Para-Scape: Landscape Architecture in Dubai

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Abstract

This paper explores the role of landscape architecture in the city state of Dubai in the United Arab Emirates (UAE) [1]. Landscape architecture in Dubai is generally regarded as a benign force, but is a nonetheless important component of constructing Dubai’s global image and legitimizing its socio-political hierarchy. Landscape, in broad terms, is analysed through the lens of Para-Scape: a landscape derived from Koranic depictions of paradise.

A survey of a range of landscape architectural projects leads to identification of the dominant landscape architectural typologies that underlie and illuminate the ways in which culture and nature are perceived in Dubai. Primarily, landscape architecture in Dubai is enlisted to serve two grand narratives: the paradisiacal image of greening the desert (Para-Scape), and making the city more attractive to global capital. The paper reveals and examines the way landscape is used within the city to serve these larger narratives. Comparing the work being carried out in Dubai with the tenets of the various charters of The International Federation of Landscape Architects (IFLA), it becomes apparent that what is happening in Dubai presents a fascinating discrepancy between theory and practice[1]. As the handmaiden of global capital with, apparently, scant regard for pressing ecological and social issues, landscape architecture in Dubai is arguably in a state of crisis. This paper explores this crisis in physical and theoretical terms – not in order to pass definitive judgement on landscape architecture in Dubai but better to understand the complexity of what would otherwise appear a superficial situation. What is happening in Dubai is interesting precisely because it so blatantly affronts IFLA’s ideals.

Dubai / Para-Scape / paradise / landscape / landscape architecture
landscape urbanism / ecology / ecological crisis / globalism / desert

Para-Scape

Dubai has been, for most of its existence, a sleepy fishing and smuggling port located on what was historically referred to as the ‘Pirate Coast’ of the Arabian Gulf. With the discovery of oil in 1968 the transformation of Dubai began from a town of 59,000 people (AMO, Reisz and Ota 2007: 76) to a global metropolis of approximately 1.6 million people, not including its ubiquitous labourers. The growth of Dubai has relied, in part, on constructed landscape to both market and legitimise the idea of the city.

The initial significant deployment of green landscape in the UAE was instigated in 1971 by Sheikh Zayed bin Sultan Al Nayhan (Sheikh Zayed) after the formation of the UAE [3]. As President of the UAE, Sheikh Zayed oversaw the miraculous transformation, which served as a powerful model for Dubai’s ruling dynasty [4], of the Emirate of Abu Dhabi from a “dusty and dirt poor desert emirate into a booming city-state, a mirage-like place of boulevards, towers and emerald parks” (Economist 2004: 90). During his reign, between 1971 and 2004 Sheikh Zayed oversaw the planting of about 130 million trees in the Emirate of Abu Dhabi, in what he understood to be a farsighted investment for a future in which oil had run out (Economist 2004: 90). This greening project [5], as initiated by Sheikh Zayed and further propagated by Dubai’s rulers, can be interpreted as being both theological and political in nature. There is considerable academic and anecdotal evidence to suggest that the initial deployment of landscape traded on a reading of verdant landscape as a symbolic recreation of the Islamic Paradise (Ouis 2002: 339).

John Brookes explains that the potency of the image of Paradise in Islamic culture is partly due to the fact that descriptions of the Garden of Paradise are held up as something not only to aspire to in the afterlife but also to create here on earth (Brookes 1987: 21). Thus the greening project takes on moral and religious overtones within the context of the UAE. The Koran itself emphasises the righteousness of such an undertaking:

Figure 1 The Para-Scape of Zabeel Park in Dubai

Figure 2 Dubai sits on the edge of the Rub al Khali desert.

“(God says) ... If the day of reckoning comes upon any of you while he has a seedling in his hand let him plant it.” (Bagader 1994: 2)

Since the action of greening the desert (and by extension urban development) effectively has God’s imprimatur then not only are the Emirati fulfilling their Islamic duty but their actions as political leaders - and their power - are profoundly legitimized through the association of the greening project with God’s will. As Sheikh Zayed himself said, “It was through God’s blessings and our determination we succeeded in transforming this desert into a green land. This encouraged us and we never looked back.” (Ouis 2002: 338)

Whilst the wellspring of the intention to green the desert does in all likelihood lie subliminally, if not explicitly, in Koranic descriptions of Paradise, the use of landscape architecture in Dubai can also be seen as part of a programme to create an image of a modern, progressive Islamic nation (Ouis 2002: 339).

