

Barcelona contemporary transformations: New centralities

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Index

Abstract

1. Introduction
2. Urban Form
3. Compact city
4. Revitalizing the inner city
5. Urban compaction
6. Implications
 - 6.1 Connected centers of social, cultural and commercial activities
 - 6.2 Community-based society
 - 6.3 Economics of culture
 - 6.4 Annexation of the tower (The culture of congestion)
 - 6.5 Public space (Un-volumetric architecture)
 - 6.6 Cities in globalization

References

"Cities, like dreams, are built on hopes and fears". Italo Calvino

Abstract

There is a widespread consensus that progress towards sustainable development is essential. Much attention has focused on the relationship between urban form and sustainability, the suggestion being that the shape and density of cities can have implications for their future. From this debate, strong arguments are emerging that the compact city is the most sustainable urban form. Furthermore, developments in urban cores became one of believed implementation to reach sustainable communities. Barcelona widely known as a compact city model has experienced continues urban transformations focusing on the provision of great urban spaces that centralize activity on a variety of scales: city, neighborhood, and within each block. This paper aims to reflect on Barcelona's oriented urban developments towards the revitalization of its urban core using urban compaction as a tool to achieve a sustainable city model, taking into consideration the contemporary implications.

Keywords: compact, urban, void, solid, density, intensity, mix use, culture, economy, scale, diversity, open space, sustainability, public space, globalization.

1. Introduction

As our cities are the main arena of human activity, they are also the greatest consumers of natural resources. Human activity cannot continue to use resources at the present rate without jeopardizing opportunities for future generations. It is estimated that around 50% of the world's population now lives in cities and urban areas. These large communities provide both challenges and opportunities for environmentally conscious developers. Sustainable development was defined by the Brundtland Commission as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*" And particularly sustainable urban development was defined as "*Improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden on the future generations.*" As urban form refers to the physical layout and design of the city, the way that cities should be developed in the future and the effect of their form can affect on resource depletion, ecological, social and economic sustainability. Therefore, there is a strong relationship between urban form and sustainability.

2. Urban Form

There are alternatives for the "shape" or structure of our cities, Pressman (1985) and Minnery (1992), among others, have identified several archetypal urban geometries, described briefly as follows:

- *Dispersed city* - continued low-density suburban development of population, housing and jobs; infrastructure investment dominated by road transport.
- *Compact city* - increased population and density of an inner group of suburbs, with associated investment in public transport.
- *Edge city* – increased population, housing densities and employment at selected nodes within the city; increased investment in orbital freeways linking the edge cities.
- *Corridor city*- a focus of growth along linear corridors emanating from the central business district, supported by upgraded public transport infrastructure.
- *Fringe city*- additional growth predominantly on the fringe of the city.

For the most part, all urban forms, with the exception of the dispersed city, represent attempts to intentionally concentrate urban developments in particular sections of the city.

3. Compact city

The compact urban form which is an alternative to urban sprawl, It implies intensification, high density and mixed uses as opposed to low density, mono use urban sprawl. Within such a definition the compact city is the most sustainable form.

Policies of urban compaction involve the promotion of urban regeneration, the revitalization of city centers, restraint on development in rural areas, higher densities, mixed-use development, and promotion of public transport and the concentration of urban development at public transport nodes.

More benefits of the compact city include: less car dependency thus lower emissions, reduced energy consumption, better public transport services, increased overall accessibility, the re-use of infrastructure and previously developed land, a regeneration of existing urban areas and urban vitality, a higher quality of life, the preservation of green space, and the creation of a milieu for enhanced cultural, business and trading activities.

4. Revitalizing the inner city

The concept of concentrating new developments within existing urban areas is widely recognized, notably in the European cities. The strategy advocates making the most efficient use of existing urban areas.

In the inner city, there are already public transports oriented and walking oriented characteristics- that is, dense, mixed land uses with urban design conducive to face-to-face activity. So, here, it is possible to reach destinations with short trips, without a car, and to create walk able communities. In re-urbanizing such areas, a city is extending into space that is not automobile dependent. Re-urbanization of essentially abandoned inner city areas has occurred in many cities around the world. Invariably, such successful revitalization is closely associated community processes that have developed a new vision for their area.

Once the inner city is regenerating, a city can then begin to take its 'inner city' qualities to the suburbs. This needs to include a process of beginning to provide sub-centers that have 'inner city' characteristics, linking them up with good public transport.

5. Urban compaction

Urban density can be expressed in different ways. It is generally expressed in People per hectare (people/ha) or dwellings per hectare (dw/ha), and represents the relationship between land take and the number of residential buildings. Different levels of density, along with the mix of uses, create significantly different types of urban environments. For example, a higher density mixed use pattern reduces the demand for motorized travel as services and activities are located within walking distance.

