

## Exhibiting Architecture in Full-Scale: Wall House, One to One at the 13<sup>th</sup> Architecture Biennale, Venice 2012

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### Exhibition of Architecture

The Architecture Biennale in Venice is the most important event on the International contemporary architecture calendar, with the world's most influential architects, designers and critics visiting it, resulting in considerable discussion and commentary in the architectural press and general media. Apart from national pavilions where each country can showcase their work (India does not have a pavilion), there is a prestigious curated part of the exhibition where the Director appointed for that year invites architects according to his own discretion to show their work in response to his theme.

The 13th Architecture Biennale held in 2012 was under the creative directorship of Sir David Chipperfield who chose 'Common Ground' as the theme for the curated section. He intended to "demonstrate the existence of a rich culture of architectural practice and research stimulated by the work of other disciplines but defined by shared enthusiasms and concerns at a time when the singular work of architects are celebrated but the role of the profession and our place within society is continuously challenged."

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**Anupama Kundoo** graduated from Sir J.J. College of Architecture, Mumbai in 1989 and a year later started her practice in Auroville, Tamil Nadu. Her body of work demonstrates a strong focus on material research and experimentation aimed at low environmental impact and appropriate to the socio-economic context. She received 'Honorable Mention' by the jury of the 2013 ArcVision International Prize for 'Women and Architecture' for 'her dedication when approaching the problem of affordability of construction and sustainability in all aspects'. Kundoo has taught at TU Berlin, AA London, TU Darmstadt, Parsons New School of Design, New York and University of Queensland in Brisbane, and from September 2014 she will be Professor at University Camilo Jose Cela in Madrid.

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I was invited to participate in the curated section among over 50 renowned architects including Zaha Hadid, Norman Foster, Alvaro Siza, Peter Eisenman, and Herzog and de Meuron. I proposed a full-scale facsimile of the Wall House in Auroville set within the heritage exhibition structure of Corderie, with a focus on common ground in the ‘making’ of architecture across different cultures. Chipperfield responded with great enthusiasm to the proposal, describing it as “fascinating and spectacular”.

The following is the curator’s note that accompanied the exhibit:

**‘Feel the Ground’. Wall House: One to One**

*Kundoo, an Indian architect now based in Australia has built an ambitious, 1:1 facsimile of the Wall House, a building she designed in Auroville, India in 2000. The common ground is in its making. A team of Indian craftsmen, who had never left their home country, were brought to Venice to construct the project in collaboration with staff and students from the University of Queensland, and students from IUAV in Venice, creating a skills exchange across three continents. The final piece embodies the dialogue between construct on cultures, and also is a showcase for Kundoo’s architecture, a lyrical modernism at ease with the demands of its climate.*

**Central Idea**

What we have ‘in common’ is much more than our ‘differences’. Dwelling on differences creates separateness, but having established the commonalities, the differences can be

celebrated. There are indeed common aspirations and a rich culture of shared material and spatial traditions across the world, and also through time. Each innovation in one place has helped technologies to evolve worldwide, and we continue to further ancient building traditions that continue to survive in the collective memory. Nothing stands alone without this continuity in space and time. The installation addressed this continuity of evolution of technologies by placing a contemporary project amidst the ancient elements of the same origin.

Transplanting a contemporary architectural project from rural India within the walls of the historic Corderie building (a 900-year-old heritage building formerly used to manufacture naval ropes) of the Arsenale in Venice, exhibited- in the most direct way- that there is really more in common than generally imagined; dwelling on the similarities between two apparently divergent architectural cultures, as well as between the ancient and contemporary.

While Chipperfield had offered the option to build the structure outside in the Giardini (gardens) where large installations are often placed, the indoor placement was deliberate. Outside, it would seem inappropriate as an ‘out-of-place’ architecture built for the Giardini site, while being indoors helped the Wall House to be perceived as an exhibition of architecture rather than architecture by itself.