The imminent exhaustion of oil reserves in Dubai has also led to the employment of Para-Scape as part of marketing Dubai as a global marketplace. Sheikh Zayed’s green legacy is continued by the current rulers of Dubai in a plan to turn 8% of Dubai’s urban area ‘green’ (Fardan 2008). This has seen the conflation of expatriate landscape architects’ often (understandably) superficial views with the ruling Sheikh’s vision of the city as a paradise garden. The conflation of these worldviews in an aggressively commercial environment creates a hybridized landscape architecture, Para-Scape (Fig.1). While the etymology of ‘Para’ within Para-Scape refers

to the paradisiacal it also resonates with the idea of paralysis. The dominance of paradisiacal (and its derivative pastoral and picturesque) imagery in much of Dubai’s landscape architectural work hinders Dubai landscape architecture from developing in other ways. The practice of landscape architecture in Dubai thus exists in a state of paradisiacal sclerosis, leading to paralysis. While Para-Scape takes on a certain religious authority, the desert, by not conforming to the image of Paradise is deemed, in some respects, to be contrary to God’s purpose. Whereas Para-Scape can be seen to be associated with the divine, redemption and cultivation, the desert (Fig.2) becomes by implication associated with wilderness and savagery [6]. The British explorer of Arabia, Wilfred Thesiger, referred to life in the desert thus: “Bedouin ways were hard, even for those brought up in them, and for strangers terrible: a death in life.” (Thesiger 1991: 15)

In the late 1960s and 1970s the rulers of the still-young United Arab Emirates initiated intensive settlement projects for the Bedouin tribes, providing free state housing and associated infrastructure in a plan to settle a politically problematic nomadic population (Ouis 2002: 335). Enticements offered to the nomadic Bedouin to settle included housing and the infrastructure and welfare associated with a modern city. While this was a major determining factor in the decision of the Bedouin population to settle, the rapidly forming image of Dubai as an expanded Paradise Garden would also have been potent: for the desert-dwelling Bedouin, greenery “marks the difference between life and death.” (Ouis 2002: 340) Mythologically, it also marks the difference between good and evil.

Figure 3 Diagram of Dubai Para-Scape landscape architectural typologies

Figure 4 Map of Para-Scape landscape architectural typologies

Dubai has a reputation for vice, of a place where transactions are made without taxes or questions, that goes back centuries (Kennedy 2007: 407). To this day Dubai is a regional node for trafficking, smuggling, money laundering and prostitution. It is also a place where aggressive development can proceed relatively unhindered by the checks and measures that are considered essential in democratic Western cultures. While Para-Scape has been deployed by Dubai’s ruling dynasty as a way of both legitimising power and of encouraging settlement of the nomadic Bedouin population, it also plays an important part in symbolically maintaining Dubai’s precarious balance between Koranic mores and a lucrative underbelly of decadence and vice [7]. For the international tourist and the international investor, the fruits of Dubai’s garden are readily available. Conversely, Para-Scape is also a sign of civic decorum and sanctity. For example, Dubai Municipality’s own promotional material refers to the Dubai park system as “safeguard[ing] the youth and teenagers from corruption and dangers of playing outside.” (Dubai Municipality Parks and Horticulture Department 2001) The notion of clean, green landscape as something respectable and redemptive (Corner 1999: 2) within the larger urban context is not unfamiliar in cities of the western world. No matter where they occur, designed landscapes often conceal more than they reveal, but due to religious and cultural factors, in Dubai the veiling role of landscape architecture seems particularly pronounced. Dubai’s Para-Scape is an effective local signifier, but in order to survive in a global economy after 2010 when Dubai’s oil reserves are predicted to run out, its landscape has to capture the world’s imagination.

Dubai’s ongoing re-creation as a device for attracting global capital represents a significant shift in the form and function of a traditional Islamic city. While this used to be intimately structured around the everyday lives of its inhabitants, Dubai is increasingly conceived from the viewpoint of a satellite (Al Sager, Al Rubaian and Khanafer 2007: 8). This, as we shall see, is just one extreme form of Dubai’s international image creation. While many cities have had the apparatus for attracting global capital retrofitted to their structure, in Dubai the attraction of global capital becomes the overarching function of large areas of the city. Dissolution of the distinction between city and theme park that has been observed as a key trait of the postmodern city attains its apotheosis in Dubai [8].

The typologies of Para-Scape

The grand narrative of Para-Scape permeates a broad and varied range of landscape typologies in Dubai (Figs. 3, 4). While still conforming to Para-Scape principles of political and religious legitimation, the Para-Scape typologies identified in this research are also adapted to the imperative to attract global capital upon which Dubai’s long-term survival now depends. This adaptation takes various forms, ranging from typologies which aspire to a global aesthetic to those which attempt to reference and commodify regional culture. Due to their frequently shared origins, a significant amount of overlap occurs between many of the typologies in both narrative and aesthetic terms. A limited number of typologies have also emerged in Dubai that represent superficial resistance to the dominant narrative of Para-Scape. This resistance takes the form of an attempted grounding of landscapes in local natural archetypes and ecologies, as found in the Xeri-Scape and Loci-Scape typologies.

Para-City

Para-Scape attains its apotheosis in Para-City, a typology in which the narrative of Para-Scape begins to encompass large city areas. One such Para-City development in Dubai is the planned Mohammed Bin Rashid Gardens project (Fig. 5). This urban development extends over 82 square kilometres, a massive 73% of which is to be green landscape (Howe 2008: 37) Designed to contain around a quarter of a million people, the project includes substantial residential areas for UAE citizens, four ‘houses’ themed around wisdom, humanity, nature and commerce, a university campus and the largest “civic park system created in the Middle East in over 10,000 years” (Howe 2008: 37-39) By positioning the project as part of a particular lineage of grand urban visions, its authors not only give it an instant pedigree but also ensure that their client’s ego is appropriately flattered.

