operating through grassroots actors. Third is through well publicized campaigns, mainly through media that raise public awareness of environmental issues and fourth is through their presence in global environment and development conferences ‘to remind a watching world that alternative views on environment and development issues exist to those propounded by state and business leaders’.

These seemingly independent ENGOs operating under the rubric of ‘non-profit’ organisations, often maintain close political and economic links with businesses and governments, both national and international. This association creates an unease of their role as independent actors and more often than not, disrupts the image that they profess, that of
The IMRE Journal

Contested Ideologies and Identity Politics
Shweta Ranpura

‘environmental guardians’. These ENGOs also have links with research institutions, universities, international ENGOs and governments through which they acquire technical expertise which they disseminate amongst the local institutions and grassroots actors.

If both the ‘green’ business centers and the ENGOs operate in a similar way as sites of knowledge and capital accumulation and dissemination then the only reason why ENGOs are preferred is through the image that they profess as ‘environmental guardians’.

In increasing their economic connections to the developing worlds, a large number of First World governmental and private organisations extend financial support to the developing world. Especially under the rubric of ‘sustainable development’, these international actors have initiated and supported the formation of local organisations/businesses to enhance their economic agendas. The local businesses in return for the financial support, act as ‘agents’ to international interests. Operating for ‘the national good’, these businesses/ENGOs work towards creating a need for newer products and services under the pretext of promoting sustainable development. In doing so, they induce the exchange of ‘green’ products and services between the local and global markets. The flow is nevertheless a one way operation, from the first to the developing world.

Another important component of this ‘one way’ flow is technological knowledge and ‘expertise’ which is the sine qua non of operations of the international actors which is put into effect by the local businesses. This technological expertise then becomes the main tool deployed by the local businesses/organizations to influence the corporations. The dissemination of this borrowed knowledge raises in it issues of the relevance of the technologies when put into practice in the Indian context. The knowledge produced in the research institutions and universities in the First World, disseminated as ‘appropriate’ solutions warns of universal truths claims. Also, the solutions provided are ones that promote newer practices that require capital intensive technologies. How are these ‘national’ organisations different from the transnational organisations? The national actors not only borrow knowledge but also borrow ideologies, in this case of technological determinism, so Eurocentric in this origin. They are both ‘agents’ of first world interests and by conferring trust in them is like ‘putting the foxes in charge of the chicken coop’!

Architects: Hybrid actors
Contested and negotiated ideologies of ‘green’

In the preceding two discussions about the transnational and national actors I have attempted to situate the issue of sustainable development in India through global political and economic links. From this wider spectrum of sustainable development, I will now narrow down to the discussion of sustainable construction and to sustainable architecture in particular for the Indian context. Within the highly volatile subject of environmental degradation and crisis, buildings and the construction industry have been heralded as the major contributors to this crisis. The built-form, being under scrutiny, instinctively brings architects under the same radar of skepticism. And operating under the same economic, political and systemic changes that any other industry player does, it is but indispensable for the architect to respond to these forces. However, I do not deny the practices of a large group of architects as autonomous of economic, political and social formations. But environment and sustainability being the norm of the day, a large number of architectural practices have begun focusing on ‘green’ or sustainable architecture, some following it as a ‘fad’, others out of demand from clients, some as means for newer modes of architectural expression and a few as an ethical choice emerging out of concern for the environment, and yet others as a combination of some or all of the above.

In India, unlike the first world countries, sustainable architecture is a recent phenomenon or rather the ‘claim’ to making sustainable architecture is recent. Depending on the ideologies of the architects, the practice of sustainable architecture emerges out of
the various concerns discussed earlier. And operating with these rather heterogeneous ideologies, I call these architects, ‘hybrid actors’.19 By hybrid I do not suggest their architectural expression in the built environment, rather I refer to hybridity to suggest the ways in which these architects try to balance their roles between trying to create buildings that address sustainability and also advocating sustainable practices by questioning the existing paradigms of architectural practice. It becomes a balancing act as they try to digress from the conventional practices but also have little inkling of where the digression would lead. They are constantly engaged in the process of identifying the most suitable approach, practice and solution to create architecture of sustainability. They carry out this search through their representation as advocates of sustainable architecture in various conferences, seminars, government organizations, businesses, both in India and abroad.