**Building Common Ground, Through Integration Rather Than Confrontation**

The exhibit shared striking areas of common ground with the exhibition space. The use of



**Figure 1:** First impression of the Wall House construction interwoven into the Arsenale exhibition space.

pre-industrial handmade Achakul bricks similar in proportion to the old Roman brick is still produced in South India. The ancient brick pillars of the Corderie set in lime mortar were interwoven with traditional Indian brickwork also set in lime mortar. Lime mortar, vaults and the ancient Sicilian application of using hollow tubes for vaults (in underground drains) were other common elements. The timeless quality of these elements established the common ground between the ancient and the contemporary. Wall House had translated Venetian blinds in glass to tackle the monsoon while allowing ventilation. Achakul bricks continue to be produced while Italian brick making has become industrial involving larger unit sizes. The plan of the Wall House was so interwoven into the plan of the Corderie, to merge the new into the old, the temporary into the permanent, seeming timeless. **(Figure 1)**

The exhibit and the exhibition space flowed into one another without confrontation, or contradiction, each attempting to flatter the other in the dialogue that occurred between



**Figure 2:** Seen from the rear end of the exhibition room, a ramp leads to the raised central space under the terracotta vault. Seen in the foreground is a variation of the vault system made with interlocked wine bottles above the bathroom area.

them. Integration instead of confrontation was the essential approach. Spatially there was a lot in common too: the long plan, the linear arrangements and circulation, the double height central space with mezzanines on either side. Also structurally, one would notice the catenary curves, arches and vaults, metal tie rods instead of buttresses, jack-arch slabs **(Figure 2)**.

The Corderie is architecture in a certain state of ruin, disclosing the construction. The peeled-off plaster reveals the brick masonry. Yet the structure emanates its spatial quality rather than the way it was made. Wall House was rebuilt in a similar degree of unfinishedness to disclose its building technologies while retaining the spatial experience. The construction of original elements like terracotta roofing systems and rammed earth walls were revealed alongside those particular to the installation like the timber framework that supported the brick structure **(Figure 3)**. Along the long wall façade, the timber frame was completely visible like a prop to reveal that this



**Figure 3:** The outdoor landscape was constructed within the interior gallery space as a convincing extension of the house and created a sense of 'outdoor' within the larger 'indoor'. On the right is an unfinished stabilised rammed earth wall.

architecture was staged, and rather than just 'architecture' it was about 'exhibiting of architecture'. Architecture in construction, interwoven within architecture in a state of ruin were inseparably integrated and it was hard to one structure begin and another one ended.

'Common Ground' was interpreted literally and physically by creating a common new base for Corderie interior, which was also the floor of the Wall House. The ground surface treatment was symbolically and physically established, as a fusion where the project and the place became part of one another, a landscape of brick paving pattern made of Achakul bricks interspersed with broken brick chips from the original Corderie pillars collected from the site, expressing respect for the existing, and giving the ruins a new life (**Figure 2**).

People can relate to each other, likewise buildings can relate. This work was about continuity and inclusivity (**Figure 4**).



**Figure 4:** Ancient Italian brick masonry in lime mortar in dialogue with contemporary brick masonry made of still-in-use ancient Achakul bricks in lime mortar, establish common ground between the apparently diverse geographical and material cultures

### Brick, a Unit of Common Ground in Architecture

Venice is a brick city, and materially speaking, brick could be considered the unit of common ground in architecture. Brick, the first manufactured material survived every technological transition and continues to be developed to sophistication. It is the bridge between the past and the future, between the developing countries and the developed countries, between the hi-tech and low-tech manufacturing processes. Yet, the brick is not to be taken for granted and there is much to be discovered and learnt from it. Wall House involved an intense research on brick, and a new appreciation of the environmental advantages of ancient low quality bricks with industrial high quality ones. While the Achakul brick used exposed in the Wall House is not unlike the ancient Corderie bricks, contemporary bricks being used in Venice seem less appropriate than the Tamil bricks. The new brick masonry interwoven alongside the existing heritage masonry successfully merged the new and the old, the temporary and the permanent.



The central roof vault is made of self-supporting and interlocked, handmade terracotta tubes arranged along a catenary curve.

### Celebrating Hands: the Rich Culture Around the 'Making' of Architecture

With an approach to architecture derived from a basic respect and appreciation of the hand and its capacity to generate, make and experience buildings, the installation intended to celebrate the many hands that shape and drive this practice and to reveal their imprint on the author's architecture. Hands signify the sensual, the tactile, the humane, the individuality and the personal engagement involved in crafting space. Hands are not just for making but also for thinking and solving like when we draw and make models.

The rich culture of the 'handmade' in buildings is endangered. Handcrafted elements are an integral part of the architectural expression, crafts are incorporated in a tectonic sense neither decorative, nor incidental to the main, and they shape the form and structural system and the spatial experience significantly. When something goes through the hand, it's not just the skill that is represented, but also the care and involvement, the wisdom contained in it.



**Figure 6:** A further variation of the self supporting vault is made of recycled wine bottles by cutting the base and allowing the neck of the next bottle to enter it. This was an unrealised idea of the original project realised here at the Biennale.