“Enlightened leadership has filled history with grand precedents for such grand designs. By ordering his Persian capital to be moved to Isfahan, Shah Abbas I realised a vision for his parks, gardens and libraries of Nisf-e-Jahan (Half the World) to reflect the heavens above. As Domenico Fontana was to Pope Sixtus V’s Rome: Peter the Great to St Petersburg: L’Enfant to Washington DC: Hausmann to Napoleon III’s Paris: Frederick Law Olmstead to Manhattan: Edwin Lutyens to New Delhi: and Walter Burley Griffin to Canberra, so Sheikh Mohammed’s vision for a new Dubai will redefine the quality of civic life for the citizens, residents and guests of the Arabian Gulf.” (Civicarts Eric Kuhne and Associates 2008)

Project designer Eric Kuhne describes how the urbanism is based on “Arabian urban design principles, not European and North American principles” (Howe 2008: 37). To achieve this, the design takes the form of the astrolabe, “an instrument perfected by Islamic scholars” (Civicarts Eric Kuhne and Associates 2008). The project also refers to the archetype of the oasis

Figure 5 The Para-City of the Mohammed Bin Rashid Gardens project

and traditional Islamic heritage in its design language and marketing in a bid to find a stable symbolic and poetic foothold in all the cultural incomprehensibility of Dubai. These tenuous links to cultural heritage notwithstanding, what is perhaps more troubling is that the project, as with nearly all development in Dubai, appears to deny the reality of its ecological context. The Gardens are depicted as both natural and “purifying” (Civicarts Eric Kuhne and Associates 2008) when in fact the creation of such a Para-City is entirely artificial and will require enormous amounts of energy [9]. Additionally, a significant portion of the project is situated over a, now degraded, remnant sabkah [10] landscape that forms a natural filter for drainage to Ras Al Khor/Dubai Creek (Parsons, Harland Bartholomew and Associates 1993: 10-15).

Branded as a garden when it is in fact a massive urban development, the Mohammed Bin Rashid Gardens project rhetorically attempts to reconcile the seemingly antithetical forces of modernity and tradition. Landscape architecture, through its creation of Para-Scape, is crucial to this rhetorical positioning.

Figure 6 The Jumeirah Palm which has branded Dubai from the perspective of Google Earth

Figure 7 On the trunk of the Jumeirah Palm - the creation of a logo for Google Earth appears to take precedence over the human scale experience.

Logo-Scape

The use of a referential motif (in the case of the Sheikh Mohammed Bin Rashid Garden, the astrolabe) to configure large-scale urban design in Dubai is not uncommon. While the Gardens are not designed to be instantly recognisable from the air, many other parts of Dubai are. Such projects are classified as Logo-Scapes, the most famous example being the Jumeirah Palm (Figs. 6, 7). In these projects, the demands of branding take precedence over the daily lives of their inhabitants (Al Sager, Al Rubaian and Khanafar 2007). Indeed, on the ground the figure of the palm doesn't lend itself to the basic principles of good urban design; rather, its efficacy is that it can be instantly recognised on Google Earth as Dubai. Perhaps the proliferation of such developments in Dubai can be attributed to the fact that Dubai's chief architect, Sheikh Mohammed, is an enthusiastic helicopter pilot (Basar 2007: 83). The Logo-Scape of the Jumeirah Palm represents the supremacy of branding in project conception.

Figure 8 The Dubailand Sales Centre within its desert / construction site setting

While the recognition of Logo-Scape from Google Earth is of primary importance, the form of coastal Logo-Scapes aims to maximize exposure to water through convoluted coastal edges. This is part of Dubai's coastal multiplication scheme whereby the land has been extended into the Arabian Gulf in the Logo-Scape of the Jumeirah Palm and the water has extended inland in the form of canal developments such as Jumeirah Islands (Fig. 9) and Emirates Hills (Fig. 10). The canals found in such developments serve the dual purpose of providing access to the 'coast' and providing a moat to define the exclusivity of the development: both are powerful marketing tools.

Theme-Scape

While Logo-Scape brands the city on a Google Earth scale, Theme-Scape brands developments as interactive and experiential worlds. The branding of Theme-Scape generally occurs with imported themes that developers and branding consultants deem to be most attractive to a global audience. While most developments in Dubai strive to gain some kind of recognizable thematic edge, Dubailand (Figs. 8, 9, 10), covering approximately 278 km² on the desert edge of Dubai's urban area, takes the idea of a Theme-Scape to a new level. In Dubailand, Theme-Scape is not a component of a larger tract of urbanism; it is the urbanism itself. Comprising seven theme parks and 45 themed mega projects, Dubailand will accommodate 2.5 million people including tourists, workers and residents when fully operational in 2018 (Dubailand 2007).

Whereas architects, branding consultants and theme park designers have produced the major attractions, landscape architecture appears to have been charged with providing a generic pastoral setting for Dubailand. This neutral setting will evoke a sense of familiarity for the global tourist, as well as facilitating maximum revenue generation from the planned attractions. Where the desert has been allowed to permeate Dubailand's verdant layer of Para-Scape, it often appears to emerge as a theme itself rather than a binding substrata. Dubailand, as the apotheosis of Theme-Scape in Dubai, epitomises

Figure 9 Dubailand is swathed in a verdant layer of Para-Scape which binds together the disparate attractions of Theme-Scape.

