

## **Architecture of Reconciliation**

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### **Abstract**

One quarter of all the world's cranes are located in the fastest growing city in the world; Dubai. The paradox is, that in striving for global economic recognition Dubai has become a parody of itself, a mythology of forms; an adult Disneyland built upon the silent deserts of the past.

The emphasis upon 'landmark' architecture is primarily driven and controlled by global economics and the quest for recognition upon the global stage. As a result, these new forms lack empathy and humility and have no connection with other complex domains involved in the making of architecture. Analysis of the *particular* climate, culture and place is absent.

The traditions of the indigenous Bedouin-Arabs founded existence upon an absence of building. Tent architecture was temporary, horizontal, climatically responsive, plastic, lightweight and black. All qualities that sit in stark opposition to the current trend of building in Dubai, expressed as permanent, vertical, un-responsive to climate, static, heavy and usually white. The result is that Dubai has become firmly disconnected from both the concept and spirit of place.

Where camels and their herdsman roamed 50 years ago we can now find an indoor ski-slope and high-rise apartments. The date palm, an essential element

of economic tradition, is given hollow signification through an abstracted plan-form of a new island development, providing no sign, in the semiotic sense, of the long tradition of human reliance upon the palm, for food, shade and survival.

Much of the debate upon sustainable design focuses upon the physical domain. The inclusion of wind turbines and photovoltaic cells might be judged laudable but the complex relationships between climate, culture and place lie largely undisturbed in Dubai. The indigenous traditions of making place are, by definition, sustainable and indeed beautiful, because such traditions have evolved into perfect models.

This paper sets out a hypothesis that by interrogating the Dubai paradigm using phenomenological methodology, architecture of reconciliation may be possible. Such architecture recognises contemporary global driving forces for development but equally, recognises the opportunities held in acknowledging the richness and authenticity of place in making *appropriate* and thus by implication, *sustainable* place.

Keywords: Authenticity, Identity, Culture, Climate, Place, Genius Loci, and Particularity

## 1 The Tradition of Making Place

*“The most unprofitable thing that eateth up the wealth of the Believer is building.”* (Prophet Muhammad)

Dubai is located on Latitude 25° 13 N, Longitude 55° 17 E and conforms to Köppen’s climatic type classification of BWh. The classification BWh is termed desert and that is defined as an area that receives ‘*an average annual precipitation of less than 250mm.*’ Annual mean dry bulb temperatures range from 12°C to 45°C. Mean precipitation is at 0mm for six consecutive months with a total annual rainfall of just 107mm. Mean annual relative humidity averages 60% and this dry and arid climate with 365 days of sun is one of the most extreme in the world.

Early inhabitants of the deserts, the *Bedouin-Arabs*, founded their very existence upon the absence of building. Bedouin comes from the Arabic word *badawi*, meaning desert dweller. These indigenous peoples made their clothes and tents from the skins of animals they herded. Bio-climatically accomplished, this weaved architecture helped protect the inhabitants from sandstorms whilst simultaneously keeping out the harsh desert sun. The production and repairing of the tents held a socially symbolic meaning for the *Bedouin-Arabs* as the act involved a family-based ritual. The very word Arab means ‘*people of the tent*’ and it is this black awning that embodies the original identity that firmly connects the indigenous peoples to both place and cosmos. Bernard Rudofsky discusses the making of place.