### Wall House

The original Wall House is situated outside the planned city limits of Auroville, in Auromodele area, designated for research and experimentation. Planned as the architect's residence, it compactly accommodated everyday needs whilst effortlessly expanding to absorb guests. It attempted to not only redefine the building program for a private-residence; it tested various spatial and technological innovations to inform other projects. Spatially, it redefined borders and transitional spaces in response to the conditions of climate and contemporary culture. Technologically, it involved the use of traditional and local materials in new and inventive ways given the global resource crunch as well as rapid urbanisation. Landscape design, an integral and inseparable part of the overall architecture, worked with the topography to integrate the indoor-outdoor transition as an integral experience.

Wall House can be seen as the culmination of an ongoing extensive research and



experimentation, in low-impact building technologies that are environmentally and socio-economically beneficial, by negotiating the balance between hi-tech and low-tech and incorporating everyday materials through techniques that include the participation of those with lower skills and education besides a few skilled craftsmen. Such hybrid forms of construction focus on new ways of using age-old local materials that combine hand skills and local craft traditions alongside knowledge based scientific systems. A laboratory for research and experimentation, this was a prototype for future development.

### Full Scale

The intention was to stress the synthetic nature of architecture, and establish that architecture is a total experience whereby the variables of context, spatiality, construction, material capacity, and humanity are inextricably linked. The dialogue between the materiality of the architecture and the non-materiality of the voids designed for human use was important in demonstrating that 'the function of the pot lies in its nothingness'. Architecture is about the design of the negative 'space' beyond the sheer functional. Yet, the generation of form based on use of material shapes it. The nuance of 1:1 is twofold in that architecture can really only be experienced as a synthesis of material, space and context and that the execution of built work is a process of collaborations, of working one to one.

'Feeling' the importance of *genius loci* in architecture is the key, even if a project is being exhibiting in an exhibition. The architect recognises the existing atmosphere in a place before any intervention takes place, and

continues the essence of the place after it is built upon, as a natural extension of the mood that already exists. There is also a mood that comes from the design brief, which merges in harmoniously. The program contains the personality, the site has geography, and there are good reasons behind choosing the right materials, which lend their own character and qualities. The built form is introduced into the existing without generating conflict. Everything is experienced in continuity. One as a part of the other, the architecture is an integral part of the site.

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The compliment of scale and spatial composition between the Wall House and its new context was imagined to create a harmonious balance and sense of quietude within the exhibition space. Instead of imposing an autonomous object within the Corderie, it was intended that the insertion merged into its context and revealed to the senses the merged *genius loci* of these spaces.

The rebuilding in 1:1 scale enabled these intentions to be experienced first-hand. The installation full-scale model is intended to challenge the exhibition of architecture as artefact; a practice that often over-emphasizes the visual component of architecture whilst foregoing the significance of all other sensory

perceptions and variables. It addressed concerns with representation of architecture. Full-scale representation allows the perception of architecture through inhabiting space and experiencing it integrally. Truthful, direct and not distorting, as no other medium translates architecture to the visitor. Models and drawings are made to develop the design and execution, and exhibited elsewhere can replace the experience through mere mental understanding of concepts. Such representations along with digital renderings of today leave superficial impressions of architecture, and contribute to further distortion in the way architecture is being written about. Even architectural photographs fall short and tend to look the same today devoid of the life that occupies architecture, almost as if architecture in photographs has to look a certain way, or else they won't get published. In order to experience architecture as a spatial entity it must be inhabited in human scale, the body must occupy it, move through it, and touch things. Then the significance of the material along with the non-material aspects is experienced in the right balance. In exhibitions architecture often seems intellectually overloaded, and the thinking can take away from the experiencing. Architecture is a very real thing, present in the real world, and the contact to the ground and ground realities should be felt.

Finally, given the theme, a full-scale installation is also the most inclusive. Each visitor, not necessarily an adult or related to architecture could relate to the exhibit through their own level of interest, without intellectual and philosophical mystifications forced upon them.

### Collaboration: Strengthening Common Understanding, Common Values of a Diverse Society

There is a wide gap between developed countries and developing countries waiting to be bridged. A common understanding is necessary about what is sustainable and how green is 'green', through dialogue and confrontations related to large disparities in consumption patterns across the world. Through architecture, a common vocabulary was pursued that is inclusive, allowing participation from different levels of a developing society, consisting of diversity of skills and levels of education. Architectural expressions can unify rather than strengthen the existing segregation in society, and ease challenges of a society that is in transition from underdeveloped to developed, from rural to urban, from agricultural livelihood to new economic activities. The 'process' of realizing architecture is as important as the final product.