Figure 10 Freej theme park is a re-creation of the Dubai neighbourhood featured in the 'Freej' animated television series

mises the wilful suppression of the local context in favour of a generic model for attracting global capital. Ecological, environmental and social aspects appear to have been largely disregarded in favour of economic concerns.

While Theme-Scape generally uses global, imported themes it sometimes also regurgitates traditional regional architecture, Islamic gardens and the oasis, as is seen in the Madinat Jumeirah development (Fig. 11). This nostalgic form of Theme-Scape is generally superficial, historically inaccurate and mainly results in the commodification and trivialisation of regional culture for the global tourist. The bind for the landscape practitioner searching for regional authenticity through such Theme-Scape projects is that the labour, technology, and capital required are all inherently global in nature. Thus an articulation of the local in design becomes unavoidably superficial (Fig. 12).

Figure 11 The nostalgic Theme-Scape of Madinat Jumeirah

Figure 12 Beneath Madinat Jumeirah, structured car parking and exposed services reveal the thin veneer of Theme-Scape's surface.

Sloip-Scape

Within the fractious environment resulting from competing Para-city, Logo-Scape and Theme-Scape typologies, Sloip-Scape is, in symbolic and physical terms, the Para-Scape 'glue' that may hold the city together. Sloip-Scape literally means 'space left over in planning' as proposed by Lionel Brett (Brett 1971) and is found in road verges, cloverleaf junctions and cladding the security apparatus of enclaves within the city (Jensen 2007:33) (Fig. 13). Typically consisting of an understorey of turf beneath a canopy of Phoenix Dactylifera palm trees, Sloip-Scape has little ecological or planned programmatic value and requires massive irrigation in a city that, were it not for its desalination plants, would have next to no fresh water. Comprising a significant proportion of green space in Dubai (Emirates Today 2007) (Dubai Municipality 2004), Sloip-Scape is often occupied by migrant workers due to its availability and public nature.

Figure 13 Sloip-Scape is occupied by migrant workers in the midday heat of a Dubai summer.

Figure 14 An aerial view of the verdant Pleasure-Scape of the Montgomerie golf course in Emirates Hills

Figure 15 The Muni-Scape of Zabeel Park is segregated from the city by the adjacent road system

Figure 16 The pastoral Muni-Scape of Zabeel Park

In symbolic terms, Sloip-Scape plays an important role in the city by aesthetically neutralising the divisions caused by Dubai’s highly segregated urban fabric. Beneath a verdant layer of Sloip-Scape the barriers of the city disappear – except to those who may try to cross them[11]. Sloip-Scape also attempts to ameliorate the brutality and dominance of the road system into a deceptive image of ‘nature’. As Rem Koolhaas has said:

“... the Generic City enjoys the benefits of their inventions: decks, bridges, tunnels, motorways – a huge proliferation of the paraphernalia of connection – frequently draped with ferns and flowers as if to ward off the original sin ...” (OMA, Koolhaas and Mau 1995: 1254)

Sloip-Scape represents the apogee of Dubai landscape architecture’s, and its clients’, predilection for stylistic over programmed landscapes, subordinating potential ecological or social function to the creation of a contrived image of nature.

Pleasure-Scape

Generally swathed in Sloip-Scape, the Pleasure-Scape typology represents the demand and expectation in Dubai for exclusivity and luxury (Figs. 14). Its ultimate expression is found in the resort, as well as gated communities, golf estates, luxury villas and private social and sporting clubs. Pleasure-Scape contains a cornucopia of lush vegetation and water, socially and physically demarcated from the city by security systems and a screen of Sloip-Scape. Pleasure-Scape is a landscape of privilege where the brutality of the surrounding city is muted for those who can afford it. AMO, Reisz and Ota refer to the increasing dominance of Pleasure-Scape in the construction of the Dubai’s urban fabric: “Instead of aiming for intensification, the city is now only conceived to soothe and relax: the ultimate typology for the urban increment has become the resort.” (2007: 194).

Consequently, Pleasure-Scapes have become a major part of Dubai landscape architecture’s day-to-day focus. By definition, Pleasure-Scapes reject

Figure 17 Loci-Scape’s formal re-creation of the desert landscape occurs as it is simultaneously destroyed on the city’s outskirts.

Figure 18 The proposed Xeritown development as part of Dubailand

Dubai’s desert reality in favour of the paradisiacal, thus negating any potential ecological value. In social terms, Pleasure-Scapes represent the apotheosis of social exclusivity in the city, with large sections of Dubai’s population being present in Pleasure-Scapes only in a service capacity.

Muni-Scape

Conceived as a semi-public version of Pleasure-Scape, the Muni-Scape typology (Figs. 15, 16) comprises Dubai Municipality’s developed park system. Essentially pastoral in nature, the basic condition of Muni-Scape is usually turf overlaid with scatterings of exotic tree plantings and attractions.