Within the practice of sustainable architecture has emerged the emphasis of ‘local knowledge’ which has arisen out of the homogenizing effects of applications of universal standards. But this discourse of ‘local knowledge’ is also one that has come to become a ‘global’ discourse. Arisen again out of a large amount of First world literature the discussion about ‘appropriate’ and site specific responses to sustainable architecture has taken a interesting twist in the Indian context. ‘Local knowledge’ and its importance has taken shape in the advocacy by architects for finding solutions from ‘traditional’ Indian architecture and the heritage of building construction techniques. The legacy of the ‘traditional’ built-form and construction techniques is now promoted as one that was climate responsive besides being socially and economically sustainable. While voicing their opinions on public platforms, the architects profess the need to look at the rich architectural heritage to find clues to today’s environmental problems. In doing so, they invoke the dualities of modern/traditional by putting forth the need to invoke the traditional but within the modern idiom. Embedded in this struggle of modern/traditional representation of architecture is also the struggle of ‘identity’, to represent oneself in relation to present national identity and to be a ‘good national subject’.20 In an effort to identify themselves with the present national identity, these architects also engage, with the same process, in the formation of ‘collective identities’. As Kusno suggests, ‘architectural tactics, as part of the material environment, are crucial in shaping social identities,’21 architects as informers of these architectural tactics play a crucial role in creating ‘collective identities’. The ways in which they choose to represent themselves through their built spaces and other modes of communication form the discourses of the profession and, hence, become identified as the practice of that specific time and place.

In the process of deploying ‘traditional’ architecture to address sustainability, architects engage in ‘inventing’ built forms that are a mélange of elements and symbols. This invented built form is a new packaged product which serves particular interests and aspirations to capital accumulation. These traditional packages are tools and tactics to attract foreign investors who engage in ‘promoting’ regional and traditional ways and cultures. But within this tension of deploying traditional architecture arises the question of authenticity in expressing these traditions. While some architects engage in a mimicry of elements and symbols that express certain traditional functions, others engage in the authenticity of the process by which the elements and symbols came into existence. This difference in deploying traditional architecture creates an architecture of sustainability which is simultaneously accepted as sustainable architecture and for the same reasons contested for its mimetic and fake expression.

Discussion

In this chapter I have identified and discussed the roles of three major actors of my case studies i.e. transnational organisations, national organisations and the architects. The transnational organisations while funding the projects come with specific political and economic interests, the national organisations act as mediators between the local
economy and their global funding agencies but have an inclination towards the transnational organisations and act as their tools. And lastly, the architects who have their perspective on sustainable architecture but also respond to the ideologies trickled down from the national and the transnational organisations. In the following two chapters I will discuss the two sites under consideration, the CII-GBC and the DA with each of the three actors and the specific roles they play in the making of the building as products of sustainable architecture.

Chapter 2

Site 1: CII-GBC, Hyderabad, India

Funding Organisation: United States Agency for International Development (USAID), USA

Sustainable development or ‘Green Neoliberalism’?

During his visit to India in 2000, then US President Bill Clinton offered technical support from USAID to build a centre for promoting sustainability. The CII and the state of Andhra Pradesh were then joined by Godrej & Boyce Manufacturing Company in a public/private partnership to pursue the project. This led to the formation of the CII-GBC, Confederation of Indian Industry- Green Building Council and thus started the race for achieving the superlative, the ‘greenest’ building. At the turn of this century, USAID-India devised a new five year plan and one strategy dealt with energy and environment with a focus ‘to reduce the role of the government in the supply of clean energy and water’.

‘to increase viability in the power sector, conserve resources, and promote clean technologies and renewable energy. USAID facilitates sharing of energy and environment best practices between the U.S. and India and among South Asian countries’.22

These objectives are achieved through rather discursive strategies, producing a power/knowledge regime of ‘green neoliberalism’, to borrow Michael Goldman’s term. The sharing of ‘best practices’ is a one way process, the process that enables the flow of knowledge and capital from North to South. By way of sharing, what USAID actually creates is knowledge imperialism. Underlying the idea of ‘best practices’ are claims of universal truths which imply that the practices that are suited to the US are also best for India. What is often neglected in these claims is the importance of local knowledge and contextual reference to the place and its practices. In its attempt to create and claim universal truths USAID annihilates the traditional knowledge and practices of response to environmental concerns. This approach of homogenizing problems and solutions thereof creates a hegemonic relationship between USAID and the places that it offers support to. The imposition of its knowledge which it achieves through imposed consent by virtue of the power of capital puts into question its ideology of sustainable development.