*“A communal art, not produced by a few intellectuals or specialists but by the spontaneous and continuing activity of a whole people with a common heritage, acting under a community of experience.”* (Rudofsky. B. 1964)

The temporary dwellings were pitched and dismantled by women and their children. The women were also in charge of cooking, cleaning, carrying water and weaving fabric. The domestic empowerment of women is an important tradition of the silent and unassuming Islamic culture. A significant factor in the success of these tribes revolved around the domestication of the camel. Perfectly evolved for such an inhospitable climate, the camel can walk continuously with no water for weeks and withstands body temperatures as high as 94°C. The animals were used for transport, food, household tools, milk, clothing and provided dung for the fire. During the winter months, when precipitation levels are at their annual peak, the nomadic *Bedouin-Arabs* travelled vast distances

across the deserts in search of trade and goods. During the summer months, when there is no precipitation with dry bulb temperatures often in excess of 55°C, the tribes live more sedentary lives on the coast or around more abundant supplies of water. During the summer months the indigenous peoples rely heavily upon the date palm for survival. Harvesting provides an abundance of fresh fruit whilst simultaneously providing shade to enable the growing of other crops. These settlements were built from local stone, mud-bricks, and palm fronds. The date palm trunks were hollowed out and crafted into canoes called *shashah* to help with the fishing and pearling industries. An architecture that embodies everything about the frugality and intimate knowledge of the desert peoples was the Al Arish dwelling. Made entirely from the date palm tree, this dwelling used the trunk for a structure and the palm fronds for walls and roof. These weaved openings provide a continuous circulation of air. To further promote passive ventilation during the hot summer months, a *malqaf* or wind catcher was used. The *malqaf* catches the wind up high, where it is cleaner, cooler, and has a stronger velocity. The air is caught and drawn down into the room below, and once warmed, the air expels back out of the *malqaf*, thus helping to achieve a continuous air circulation and thermal comfort for the occupants.

The courtyard or *hoosh* is used to expel the harsh climate of the desert. The *Bedouin-Arabs* experience of nature is so bitter that he doesn't find any real comfort or joy letting it into his dwelling. In the desert, the kind facet is the sky and the native peoples allowed their friend into their dwelling via the open courtyard. The *hoosh* allows for an internalised and introverted domain that expresses of its sacred centre to the outside world. Trees and fountains in the *hoosh* signify the soft femininity of dwelling, which contrasts with the climatically harsh, economic, and male dominated world on the outside. The *mushrabiya* (latticed faced window) is another bio-climatically accomplished device that allows an even light and air to enter promoting a natural ventilation strategy. The window also allows for external views of the street whilst retaining internal privacy for the viewer as Islamic culture demands.

The *Bedouin-Arabs* possess an astonishing knowledge of their *particular* environments potential. This wisdom genius enabled them to dwell beautifully in their harsh terrain, directly taking into account climate, culture and place. The word *desert* is defined in the western dictionary as '*any place lacking in something*'. The reality could not be further from the truth. The *Bedouin-Arabs* possessed a deep understanding of the place that gave them authenticity and sense of self. These peoples must not be considered primitive, for their responses to the climate were so advanced having been evolved and refined over thousands of years through the particularity and collective knowledge of generations of desert dwellers. Compared to Dubai's *developed* culture today,

which has been in existence for 50 years, the indigenous peoples held a timeless and deep-rooted spirit of place.

## **2 Architecture of Globalisation, Profit and Ego**

*“The importance of ‘Big’ architecture in Dubai is rooted in its historically transient and impermanent architecture, and the vastness of the desert landscape.” (Kichner. M & Rab. S. 2007)*

The recent history of Dubai has been extraordinary. Where nomads and their camels roamed only half a century ago, we can now find an indoor ski-slope, the largest shopping mall in the world, and the tallest building in the world. This rapid urbanisation had its initial development triggered by the discovery and exportation of crude oil in 1969. Dubai is now undertaking a hyper-development based upon tourism, entertainment, and retail to ready for oil’s eventual depletion in 2010.