Dubai Municipality defines Muni-Scape as constituting:

1. (the) creation of recreational facilities for everyone
2. expansion of green spaces
3. environmental protection against pollution.

(Dubai Municipality Public Parks and Horticulture Department 2001: 7).

The provision of Muni-Scape by the municipality can also be seen as a desire to compete with other global cities in terms of the provision of (semi) public space. Despite the description of Muni-Scape as being ‘for everyone’ it is generally fenced and admission of 3-5 dirham is charged. This fee, combined with the distance between the parks and worker accommodation, is often enough to discourage Dubai’s underclass of migrant workers from entering. Officials from the Public Parks and Horticulture Department say the fencing and entry fee is required to pay for the upkeep of the park as well as to ensure that people who enter the park do not “abuse” it (Fardan: 2008). The parks are considered as family areas and the prospect of hordes of single (or effectively single) migrant construction workers is seen as threatening.

Due to its lack of adaptation to the extremity of Dubai’s climate, its relative lack of attractions and possibly its secure nature, Muni-Scape is generally not well visited, particularly in the summer months, compared to the highly popular shopping malls (Fig. 22).

A typology of partial resistance: Loci-Scape

Loci-Scape often represents an attempt by the expatriate landscape practitioner to reconcile the global practice of landscape architecture in Dubai with orthodox landscape architecture’s ethos of the genius loci. In Loci-Scape the indigenous landscape of the Arabian Peninsula becomes a source of inspiration for the production of contemporary landscape design. The archetypal landscapes referred to are most commonly those of the desert (Fig. 17), the wadi, and the oasis. Significantly, this reference is generally form-driven rather than attempting to replicate their ecological functioning. Loci-Scape’s re-creation of these archetypal landscapes also often occurs concomitantly with destruction of such landscapes elsewhere.

Loci-Scape can be seen as an attempt to sooth any nagging doubts that the expatriate landscape architect may experience concerning cultural authenticity while working in an intensely cross-cultural context such as Dubai. These doubts, in the Loci-Scape typology, become manifested as form-driven re-creations of landscapes of cultural and ecological significance.

A typology of potential resistance: Xeri-Scape

Conceived as a reaction to the ecological destructiveness of the dominant Para-Scape landscape typologies, Xeri-Scape attempts to minimise water consumption to produce an ecologically less destructive landscape (Figs. 18). Similar to Loci-Scape, Xeri-Scape is referenced on the indigenous landscapes

Figure 19 Previously demarcated as a sabkah ecological zone, the site of the Mohammed bin Rashid Gardens has been cleared and awaits development.

Figure 20 Areas once identified as ‘sabkah / wetland and important biological zones’ (Parsons; Harland Bartholomew and Associates 1993) largely destroyed by urban developments, many of which have used the services of landscape architecture.

of the desert and traditional Arabic urbanism; however, its interpretation is driven less by stylistic concerns than by a more programmatic analysis of ecological and cultural function. Still in its formative stages in Dubai, Xeri-Scape can be seen as a derivative of Masdar City in Abu Dhabi, proposed by Foster and Partners, which aims to be completely carbon neutral and produce zero net waste (Foster + Partners 2007).

Xeri-Scape ideas can also be seen in the proposed 45-hectare Xeritown urban development inside Dubailand, conceived as a ‘test site’ for sustainability. Xeritown imitates natural xerophytic landscapes through minimising water use and water recycling. The design’s reference to its desert landscape site also indicates a potential rejection of the tabula rasa approach of Para-Scape. In the project’s design process, humid zones were mapped from satellite imagery of existing vegetation and designated as areas to be protected from development (X-Architects, SMAQ 2007: 52).

Xeri-Scape can be seen as part of a larger emerging response by landscape architects, architects and urban designers to the ecological destructiveness of Para-Scape. It would also appear to represent a shift in the attitude of the rulers of the UAE (particularly in the Emirate of Abu Dhabi) towards sustainable design, along with its capacity to be used as a branding tool for both developments and potential cities.

Crisis

An analysis of the dominant typologies of Para-Scape, in ecological and social terms, reveals a state of crisis for Dubai landscape architecture, meaning either a philosophical and material shift from an established norm or a movement counter to an otherwise shared ideal. The ideals of landscape architecture as a discipline are represented by the Charter of the International Federation of Landscape Architects (IFLA). In point 7 of the Charter

for Landscape Architectural Education, IFLA states that landscape architects should ensure:

- a decent quality of life for all the inhabitants
- an approach to landscape planning and design interventions which respects the social, cultural, physical and aesthetic needs of the people
- an ecologically balanced approach assuring sustainable development of the built environment
- a public realm landscape which is valued and expressive of local culture (International Federation of Landscape Architects 2005)
- The IFLA code of ethics further develops the responsibilities of practicing landscape architects in point 3, ‘The Landscape and Environment’
- To recognize and protect the cultural and historical context and the ecosystem to which the landscape belongs when generating design, planning and management proposals.
- To develop, use and specify materials, products and processes which exemplify the principles of sustainable management and landscape regeneration.
- To advocate values that support human health, environmental protection and biodiversity.