National Institution: Indian Green Building Council (IGBC), Hyderabad, India

‘Green building’: Indigenization of borrowed Ideologies

The IGBC is a part of the CII-GBC and is ‘actively involved in promoting a Green Building concept in India’.24 The vision of the council ‘is to usher in a green building revolution and facilitate India in emerging as one of the world leaders in green buildings by 2010’.25 The ideologies of the IGBC are more clearly defined through the representations in the council and the various stakeholders of construction industry comprising of Corporate, Government, and Nodal agencies, Product manufacturers,. The ideologies get reflected in its bulletin called the , ‘Green Buildings in India- Emerging Business Opportunities’ and ‘Green Building Movement in India – Catalysts and Course’ which is to tap the green building products market and increase the number of registrations for green building. The popularity of the rating system is evident in the emphasis that IGBC lays on numbers to show its growth. ‘From a humble beginning of 20,000 sq.ft of green footprint in the country in the year 2003, to a staggering 70 million sq.ft till date, green buildings are well poised to reach scalar heights’.26 This rating system is one market strategy
to induce a new service sector, new industries and technologies for green building products. The rating system is one devised to perform within the given practices of the building industry rather than towards inducing better practices.

A stark example of this practice comes from its Bulletin on ‘High Performance Glass on the website of IGBC’ which claims that glass has been used for hundreds of years in architecture, alludes more to western practices of architecture and not to the Indian context as it refers to high performance glass that is used more as a façade making element. Glass as a predominantly façade making element has probably been introduced in the Indian context since the past decade. The use of glass in the hot climate of India is a widely contested issue especially due to the load that it puts on the air conditioner (AC) in the buildings, leading to whole chain of problems from energy consumption, hazards due to the refrigerants in the AC to the need of air conditioning the building itself. What the IGBC fails to project as an institution is its concern for the environment. Through its publications and advertisements the only agenda that gets filtered is its inclination towards satisfying the market and gaining benefits from it in terms of getting more buildings certified, introducing and promoting new building products and technologies. It thus acts as mediator carrying forward the agenda of USAID which is the transfer of knowledge and capital to promote ‘sustainable construction’.

Architect as ‘cultural ambassador’
Reviving traditions / Identity politics

In 1985, after being ‘disillusioned by a 10 year partnership practice based on a westernized architectural education’ as is put on the official website of his firm, Karn Grover started his own firm ‘Karan Grover and Associates’ in Vadodara, the ‘green city’ of the western state of Gujarat, India. His ‘key projects’ have been large scale governmental projects which include institutions, public spaces and government administrative buildings besides the corporate offices for huge corporations.

Grover’s firm philosophy, as stated on the website, talks about an effort to draw essences from traditional Indian architecture and use it in the contemporary idiom.

’Some of the fundamental values that the architectural practice believes stems from the standpoint of creating a ‘Contemporary’ Indian architectural idioms and language drawing essences from Tradition and Culture in very fundamental planes’

‘Green is an aesthetic; it is a strategy to make most of what is available’
- Karan Grover at the Clinton Global Initiative September, 2007

What is interesting is the rather rhetorical way that he chooses to discuss the idea of green. Within this rhetoric are embedded references about his ideologies of sustainability where he uses green as an aesthetic strategy. His advocacy to draw essences from ‘traditional’ Indian architecture, as seen in the quote, gets reflected in his practice and creation of the built environment. In describing one of his buildings on the website, clear references are made to the use of elements from traditional Indian architecture, ‘In the Institute of Plasma Research, Ahmedabad Grover has used the contained landscape, the courtyard, axis screens, jails and water, all elements which have had significance in the traditional Indian architectural context’. In another building he ‘employed green features like recycling, daylight, passive cooling, etc’. The narration about his most acclaimed building, the CII-GBC which won the Leadership in Energy and Environmental Design (LEED)- Platinum award from the USGBC, on the website goes, ‘This project has numerous ‘GREEN' features, which make it one of the most eco-friendly and energy efficient modern projects in the world. We have successfully demonstrated the use of day lighting, photo-voltaics, waste water recycling, use of recycled building materials, erosion control in landscape, green roofs, passive cooling integration with HVAC (Heating Ventilation and Air Conditioning) and a total
building management system’. All the above narratives about the responses to sustainable architecture point towards ‘water and energy’ being the main determinants of the architect’s decisions. What these narratives, and in it Grover’s response, lack is the consideration of social issues attached to the making of the built environment, for example, construction practices that involve large pools of labour. The architect’s bigger concern though, seems to be that of creating an image for himself, both nationally and internationally. When interrogated about the concept of the building, the architect’s response was, as written by a journalist, ‘We have hundreds of years of legacy in such construction, which we have all but forgotten. We decided to revive all our traditional methods and present them in the modern idiom’. This response of the architect to profess Indian traditional architecture can be viewed as an attempt to identity formation, not only of himself but of Indian architecture. And his ideologies of sustainable architecture then remain reduced to the mimicking of elements and forms from ‘traditional’ architecture.

