Urban Planning in Dubai UAE, Cultural and Human Scale Context

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Introduction

The rapid urbanization of regional Middle Eastern cities, and the advent of modern high-rise towers, transformed them into fragmented urban space ignoring basic and fundamental conditions in producing sustainable buildings forms and comfortable usable spaces which have become a global phenomena to address by public authorities, developers, urban planners and architects.

In his “Against Architecture” book, Franco La Cecla claimed that “architecture has lost its way and its true function, as the archistars use the cityscape to build their brand, putting their stamp on the built environment with little regard for public good.”

Renzo Piano agreed with Franco’s statement and noted, “there is too much building, sometime only to put a signature on a spot, without any worry about the people who are living there.”

One would question if architects are the only players responsible for this phenomena ignoring the role of capitalist developers power and municipalities’ governance.

This presentation highlights urban planning and design development in the region, stakeholders roles in development market, and urban issues and consideration of Dubai master urban plan.
Urban Design & Architecture

- Urban design is the knowledge core which collates and integrates technology and art, creating and organizing the building environment which could achieve social function, comfort and visual preference for the city society.
The concept of urban planning and design developed, evolved and expanded historically from the beautification of cities led by Christopher Wren in London and Baron Haussman in Paris in the 18th and 19th centuries, and Ebenezer Howard’s 20th century “Garden Cities” concept through 1926 Le Corbusier’s 3 dimensions city “City Contemporary.”
• The cities in the middle east region, driven by oil wealth, transformed from integrated urban fabric and gated cities to ordered and compartmentalized car cities within a short time span of 30-50 years.
• Rapid urbanization has lacked a transitional period that enable cultures and their values to evolve and strengthen their own identity.

• Started with the demolition of traditional urban fabric to set up new roads, in major historical or cities fabric.

• Creating “new” high rise buildings isolated from existing urban fabric

• The result has been internationally-styled buildings introduced into creating of artificial environments.
Tall Buildings

- Tall buildings emerged as a feasible economic solution to provide more space in dense old cities such as Chicago and New York.

- Tall buildings in today’s market focus on the objective of maximizing the profitable multiplication of the value of ground encouraged by building regulations resulting in tower typologies isolated from cities existing urban fabrics.

- These buildings are statements of modernity, globalization, prosperity, and carry a notion of pride, major achievement and symbols of capitalist power.
• Historically tall buildings used as monumental **representation of power and human spiritual needs** (Pyramids, Malwiya, Ziqorats).

• The first living example of tower houses, “**Manhattan of the Desert**” were created in the 16th century in **Shibam –the Yemen** listed as one of the oldest World Heritage sites reflected builders skills, and maintain a built in harmony and environmental unity.
Different design approaches have been employed by international and local architects, the *international style* in an attempt to portray symbols of growth, prestige and progress.

- Opposite approach has been to retreat into the past and to *emulate traditional* using superficial out forms.
A successful approach, in my opinion, is that which seek an understanding of the essence of the regional local architecture, as distinct from its forms. The forms that evolve from this approach would, in consequence, have a regional identity, a sense of continuity and relevancy in terms of local culture.

Special local features used successfully in Le Mondes Arab Institute in Paris
Dubai Masterplan 2020

The Vision: Dubai 2020 Urban Masterplan produced to reflect H.H. The Dubai Ruler’s vision “to place Dubai as the catalyst of regional growth and the gateway for creative interaction with the rest of the world.”

- Since 1950, Dubai’s population grew about 100 times to 1.9 million estimated inhabitants in 2010. The estimated forecast is 2.8 million by 2020, with UAE nationals making up only 17% of the population.

- The Tourism plan aiming to attract 15 million tourists each year expected to rise to 20 million in the year 2020.
**Property Development Market**

Market trend influenced by major stakeholders: Dubai Municipality, National Developers, Architects and Project Managers

**Dubai Municipality**

Dubai Municipality, is the planning authority since 1950 commissioned the preparation of the city urban plan including;


“The latest plan responds to the environmental challenges and the socio economic transformation as the key to managing future urbanization.”

(mid 1980’s) Doxiadis The Comprehensive Development Plan

- Governance and building approvals before it decentralized in 2000
- Approval of mega developments were given to government linked bodies such as: Nakeel, Jebel Ali Free Zone (JAFZA ), (TECOM) and RTA.
- Approval process mostly focusing on projects technical and safety details standards ignoring related urban and cultural quality.
- Based on such approvals, master national developers setup their development guidelines to govern sub developers projects.
Dubai Development Market

- Rapid urbanization was economically driven by attracting foreign investment and activities aiming at developing a sustainable economic hub.
- Market driven by supply not demand setting for consumerism.
- Targeting locals and regional speculators, middle class and high end expats working/living in Dubai.
- Economics dictated that more plots be sold, thus plot sizes for high-rise buildings became smaller.