(International Federation of Landscape Architects)

These principles distinguish landscape architecture as a profession committed to averting social and ecological crises. The profession of landscape architecture, in general, struggles to reconcile its idealism with commercial reality, but in Dubai, landscape architecture’s divergence from the IFLA charter’s core principles seems especially pronounced. Landscape architecture in Dubai appears, in many cases, to be implicated in the creation of social and ecological crises.

Figure 21 The Lagoons development simultaneously trades on and threatens the adjacent Ramsar Convention listed flamingo breeding ground.

Figure 22 Impenetrable zones in Dubai’s urban area for a typical unskilled migrant worker - this diagram assumes the worker has no money to spend on admission to the Dubai Municipality park system or gated commercial attractions. This is a necessarily speculative map.

Ecological crisis

The ecological crisis is nowhere more evident than in the massive amount of irrigation required to sustain the verdant illusion of Para-Scape. According to Dubai Municipality, the amount of irrigation water used in 2007 alone was 271 million m³ (Dubai Statistics Centre 2007). While most irrigation water, at least that used by the Dubai Municipality, is treated sewage effluent (Fardan 2008) the opportunity to use this water for more productive agricultural ends is disregarded. Additionally, many private developments irrigate with potable water, much of which is produced in an energy-intensive desalination process.

In addition to their massive irrigation requirements, many of the Para-Scape landscapes have minimal ecological value: “Para-Scape landscapes are largely image; they often have little substantive ecological merit, and in their bid to create images of green verdure they conflict directly with indigenous desert ecosystems.” (Doherty 2008: 106)

One of the problems landscape architecture in Dubai has faced in this respect has been the reading of the indigenous landscape as a tabula rasa [12]. Rather than the desert / sabkah landscape of Dubai being read as a source of ecological authenticity and credibility for landscape architecture, it has tended to be relegated to something that needs to be defeated so that ‘real’ landscape (Para-Scape) can be established (Fig. 19). This tendency for Dubai landscape architects and their clients to fail to see the worth of the desert / sabkah landscape because of dissatisfaction with its conditions represents a theoretical and practical failing [13]. Dubai landscape architecture’s complicity in the destruction of indigenous ecology can be witnessed in the almost complete destruction of “sabkah and important biological areas” (Parsons, Harland Bartholomew and Associates: 1993) by developments which have engaged the services of landscape architects (Fig. 20).

Concurrently with its involvement in the destruction of the desert and sabkah ecology, Dubai landscape architecture commits a sleight of hand when, along with the project’s branding consultants, it suggests that new developments are being somehow reconciled with nature.

The commodification of nature can be witnessed in the Lagoons development (Fig. 21), which consists of a 6.5 million m² urban development adjacent to a Ramsar Convention listed wetland / sabkah ecosystem. This ecosystem is home to migratory flamingos and 264 other species of aquatic and terrestrial fauna (Dubai Municipality 2003). Marketing for the Lagoons development invokes a development in harmony with nature, despite it being situated in an area that the 2003 Dubai Urban Area Structure Plan listed as a conservation area:

“This is the vision behind The Lagoons. To create a space where nature may flourish, while also providing all the requirements for elite modern living. World class commercial office space, business and retail properties, residences, hotels and leisure venues – all in a beautiful waterfront landscape that is alive with many different species of plants, birds and other wildlife. Our modern world interwoven with natural splendour, right in the heart of Dubai.” (Sama Dubai 2008)

The notion that a large-scale urban development can be built immediately adjacent to a sensitive sabkah / wetland ecology without causing ecological degradation seems dubious. The role of landscape architecture in this instance is to both minimise [14] and to symbolically compensate for this degradation. In this respect, landscape architecture is fundamental to the marketing of the development (Sama Dubai: 2008). The ‘nature’ that landscape architecture produces by way of compensation, however, is a highly artificial construct. Jensen describes these lush, green landscapes as “often stranger than an equivalent portion of the moon would be in relation to the natural surroundings.” (Jensen 2007: 119)

Figure 23 The fenced perimeter of Zabeel Park

Figure 24 Worker's accommodation, with minimal provision of outdoor space, adjacent to the Lakes development

Figure 25 A security checkpoint at a private estate at Emirates Hills is swathed in 'greenery' in an attempt to neutralize the dynamics of exclusion.

Landscape architecture in this superficial, compensatory role minimises the growth of collective guilt about ecological destruction and thus reduces the potential for a genuine ecological movement to gather strength in Dubai [15].

Significantly however, in late 2007 Sheikh Mohammed ordered the adoption of the Leadership in Energy and Environmental Design (LEED) rating system for all new developments. This system provides, at least, a broad framework for ecological design despite there being no regulations specific to Dubai landscape architecture (Howe 2008a: 29). The application of this rating system, devised by the US Building Council, to the Dubai economic, political and environmental context will be a major challenge for Dubai landscape architecture. Importantly, support for the LEED system by Sheikh Mohammed hints at a faltering of the ruling dynasty's support for overtly unsustainable Para-Scape, possibly ushering in a period where Para-Scape will be confronted with more ecological alternatives.