Site 2: Development Alternatives Headquarters, (DA) New Delhi, India

Funding Organisation: Holcim Foundation, Switzerland/ACC India Limited, India

Towards the ‘Triple bottom line’

In the third quarter of 2007 in New Delhi what is probably the most sustainable building on the Indian subcontinent will be finished – the headquarters of Development Alternatives, a "center for excellence in sustainable habitat". The mission of the foundation is to encourage innovative approaches to sustainable construction which are carried out through sustainable design competitions, symposiums, funding for building initiatives and grants for research proposals. The primary objective of the foundation, as found in its mission statement, is the ‘non-commercial promotion and development of sustainable construction at national, regional and global levels’. This philanthropic objective of ‘non-commercial promotion’ gets problematized with the acknowledgement of the funding agency that supports this foundation, Holcim Group. Holcim Group is one of the largest manufacturers of cement in the world with ‘interests in more than 70 countries and employing more than 90,000 people’. The decision of the Holcim Foundation to give a Grant for the DA Headquarters comes at a strategic time when the company is spreading its reach in India. With the DA being a ‘Non-profit organisation’ that works towards sustainable development, a grant towards building its headquarters can be seen as a strategy of the company to gain credibility of engagement with an environmental cause. With the cement companies already under target by environmental groups for creating ecological hazards, the strategy to promote sustainable construction, is but a way to mitigate and negotiate the extent of its operations. Nevertheless, it is important to recognize the parameters and ideologies of the foundation’s engagement with sustainable development. The framework that Holcim Foundation for Sustainable Construction has laid out is a holistic one. It is based on the principle of the ‘triple bottom line’ which ‘asserts that long-term sustainable progress requires the balanced achievement of economic growth, ecological balance and social progress’. In order to understand, evaluate and apply this concept of sustainable construction, the foundation has laid out five main “target issues” with the help of the universities that it has partnered with; Swiss Federal Institute of Technology (ETH Zurich), Switzerland, Massachusetts Institute of Technology (MIT) in Cambridge, USA, Tongji University in Shanghai, China.
This framework is a broad one that considers economic, ecological as well as social equity issues in addressing sustainable development. However, the paradox lies in the mission/ideologies of the foundation and the ways in which it chooses to implement these ideologies. With its engagement with universities, its focus towards engaging with ‘experts’ to implement or put into practice its ideologies of sustainable development, the foundation fails to take into consideration the importance of ‘local knowledge’. In privileging the ‘expert knowledge’ and subjugating ‘local knowledge’ it creates regimes of knowledge production. And like most of the transnational organisation working towards sustainable development, Holcim foundation becomes a site of knowledge and capital dissemination.

National institution: Development Alternatives, Non-profit organisation, New Delhi, India

Alternative development: creating large scale sustainable livelihoods.

DA is a non profit organisation founded in 1983 by Dr. Ashok Khosla with a vision to promote sustainable national development. The ‘corporate objectives’ as it is referred to on the website are to ‘innovate and disseminate the means for creating sustainable livelihoods on a large scale, and thus to mobilise widespread action to eradicate poverty and regenerate the environment.’