Many hands have been involved in the making this work. Starting with those who re-produced and packed the material in Tamil Nadu under the expert supervision of celebrated Californian ceramist Ray Meeker, to diverse groups such as staff and students of the University of Queensland, Australia; students of UIAV, Venice; craftsmen from Tamil Nadu in Venice; professionals from India, Italy and Australia; a visual communication designer Prof Fleischmann from Germany and German photographers, the project was the result of collaboration (Figures 7 & 8). The project revealed the common ground through the direct collaboration of diverse people who may not even share a common language. The



**Figure 7:** The core team from right to left: Michael Dickson, lecturer at UQ, Sekar Sokkalingam Head of Indian crafts team, Sari Bianca Bassini Italian student assistant from Mendrisio, Anupama Kundoo



**Figure 8:** The installation was handmade with the participation of 20 students and staff from the University of Queensland, Brisbane, 10 students of IUAV Venice, 6 Indian craftsmen.

combined efforts of all these participants confronted the common ground of building practice between industrial, handcrafted, unskilled and semi-skilled labour. For students of architecture, live projects provide opportunities to impart knowledge in a short time-frame, to learn invaluable lessons by confronting true scale, true material, site and direct engagement, bridging the gaps between theory and practice and empowering them to be confident practitioners.

To expand the reflection of issues raised here, integral to the exhibit were the independent work of artists whose paths had crossed the author's, and whose work widened the discussion while contextualizing her own research, and approaching the subject through their different perspectives: Ray Meeker's film 'Agnijata', the making of a baked in-situ mud building; Harun Farocki's film 'In Comparison' which shows diverse social realities across the world through the making of brick; and the photography of Andreas Deffner showing documentations of the

making and remaking in small photographs the size of Achakul bricks.

### **Yes It Was Extremely Challenging**

Indeed "ambitious" as David Chipperfield put it, it was accordingly challenging. It was also risky, as the attempt was to explain architecture through the medium of architecture itself. The approach being very subtle, and without posters, models or explanations, and one couldn't take for granted that the intentions would be understood. Yet the fact that we live in times of short attention spans and too much information, this approach seemed more likely to succeed.

The idea of building a whole building inside a heritage structure with low load-bearing restrictions, within a short span of 8 weeks was almost unbelievable. A most overlooked technical feature was the design of timber spreaders that distributed the load on the floor beneath the walls. In a spirit of adventure, the challenges were managed through the excitement of the vision and the passion it



**Figure 9:** Authentic material from the original context in Tamil Nadu including boulders and red earth were transported in 3 large containers to Venice.

generated. An opportunity to involve people from the new environment in Brisbane as well as the earliest people from the pioneering days, the quest was to discover the common ground in 'making' of architecture, and engaged building practices from 3 continents. The many hurdles and little time to resolve them included funds to be raised, getting authentic local material shipped from Tamil Nadu in three containers (**Figure 9**), customs to be tackled at the borders, and visas to be arranged for 6 Indian craftsmen (**Figure 10**) who did not even have passports (3 of them who had gained experience on the original project 16 years ago). Having never been abroad, it was an opportunity for them too to contextualise their capacities in the larger world. There was a rich skill exchange sometimes with no common language, except the actual work. A great experience in teamwork and collaboration, it was rich in cultural diversity, learning, exchange and friendship. A highly educational project to be realised in 8 weeks, it was nevertheless a major choreography.



**Figure 10:** The team of 6 Tamil craftsmen, some of who worked on the original Wall House, went abroad for the first time to Venice, and re-enacted the construction after 13 years.

### **Looking Ahead**

The quest for knowledge about the self, the environment and the profession has been the driving force behind the architectural practice now known for extensive research and experimentation. The many hurdles along the way were faced through rigorous dedicated labour, but carried through the enthusiasm and energy generated by visions of a promising future, and the passion for architecture. Education continues throughout life beyond Universities, each new project is an opportunity for building knowledge. Imagination is almost more important, and a forerunner to knowledge. The various aspects of life, architectural practice, research, teaching and community continue to overlap seamlessly and continuously and therefore enrich the quality of each. Boundaries are unnecessary as everything is connected. Life is a process, and architecture houses life in process. You can exhibit what you are. ■

*Photo Credits: Andreas Deffner*