When the United Arab Emirates (UAE) formed in 1971, British political and military presence in the area reduced. At this time, modernisation and development along Western principles was seen as the remedy for all social agendas. Mindful of its image, Dubai has deliberately sought economic and political recognition by adopting a Westernised code of building. This has resulted in the abandonment of all traditional knowledge regarding climate, culture and place. Modern Western architecture has its origins largely within the temperate regions of the northern hemisphere and most contemporary ideas are based on designs made for climates that are seasonal without any great extremes in temperature, rainfall or humidity. This architectural model has been found wanting and unsustainable within a home environment, so when replicated in Dubai, the negative impacts are significantly amplified. In the summer season 75%-85% of the total power generated in Dubai is used for air-conditioning plants. (Mitchell. K. 2007) According to the World Wide Fund for Nature (WWF) Report in 2006, the average global ecological footprint was 2.2 global hectares per person while in the UAE it is 11.9, the highest in the world. The present consuming of resources simply cannot be maintained.

*“The architect who builds a sort of solar furnace and then brings in a vast refrigerating plant to make it habitable, (of) over simplifying the problem and working below the level of architecture.” (Fathy. H. 1992)*

In the quest for global recognition, Dubai has become a key component of a globalised and monocultural society that, by definition, undermines local traditions. The need for ‘landmark’ architecture that is driven by world

economics and the quest for prestige has become the main driving ambition. The architecture of contemporary Dubai is obsessed with icons that are loaded with meaning, in the semiotic sense, when viewed on the global stage. The primary goal of clients and their architects is to be iconic, on budget and on time. Viewing architecture and building as an economic commodity results in the failure to recognise for a wider social, cultural, and environmental consequences of such positioning.

During the early development of Dubai, precedent was drawn predominantly from North American urban settlements such as Las Vegas and Orlando. Founded upon precedents that are themselves representative of modern mythologies, re-contextualised in Dubai; these artificial imaginary kingdoms are escapist, Disneyesque and hugely underwhelming. Dubai's '*Cultural Village*' promises '*an inspired mix of Arabic and old Dubai architecture.*' Yet instead of perfectly evolved features such as the *hoosh*, *malqaf* or *mushrabiya*, the reality is artificial ventilation, rendered concrete blocks and façade adornments faintly suggestive of the past architectures. This cultural dreamland is obscuring the rich and variegated traditions of the *Bedouin-Arabs*. We are being tricked into believing in its authenticity and responsiveness to place.

*"Our relation to the physical keeps weakening and we live increasingly in a world of dreams, in a stream of unrelated sensory impressions."* (Pallasmaa. J. 1994)

A proposal unveiled at The International Design Forum in 2007, *The Cloud*, promises "*a landmark and statement of identity for the city of Dubai.*" *The Cloud* will be 300 metres long, 30m high and 100m wide – and it is perched 300m in the air. It will be supported by a complex three-dimensional steelwork lattice system with vertical lifts and escalators literally providing a stairway to heaven. Suspended in the air, the scheme proposes a garden, a lake, restaurants, a palace and museums. Clearly designed as a place to dream;

*"The Cloud takes its inspiration from nomads who wandered freely, like the clouds they sought. Now people move vertically instead of laterally, the landscape seen from their towers is one of clouds instead of sand. The Cloud is a bridge between dream and reality."* (Karam. N. & Hapsitus. A. 2007)

If built, *The Cloud* would undoubtedly be a technological and engineering masterpiece. However contrary to its claims, architecturally it would be so disconnected and firmly un-rooted from the heart of this *particular* place, that it would result in what Kevin Mitchell likes to call, "*an intellectual dead end.*"

(Mitchell. K. 2007) The architect's obsession for originality has eliminated need for the cumulative intuition developed by the *Bedouin-Arabs*. This male dominated and visual form of architecture sits in direct opposition to the past traditions of subtle femininity within dwelling. With no real accountability for the truth and realities of the past, the architecture of Dubai has become self-motivated, self-referential and self-indulgent.