Embedded within these objectives are issues that relate to social, economic, political and environmental aspects of sustainable development which resonate with the three E’s of sustainable development i.e. equity, economy and ecology. The DA is involved with grassroots actors in promoting sustainable development, the ways in which it operates is a top-down approach, both in the dissemination of knowledge and the implementation of its various schemes which, it claims is, ‘direct response to the needs of the target clienteles-the poor, the deprived and the under privileged’. The voice here of the ‘deprived, the under-privileged’ or the ‘subaltern’ is subjugated by privileging the knowledge of the ‘experts’. The technology that is disseminated as ‘appropriate’ is developed in other regions of the world, in various research institutions and universities. The paradox then lies in the ways in which the DA disseminates these knowledges produced in other regions of the world to be ‘appropriate’ to the diverse Indian context. In its role as a mediator between the North and South, NGO’s like DA become an important channel not only of the transfer of knowledge but also of power and capital. Its political reach is evident in the number of transnational institutions that it has partnered with i.e. USAID, UNEP, UNDP, UNICEF, Asia Development Bank, Swiss Agency for Development Corporation, Holcim Foundation besides the various state governments of India, national NGO’s, Business corporations, various multilateral institutions.

Given its global connections and its role as a facilitator of knowledge and capital between the global and local agencies, and operating in a top down approach, how different then is this ‘non profit organisation’ with its non-capitalist objective when compared to the other service providers in environmental management who operate under the rubric of ‘consultants’ with a purely capitalist intention?

The Architect: Advocating Sustainability

Ashok Lall, Practicing architect and Dean of Studies, TVB School of Habitat Studies, New Delhi

Ashok Lall has his architectural practice in New Delhi, Ashok B Lall Architects, which was established in 1980 and at present he is also the Dean of Studies at the TVB School of Habitat Studies, New Delhi. His practice focuses on ‘area of sustainability and energy conservation through research-in-practice’. In order to understand his ideology on ‘sustainability’ and architecture I will examine the ways in which he portrays his firm’s philosophy and also through his various conference papers on sustainable architecture and sustainable development.

The firm’s philosophy of Ashok B Lall Architects appears on the firm’s website,
‘As a firm we do not espouse any style or aesthetic. Each design is a process of discovery where solutions are found appropriate to the project at hand. The process is driven by three guiding principles:

- Inclusion of the client and user groups at all stages of the project by appropriately structured consultation.
- Search for simplicity and economy of means.
- Prioritizing selection of design strategies and technologies in favor of sustainability and energy conservation.'

As a practice of architecture, the firm believes not in its authoritative presumption of preeminence of vision and the autonomy of form but rather recognizes the social, cultural and economic milieu within which it operates.

One of the architect’s conference papers which is entitled ‘Evolving Traditional Practices for Sustainable Construction in the Present’ discusses the importance and relevance of reviving Indian traditional design principles and building construction practices as a response to sustainable architecture. He argues that, in the wake of the sudden spurt in building construction, as a result of the transnational trade and finance, a paradigmatic shift is required in the structure of the building trades, materials of construction and design practice. By emphasizing the need to ‘evolve’ traditional building practices instead of adapting the ready-made global technologies and building types, he is offering resistance on a broader scale to the process of globalization and its homogenizing effect on culture, in this case particularly the building construction culture and architecture. This resistance is also extended to the technological determinism that dominates the sustainability discourse which emphasizes the need to create new technologies as a response to sustainability. He advocates the use of materials with less embodied energy, using construction techniques that employ a large pool of human resources and the need for wider distribution of wealth in the economic processes of construction. In the design of the built-space, he emphasizes the need for climate responsive design derived from traditional practices, a better interaction between the indoor and outdoor spaces and creates a habitable public realm in the city. The gap in his advocacy is the ways in which this ideology can make a wider impact on the large scale developments undertaken by the key industry players, the construction lobby. To put sustainable construction in wide effect, it needs to be addressed in the policy of building construction e.g. national building codes, the bylaws made by the municipal authority, the production of construction materials, etc.

Chapter 3
Comparative Analysis

In the previous two chapters I have discussed the ideologies of the three actors in question i.e. transnational organisations, ‘national’ organisations and architects through the ways in which they represent and influence the practice and discourse of sustainable development/architecture. In this section, I will engage in a comparison between the two case studies in the same sequence that is followed in the discussion of the case studies. I will start with comparing the transnational organisations followed by the ‘national’ organisation and lastly the architects. Through this comparative analysis I do not intend to portray one building as better than the other or one organisation as being superior to the other. Rather, my intention is to highlight the differences and similarities in the parameters that they deploy to address sustainable development/architecture.