Social Crisis

Dubai's demography is fractured into largely discrete socio-economic strata. A large stratum of Dubai's population, consisting of unskilled migrant labourers, exists to perform often dangerous and exhausting tasks for minimal financial reward [16]. This service population contrasts with an Emirati and professional expatriate population who live a life of comparative ease and affluence (Davis 2007: 69).

This extreme socio-economic stratification is also mirrored in Dubai's built landscape; Dubai's unskilled migrant labourers are excluded from much of the highly privatised city (Fig. 22). Even the 'public' park system (Muni-Scape) established by Dubai Municipality currently accounts

for only 1% of Dubai's urban area (Emirates Today 2007) and can also be considered only semi-public as it is gated and a fee is charged for admission (Fig. 23).

Additionally, much of what constitutes public landscape outside of Muni-Scape is designed as pure image and not intended to be used (Sloip-Scape). In the privatised typologies of the city, such as Theme-Scape and Pleasure-Scape, security and surveillance systems and entry fees often exclude this subjugated demographic sector in anything other than a service capacity. The location of the labour camps, mostly on the city periphery, also tends to deny the labouring classes access to the parks as they rarely have access to private or public transport except between accommodation and work (Fig. 24).

The Olmstedian ideal of democratic landscape which underpins orthodox landscape architecture's social ethos concerns the role of public spaces as social safety valves, bringing together classes and ethnicities in common recreational activities (Davis 1992: 156). The translation of the Olmstedian ideal of democratic public space to Dubai is problematic from a number of points of view. Significantly, the Middle East and particularly Dubai has no real history of secular public space like the large park systems that Olmsted created. Another stumbling block for the creation of conventional democratic public space in Dubai is the restrictive political context. The actual establishment of truly 'public' space is, in conceptual terms, difficult to achieve due to Dubai having ultimately one 'landlord', currently Sheikh Mohammed (Davis 2007: 67).

In this restrictive political context, Dubai landscape architecture is often reduced to creating the appearance but not the substance of public space. While Dubai becomes increasingly segregated into socio-economic

strata the creation of the image of 'community' in gated real estate developments has become a major task for Dubai landscape architecture. Marketing for the al Furjan development deploys a traditional Arabic notion of community:

"Al Furjan symbolises a collection of homes or a small village. A fareej (a single village) represented a way of life to its residents, one that created a community of extended family and friends, rather than merely neighbours. It fostered lifelong bonds, a shared sense of responsibility and reliance on each other. Today, Al Furjan builds on this tradition to define a modern collection of vibrant neighbourhoods that celebrates family, home and choices." (Nakheel 2008)

The use of 'community' in this description is superficial in that it appears to be the image of interdependence of people that is required, rather than the reality; certainly the level of interdependence found in a traditional fareej would be considered burdensome by the contemporary residents of Al Furjan (Sudjic 1992: 311). In addition, the notion of community promoted in Dubai's gated developments is generally more reliant on the exclusion of particular classes rather than inclusion. Harvey (2002: 170) refers to this often-unacknowledged exclusion:

"The darker side of this communitarianism remains unstated. The spirit of community has long been held as an antidote to threats of social disorder, class war and revolutionary violence. Well founded communities often exclude, define themselves against others, erect all sorts of keep out signs (if not tangible walls), internalise surveillance, social controls and repression."

Landscape architecture's role in this respect is to provide the private community with parks, spaces and pedestrian interconnections as well to

integrate the security system of walls, gates and cameras (Fig. 25) into a benign layer of Sloip-Scape, neutralising the disengagement of the gated residential development from its social context. As John Wigham, director of regional landscape practice Cracknell, says: "If you design in (security features) from the outset, they can be integrated and look great." (Boley 2008: 33)

Along with project branding, landscape architecture in Dubai is involved in appropriating notions of community while the city around becomes increasingly socially stratified. Perhaps Dubai culture in general would be better served by an honest expression of a 'community's' desire for exclusion which at least acknowledged the truth of this social dynamic in Dubai. It is this tendency of Dubai landscape architecture to conceal certain realities that inhibits, to some degree, Dubai culture's ability to confront the realities of its modus operandi [17].

Implications

While Dubai is viewed by the west as a "fantasy world in the desert" (Davis 2007: 63), its significance in a regional context cannot be underestimated (Fig. 26). As Koolhaas (2007: 7) says of the generic 'Gulf' city (of which Dubai is the apotheosis):

"The emerging model of the city is being multiplied in a vast zone from Morocco in the west, then via Turkey and Azerbaijan to China in the East. The Gulf is not reconfiguring itself, it's reconfiguring the world. This may be the final opportunity for a new blueprint of urbanism."

While this may be overstating the case somewhat for the sake of impact, it is certainly true that Dubai is viewed by many countries and rulers within the region, not as a "fantasy world" (Davis 2007: 63), but as a viable model that can be replicated or at least responded to.