### 3 Architecture of Reconciliation

*"It is the task of architecture to provide a horizon of understanding our being in the world and, finally, of ourselves. Authenticity of architectural works supports a confidence in time and human nature; it provides the ground for individual identity."* (Pallasmaa. J. 1994)

In his Essay, *'The Geometry of Feeling'* Juhani Pallasmaa articulates a generic vocabulary to enable the interrogation of place from a phenomenological perspective. Developing this thesis from our earlier research, *'Sustainable Design: A Counterpoint to Globalisation?'* (Tyrrell. R. 2007) our hypothesis remains that this vocabulary paradoxically requires being decontextualised from cultural influence in order to be applicable with any chosen cultural construct.

We therefore propose a vocabulary that strives to be generic in order to shed cultural influences drawn from Pallasmaa's personal experience. This vocabulary describes eight territories of perception:

*The macrocosmic territory:* That which connects place and cosmos.

The macrocosmic is that which connects the specific place with its wider context both in aspiration and actuality. It might be best described in metaphor. Dubai; a cornucopia of exposure, mini-skirted and crop-topped so paradoxically full of symbolism, yet devoid of substance when compared to the hidden architecture of tradition; the veil, largely hidden but above all, silent.

*The thresholds of that territory:* That which defines place and, as a consequence, other place.

Where does the territory begin and end, how to we recognise place as this place....or indeed....that place? Interrogation of morphology of Dubai and, in contrast, Marrakech, evidence radically different methodologies in defining territories. What role the solid and the void? What role groundscrapping or skyscraping?

*The thresholds of entry:* That which delineates difference and presence.

In tangible terms, the simple solid door that opens to the *Hoosh* of tradition compared to the ephemeral, reflective yet transparent automated sliding glass doors into countless hotel and office block receptions of contemporary Dubai. Each paradigm signifying the transition between territories in radically different ways.

*The microcosmic territory:* That which defines particularity

Interrogating what it is beyond the threshold. In tradition, it is courtyards, rooms, substance and silence....all internalised....an internal (and controlled) version of the outside. In contemporary Dubai, it is exposed, layered vertically and devoid of cultural meaning.

*The thresholds of that territory:* That which illuminates definitions

Interrogating further that which exists beyond the threshold....is it further subdivided by other thresholds....how is it composed which leads onto....? In tradition, layers of privacy and meaning. In contemporary Dubai, at best; thinly screened again devoid of meaning.

*The elements of the territory:* That which orders and mediates

In tradition, from the *Malqaf* to the paucity and precision of decorative elements. In contemporary Dubai; racks of air-con and meaningless and misplaced decoration signifying nothing.

*The tectonics of that territory:* That which brings-forth particularity

How is it made and why? If arche is that which sits behind the idea and techne, the bringing-forth of arche, this is the how and why domain. In tradition; the thermal mass and closure of the mud wall that is 'of the territory'. In contemporary Dubai planar glass walls encouraging ingress of the enemy and exposure of what was an 'inner world'.

*The dialogue of territories:* That which rebuilds the entity

Reconstituting the particular territories described above into the whole. Morphology and decoration, tectonics and thresholds reassembled to describe the entity. In tradition; silent, hidden and somehow dignified. In contemporary Dubai; exposed, loud and brash.

Even cursory interrogation utilising this vocabulary of territories suggests that contemporary Dubai is largely devoid of engagement with the fundamental traditions that define place within the particular cultural traditions of this *particular* place, or indeed, the wider region.

This paper has set out architecture of the past in contrast to the present and currently these two very different forms of architecture sit in polar opposition to one another. The hypothesis of this paper proposes a reconciliation of not only the art of architecture, but also a need for reconciliation between the world and ourselves. Such a proposal recognises contemporary global driving forces for development but equally recognises the opportunity to learn from the spirit of place.

The Dubai paradigm must now be interrogated with a phenomenological methodology that recognises the need to move forward, yet with need to reconcile with the past. The deserts already possess a richness and authenticity that could help provide a foundation for a Dubai that has currently failed to embrace them. In using these past traditions unique to its environment, Dubai of the future must be an iconic city and not a city of icons.



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