Transnational Organizations

“encourage domestic and international private investments and reduce the role of government in the supply of clean energy and water”

“World’s Most Environmentally Friendly Building Inaugurated”

‘promote sustainable responses to the technological, environmental, socioeconomic and cultural issues affecting building and construction’

“In the third quarter of 2007 in New Delhi what is probably the most sustainable building on the Indian subcontinent will be finished – the headquarters of Development Alternatives, a "center for excellence in sustainable habitat."
As discussed earlier, USAID and Holcim Foundation are both actively involved in the promotion of ‘green buildings’ and sustainable construction in India. While engaging in a comparison of these two transnational organisations, it is important to recognize the difference in the scale and extent of the organisations. While USAID’s interest in ‘green buildings’ is part of one of its strategies called the ‘Energy and environment objective’, which, as mentioned earlier, is part of a five strategy plan - the Holcim foundation’s sole objective is to promote sustainable development. But it is also important to note that the Holcim foundation is a part of the larger enterprise, Holcim group, which is one of the world’s leading cement manufacturers in the world. Thus, the initiatives of both the organisations are a small speck of their otherwise wide area of operations. And these operations are informed by the economic interests of these global players in intervention in the local Indian market and economy. While USAID deploys more powerful tools of neoliberalism by intervening in the national and state energy & environment policies, the Holcim Group does it through its efforts in capturing the cement market of the rapidly growing construction industry in India. Thus, both have an underlying agenda of economic interests and capital accumulation, yet the ways in which they promote their agenda of ‘green buildings’ or sustainable construction are different.

The parameters through which these transnational organisations address and evaluate sustainability are different and this difference in ideologies, I argue, gets reflected in the practices of both the actors involved in the process of the building production and the building as a finished product. In doing so, I do not deny the agency of the architect who plays a major role in the decisions of the building as an architectural product.

In announcing a USD 1.2 million, a 3 year matching grant the main objectives of USAID were to ‘assist the centre (CII-GBC) as it develops detailed plans for each major area, including green buildings, green business incubation, and water and energy conservation’. Also, in the year 2000 during a visit of then US president Bill Clinton, he announced ‘technical assistance’ from USAID to start the process of green building business in India. USAID had then provided financial assistance for a group of ‘experts’ from India which included a few members from the Confederation of Indian Industry along with Architect Karan Grover, to visit a few of the best green building practices in the US. Understanding both these initiatives of USAID together leaves us with two things: one the primary objectives of water and energy conservation, green buildings and green business incubation, and second is the way through which it would achieve the primary objective through technical assistance. This then leaves us with a very simplistic model that USAID puts forth to address sustainability which is through

- transfer of technology from the US to India which increases opportunities for the US to provide new services to the Indian market
- ‘green buildings’ which would again mean the transfer of knowledge of green practices from the US to India along with opening up the Indian market for green products manufactured in the US
- Water and energy conservation, again deploying new technologies to achieve the same

So for USAID, sustainability can be addressed through solving energy issues and with deploying newer technologies for greening buildings and businesses. The issues of social and economic equity are left unaddressed which to begin with is not the ideology of USAID as an organisation, which operates through an liberalizing agenda. And while addressing sustainability issues, USAID adheres the rhetoric of ‘green’ to veil its neoliberal ideologies. Under this garb of ‘green neoliberalism’ USAID continues its ‘business as usual’, eschewing the concern for the ecology and environment both in its ideologies and the ways in which it chooses to portray them.

In contrast to the narrow framework of the USAID of addressing sustainability through energy and
technology, the Holcim foundation provides a comprehensive framework which include five target issues namely;

- Quantum change and transferability
- Ethical standards and social equity
- Ecological quality and energy conservation
- Economic performance and compatibility
- Contextual and aesthetic impact

Through an elaboration of how all these five issues need to be addressed, it provides a framework to evaluate sustainable construction which not only addresses energy but includes economic and social equity and addresses the cultural differences that are required to be considered to propose a complete model. The limitation of this system is it fails to provide a transparent and objective system to measure these issues in different geographical locations which leaves the matter to the ‘experts’ and their subjectivities.