Figure 26 The eerie, partly finished ‘fantasy world’ of the International City development

The region’s adoption of Dubai as a model in landscape architectural terms presents a potentially worrying scenario. Dubai landscape architecture has been, through the frenetic application of Para-Scape, involved in creating a totally unsustainable city (*World Wildlife Federation 2007*) in which the local ecology continues to be destroyed at an alarming rate [18]. In addition, Dubai landscape architecture is implicated in creating a city in which truly democratic space has been, in general, deliberately negated. The replication of these ecological and social crises elsewhere has the potential to significantly magnify Dubai’s destructive potential (Fig. 27).

Dubai landscape architecture’s implication in the creation of the Emirate’s sometimes socio-ecologically impoverishing landscape appears to represent a collapse of orthodox landscape architecture’s founding ethos, a situation which is rarely acknowledged. This collapse, however, needs to be considered within the context of a political and economic system which is often at odds with the values of orthodox landscape architecture. The role of a landscape architect in Dubai, to span the gulf between the ethos of orthodox landscape architecture as advocated by IFLA and the demands of clients within the larger political and economic scenario, continues to be a formidable challenge. ‘This discrepancy between theory and practice that has emerged in Dubai landscape architecture also highlights the need for an analysis of the IFLA-advocated ethos itself within a cross cultural context such as Dubai.

It is in within this complex environment that landscape architecture in Dubai requires critical attention, both from within landscape architectural practice and from academia, in order to explore the reconnection of Dubai landscape architecture with its ennobling social and ecological goals [19].

Figure 27 A security wall being constructed around the lakes district development on Dubai’s outskirts

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Notes

- 1 This article was written concurrently with PhD research by Julian Bolleter supervised by Professor Richard Weller at the Architecture, Landscape Architecture and Visual Arts Faculty of the University of Western Australia
- 2 See www.iflaonline.org for the International Federation of Landscape Architects charters concerning landscape architectural practice and education.
- 3 The UAE is a confederation of states or Emirates, one of which is Dubai. The city state of Abu Dhabi is the capital.
- 4 While Dubai and Abu Dhabi in part define their identities through the differences between the two, Abu Dhabi as the UAE capital and the wealthiest of the Emirates still exerts an influence over Dubai.
- 5 The greening project is referred to by different names. Dubai Municipality refers to it in terms of percentages of ‘greenery’. See Dubai Municipality 2004. 4838 Hectares of Urban Land to Turn Green by 2012.
- 6 In more recent times the desert in Dubai culture has been commodified as a site of authentic local culture and thus is the subject of tours and ‘safaris’.

- 7 The notion of Dubai’s dark underbelly is explored in Davis, M. 2007. Fear and Money in Dubai. *Topos* 58: 62-70.
- 8 The parallels between the post-modern city and the theme park are explored by Sorkin, Michael 1992. *Variations of a Theme Park*. New York: Hill and Wang
- 9 A square metre of turf alone, in the Dubai summer months, requires on average 15 litres of water a day to keep it alive.
- 10 Sabkah is a saturated salt flat common in coastal regions of the Arabian Gulf. The once significant sabkah areas in Dubai have been largely cleared for development.
- 11 The use of Sloip-Scape as a barricade is discussed in Rifki, Fatih A, and Amer A Moustafa 2007. Madinat Jumeirah and the Urban Experience. In *The Private City*. Al Manakh: 23-29.
- 12 Sheikh Mohammed himself has said: “We will build and construct, so people will come, we will not ask people to come to an empty place.” In Bantey, Paul, and Eirik Heintz 2007. *The Architecture of Elsewhere: New Urban Contexts in Dubai and Shanghai. Regional Architecture and Identity in the Age of Globalization Volume III*. Dubai: The Centre for the Study of Architecture in the Arab Region: 1205-1218.

- 13 The tendency of architects to inaccurately perceive their context because of their dissatisfaction with existing conditions was discussed in Venturi, R., Brown, D. S. & Izenour, S. 1972. *Learning From Las Vegas*. Cambridge: The MIT Press.

- 14 ‘The Lagoons’ is, according to the official website, one of the first projects in Dubai to undertake a comprehensive Integrated Environmental Assessment (EIA) across all phases of the project. Presumably the project landscape architects are involved in this process. See www.lagoons.ae.

- 15 The apparent ‘innocence’ of landscape being used to mask ecological destruction is discussed by James Corner. Corner, J. 1999. Recovering Landscape as a Critical Cultural Practice. In Corner, J. [ed]. *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press: 1-26

- 16 The average yearly wage of a Dubai unskilled migrant worker is 1/16th of a typical Dubai resident’s. See www.mafiwasta.com/UAE-statistics.html.

- 17 New urbanism’s re-creation of traditional public space typologies in Europe is equated with retarding the development of authentic culture by James Corner. Corner, J. 1999. Eidetic Operations and New Landscapes. In Corner, J. [ed]. *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press: 153-170.

- 18 The UAE has a disproportionately high number of endangered species compared to the rest of the world: 600 out of 30,000. Refer to: www.khaleejtimes.com/DisplayArticle-New.asp?xfile=data/theuae/2008/March/theuae-March22.xml§ion=theuae&col

- 19 The potential of Dubai landscape architecture to reconnect with its social and ecological ethos will be explored in a second, concluding, paper. This paper will specifically discuss the role that emerging landscape urbanism theory could play in this respect.

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