- Plots for open spaces and facilities were sacrificed to make way for developable land.
Developers

- Influenced by market boom, National Master Developer Companies founded to undertake mega projects (*Cities within City*) on land offered by the Government.
- Master national developers led by the branded Emaar, Dubai Holdings, Dubai Property and others.
- Sub-developers who normally have limited management and technical capacity take a short cut with a vision or sometime a desire of a readymade design.
- Developer imposed by building forms and tend to duplicate images with no or vague understanding of their design intent.
**Project Managers**

- Project management companies' role has been undermined by most developers and considered limited to construction management.
- Hill International, P.M. Consultants plays a major role in achieving developers’ objectives in design and construction procurement engaging strong management team including urban planner/design managers.

**Architects**

- Renowned international firms are normally awarded major mixed use development projects or single prestigious tall buildings design.
- Local firms mostly deploy expats architects and engineers who have little or no commitment to local culture and heritage design aspects.
- Design market trend in general is providing the Clients what he is asking for with appetite to negotiate low fee.
Urban Design Challenges

Major challenges impact negatively on the significant measurable achievement in the city image:

1. Unbalanced distribution of different social sectors housing focusing on the high end market with limited affordable housing.

2. Inflated scaled high ways and metro stations compromise urban spaces and building forms.

3. Congested traffic due to lack/delay of community facilities within new developments. (Total return journey to and from work 1hr 45 min) highest in the regional cities.

4. Allocated areas for facilities and public open spaces are often filled with additional buildings, favoring increased sellable plots to the provision of community facilities.
5. Water bodies become trend replacing community open spaces play grounds.

6. The city skyline now is ‘diffused’ by many single mediocre tall buildings.

7. The region dominant features of domes and minarets in city skyline are dwarfed by the tower buildings.
In design response to address the “challenges of local conditions” a comparison could be considered and debated of the 1970’s John Harris first tower World Trade Centre building and SOM’s Cayan Tower (the CTBUH 2013 award) and Calatrava’s Torso Tower (the 10 years CTBUH award).

Cayan Tower (2013)  
World Trade Center (1970, 2008)
• The Cayan limited urban space compared to Torso first Europe highest tower in aspect of image and urban space.
• Cayan Tower is now one of many tall buildings in the Marina – losing its “majestic iconic” status compared to the Torso Tower (10 years CTBUH award).
• Cayan monumental design concept imposed circular inner core and building layout compromised the quality of usable spaces.
• Examples of quality urban architectural design reflects sound understanding of local environmental conditions and culture integrated in contemporary urban and building forms

• Dubai Downtown Housing

• DIFC Village
The future of 21st century planning lies in the balance of the triple bottom line, which is measurable and accountable.
Destination Components

“Architecture is the thoughtful making of space” - Louis Khan

Successful master plans and building design start with a Sense of Place to achieve more viable, balanced and quality space and buildings.
Considering the Human Dimension of Skyscrapers

It is paramount that towers be designed in an urban context whereby they provide all amenities for social activities.

A common concern with all tall buildings is the way they relate to the public realm on the ground level. Their success in touching the sky should be measured by their success in reaching the ground.

- As buildings get taller more ground urban space needs to be considered.

- Openness of building forms provides visual continuity and space transition interests.
Creation of quality urban space and communal space at height.

Al Ain Mixed Use Project - Abu Dhabi
(Archicentre1989)
Improving City Urban Image on the city scale requires:

- Introducing mixed use and community urban areas above/under roads level to integrate the fragmented urban fabrics.

Downtown Dubai

Abdullah Al Hamad Street – Kuwait Urban Development (Archicentre 1990)
Improving City Urban Image on the city scale requires:

- Provide shaded pedestrian arcades, and awnings urban features
- Improve median greenery landscape identify and develop urban nodes and monuments.
- Study of Road elevation, building height, material and open spaces between building.
Conclusions

“The concept of interaction between international technology and traditional urban and aesthetic values should occur in a climate which permits the investigation of all possibilities that can be used towards exploring social and environment advantages to achieve urban scale and city identity.”

➢ Municipalities:
   • provide balanced urban plan to address the market needs or demands of affordable housing.
   • studies are needed to assess road hierarchy, modes of transportation, and related street scape
   • procure urban design works to address the missed process link between urban planning and building architecture
   • set up adequate and control building regulation associated with developers incentives to provide quality community and urban spaces in their project
   • safeguard the quality of community facilities and environment and retain the vital human scale

➢ Developer to provide on simplicity in their project development brief rather than twisted buildings could still achieve targeted financial return, and quality building performance objectives saving 20-25% of project cost.

➢ Project Managers
   • to enhance procurement method, RFP, selection criteria of Design Consultant Services.
   • engage strong urban planning & design manager in project PMT.

➢ Planners and architects to engage in thorough understanding of local culture and environmental condition.

➢ Local Educational institutions need to establish program for high degrees studies in urban planning and design.

The introduction of tall buildings and technology into the region is a reality from which there is no retreat. Planners and Architects are not the only people responsible for the rapid transformation of the city. Politicians, municipalities, developers, speculators and contractors play a significant role.