‘National’ Organizations

The vision of the council is to usher in a green building revolution and facilitate in India emerging as one of the world leaders in green buildings by 2010”

“The corporate objectives are to innovate and disseminate the means for creating sustainable livelihoods on a large scale, and thus to mobilise widespread action to eradicate poverty and regenerate the environment”

A fundamental difference in both these organisations is their mode of operation, while IGBC is a ‘Green Business Centre’, DA is a ‘non-profit organisation’ that promotes sustainable development. While the former has an entrepreneurial vision of bringing about a revolution in the business of green buildings to make India a world leader, the latter focuses on rejuvenating the environment, eradicating poverty and creating sustainable livelihoods. As stark as the differences in their visions are, so are they similar in their powerful local and global connections. In their role as mediators between global and local players who facilitate the flow of knowledge and capital their priorities are more inclined towards their global partners. And the way they aspire to bring about a change in ‘green’ or sustainable practices, is through ‘borrowed’ technologies and knowledge and hence through ‘borrowed’ ideologies.

The extent of operations of these organisations differ as the IGBK only focuses on buildings and in it construction/architecture, DA works on a broader agenda of providing sustainable housing. But within this set framework of operations of addressing sustainability it is important to understand the parameters they deploy and the ways in which they implement their ideologies.

The IGBC uses the LEED rating system as a measure to gauge the sustainability of the building. As discussed earlier, the rating system was adopted from its US counterpart, the USGBC which at a later date in 2007 was ‘indigenized’ in the wake of a huge amount of criticism from scholars/researchers. As it is not the scope of this study, I do not delve into the ways in which the rating system is indigenized, but what is of interest here is what the rating system addresses and what does it not consider. The main focus of the rating system is addressing issues of energy and water conservation. So, a green building gets defined by the energy and water it conserves in the process of construction, thus maintaining a low ecological footprint. But what this rating system does not address are other aspects related to the production of buildings namely relevant construction techniques, pool of labour engaged and in doing so, it eschews issues of economic and social equity.

Though the IGBC has indigenized the system, its wider agenda still remains in opening up markets for newer products, services and technologies, all imported from the US.

In contrast to the IGBC, DA’s framework is based on 3 E’s namely ecology, equity and economy. Its involvement in sustainable construction is through dissemination of ecologically and environmentally sound, economically viable and socially sustainable construction techniques. But this practice gets problematized in the light of its implementation process. Like the IGBK, the DA is also dependent on
its global partners for its construction technologies. Though it indigenizes the technologies, it is nevertheless a top-down approach which does not take into consideration the specific construction culture of the places it operates in. In spreading standardized techniques that are environmentally sound, economically viable, it engages in similar practices as the IGBC does through its standardized rating systems.

Yet, if a comparison is to be made, the framework of the 3 E’s that the DA adopts, promotes and disseminates is, as a practice of sustainable construction, a better approach to the reductionist one adopted by the IGBC, one that reduces the discourse of sustainability to the issue of energy and water conservation.

Architects: The Hybrid actors

Famous in their own rights, both these architects create a distinct yet similar, vivid yet nondescript image. Karan Grover a commercial architect, Ashok Lall Dean of Habitat studies in an architectural institute, the former a globe trotter making himself visible in international sustainability conferences, the latter a part of every important conference on sustainability in India, both engage in the discourse on sustainable architecture in rather distinct ways. As stark are the differences, so are the similarities striking too. Both advocate the need to invoke traditional Indian architecture to find solutions to address sustainable architecture and both adapt this philosophy in their architectural practice. But the ways in which they deploy their understanding and knowledge about traditional Indian architecture in finding solutions to create sustainable built environments puts them both in conflicting positions.

For Grover, traditional Indian architecture serves as a tool for evolving architectural expression/language while for Lall it serves as a model for finding climate responsive solutions. This difference in ideologies of the architects is reflected in the buildings, where in the case of Grover’s design the wind towers, the jails get reduced to mere symbols of the architectural heritage serving less as climate responsive elements, whereas Lall’s design responds by reviving the traditional construction techniques which were labour intensive, using local materials with less embodied energy and economically viable.

While for Grover, getting the highest number of points in the LEED rating system was his criteria and motivation as mentioned by him, Lall discusses the social, economical and ecological impacts of his practice. Lall’s engagement goes much deeper as he tries to involve the local manufacturer/craftsmen in reviving labour intensive construction techniques and while appropriating equipment (air cooler) to make them less energy intensive and better suited to the Indian climate and context.

Whether the CII-GBC is more energy efficient or the DA can be determined by Life cycle analysis of both the buildings but the ideologies that both the architects adhere to, Lall’s ideologies and his approach towards addressing sustainable architecture is more comprehensive. His concerns go beyond the reductionist conception of sustainable architecture as one addressing energy conservation to address economical, environmental and social equity aspects in his decision of making the building.
Concluding remarks

Throughout the discussion of this paper I have explored variety of ideologies about sustainable development/ construction/ architecture and highlighted the contradictions in the ideologies of various actors involved in the making and production of the two buildings. My study engaged in an interrogation of three main actors - i.e. the funding organisation, institution that houses the building and the architect - influencing the making of two buildings, both of which are proclaimed as the ‘greenest’ either in the world or the Indian sub continent. In discussing both the case studies I have filtered out one set of ideologies as presenting a better framework for addressing sustainability than the other. However, I do not portray one building as better than the other but instead argue that in the process of making the building, an approach that considers environmental, economic and social equity issues presents a more comprehensive framework to address sustainable architecture.

The paper has also explored the influence of political and economic ideologies as being influential in the production process of the building as well as the building as a final product of this process. The transnational organisations with their discursive framework of knowledge imperialism and capital power create regimes of green neoliberalism. Through their top-down approach of intervention they create a hegemonic relationship, one that legitimizes the western practices of sustainability as the ‘best’ and eschews the issues of local knowledge. However, within these embedded liberalizing agendas, there are differences in the parameters that the two transnational organisations deploy to address sustainability which have been emphasized. While one focuses their mission on goals of energy conservation, the other employs a framework that includes economic, environmental and social equity issues. Similarly for the two ‘national’ organisations who are similar in their operations of borrowing ideologies from their funding organisations, their parameters of addressing sustainability are stark. And lastly the architects, who I have portrayed as the key decision makers in this process whose buildings are a direct reflection of their ideologies. Though the ideologies do trickle down from the transnational funding organisations, to the ‘national’ institutions, to the architects, but the voice of the architect is echoed the most in the building as a finished product. This argument emphasizes the agency of the architect as being crucial in the production process.
and his ideologies as important determinants that set the note for future architectural practices. I have not shown one building as better than the other but what I have addressed is one set of ideologies being better than the other. The ways in which the practice of sustainable architecture gets perceived as a ‘collective identity’ is contingent on the architects ideologies and their decisions both of portraying themselves and their buildings. These hybrid actors balance their roles between being the ‘experts’ of sustainable architecture and the grassroots actors trying to advocate and bring about a change in architectural practices. The ways in which the practice of sustainable architecture will get shaped in India is contingent on the various political, economic and social transformations occurring due to rapid globalization but one thing that will remain constant is the agency of the ‘star’ architects as the master narrator.

Notes and References

6. Corburn, J. (2005), Street Science, p.47
7. ibid, p.48
8. ibid, p.49
9. ibid, p.77
12. ibid, p.103
13. ibid, p.144
14. ibid, p.130
15. ibid, p.131
16. ibid, p.132
17. ibid, p.133
18. ibid, p.127
19. I borrow this appellation from Abidin Kusno’s categorization of Dutch colonial architects as ‘Hybrid subjects’ whose professional identity was formed as neither colonizer nor the colonized.’
21. ibid, p.5
25. ibid
27. Architecture Page; Karan Grover Associates,
http://www.architecture-page.com/go/people/profiles/karan-grover-associates-kga
28. Architecture Page; Karan Grover Associates,
http://www.architecture-page.com/go/people/profiles/karan-grover-associates-kga
29. Clinton Global Initiative
http://www.clintonglobalinitiative.org/NETCOMMUNITY/Page.aspx?&pid=1483&srcid=1483
30. Architecture Page; Karan Grover Associates,
http://www.architecture-page.com/go/people/profiles/karan-grover-associates-kga
31. ibid
32. ibid
33. Infochange India; Infochange Environment
34. Holcim Foundation for Sustainable Development
http://www.holcimfoundation.org/T558/Constructionprojectgrant-India2007.htm
35. Holcim Foundation for Sustainable Development
http://www.holcimfoundation.org/
36. Holcim Foundation for Sustainable Development
37. Holcim Foundation for Sustainable Development
http://www.holcimfoundation.org/T222/Mission.htm
38. Development Alternatives Group; Mission,
http://www.devalt.org/mission.htm
39. Development Alternatives Group;
40. Ashok Lall Architects; About us,
http://ashoklallarchitects.com/aboutus/about_us.htm
41. ibid