The relationship between urban compactness and travel patterns is central to the sustainable urban form debate. It has been commonly accepted that a degree of compactness, in any of several forms, reduces demand for car travel. Also there is a potential impact of urban compaction on environmental quality because turning any natural land over to urban uses has negative impacts for natural species diversity. Finally, social and economic impacts are also significant, although they have received far less attention than environmental aspects to date.

6. Implications

Overall, a city with a compact urban form is more sustainable. In the main it is characterized by compactness, mix of uses, and interconnected street layouts, supported by strong public transport networks, environmental controls and high standards of urban management.

As sustainability is a vast and complex area of study, this paper is limited to the selected implications on sustainable future cities.

6.1 Connected centers of social, cultural and commercial activities

The Compact City addresses these issues because it grows around centers of social, cultural and commercial activity located at public transport nodes. These provide the focal points around which neighborhoods develop. The City is a network of these neighborhoods, each with its own parks and public spaces and accommodating a diversity of overlapping private and public activities. Most importantly, these neighborhoods bring work and facilities within convenient reach of the community, and this proximity means less driving for everyday needs. In large cities, Mass transit systems can provide high-speed cross-town travel by linking one neighborhood centre with another, leaving local distribution to local systems. This reduces the volume and impact of through traffic, which can be calmed and controlled, particularly around the public heart of neighborhoods. Local trains, light railway systems and electric buses become more effective, and cycling and walking more pleasant. Congestion and pollution in the streets are drastically reduced and the sense of security and conviviality of public space is increased.

6.2 Community-based society

Sustainable Cities could reinstate the city as the ideal habitat for a community-based society. It is an established type of urban structure that can be interpreted in all manner of ways in response to all manner of cultures. Cities should be about the people they shelter, about face-to-face contact, about condensing the ferment of human activity, about generating and expressing local culture. Whether in a temperate or an extreme climate, in a rich or poor society, the long-term aim of sustainable development is to create a flexible structure for a vigorous community within a healthy and non-polluting environment.

6.3 Economics of culture

"The experience economy" a next economy following the agrarian, industrial economy and the most recent service economy, has radically altered the ways that Cities establish and maintain their competitive advantage. In the experience economy, experience itself has become the product: we're no longer consuming objects but sensations, even lifestyles. Thus, encouragement of cultural activity is a factor which dynamics the city internally and shows it to the outside world. In contemporary cities, cultural activities, the arts, sport and leisure constitute a genuine thermometer of collective vitality, determining the attractiveness of a city, contributing to its image abroad. Therefore cultural activities and facilities must be integrated within the mixed-used developments in the compact city as a strategic tool for economic and cultural transformation.

6.4 Annexation of the tower (The culture of congestion)

"Proposes the conquest of each block by a single structure. Each building will become a house—a private realm inflated to admit houseguests. Each house will represent a different lifestyle and different ideology. The culture of congestion will arrange new and exhilarating human activities in unprecedented combinations. Through fantastic technology it will be possible to reproduce all "situations" — from the most natural to the most artificial—wherever and whenever desired." *Rem Koolhaas, delirious New York.*

In the era of elevators, the greater number of floors stacked around the shaft, the more spontaneously they congeal into a single form. The tower acts as a utopian device for the production of unlimited numbers of virgin sites on a single metropolitan location. It lies at the crossroads between the global process of densification shaping contemporary urban development and the protocols and iconographies that define local cultural specificities.

In terms of urbanism, this indeterminacy means that a particular site can no longer be matched with any single predetermined purpose.

6.5 Public space (Un-volumetric architecture)

Public life in the traditional city is reduced to public space in the contemporary city, a notion that mimics a certain type of urbanism.

The hegemony of the pedestrian, the plaza, the street and the perimeter block must be challenged not because the values they embody are no longer valid, but rather, because they are suffused with a set of fundamental misconceptions about the nature of contemporary civilization and its outside, leading to a false understanding of the whole.

As Congestion is important because it describes the contemporary city lifestyle, urban activities are unstable, uncertain, they should overlap and mutate. Therefore open space must act as social condenser creating horizontal congestion.

6.6 Cities in globalization

Cities are now reflecting a clear culture economy overlap, with global cities such as New York, London, Paris, Barcelona and Tokyo emerging as centers of the global economy and cultural industries.

Marketing the city's cultural offerings aims for both consumption of culture and generation of income in the city.

References

Rogers, R. and Gumuchdjian, P., 1997, *Cities for Small Planet*, Faber and Faber Limited, London

Jenks, M., Burton, E. and Williams, K. (Editors), 1996, *The Compact City: A Sustainable Urban Form?*

de Roo, G. and Miller, D. (Editors), 2000, *Compact Cities and Sustainable Urban Development: A Critical Assessment of Policies and Plans from an International Perspective (Urban Planning and Environment)*

Elkin, T., McLaren, D. and Hillman, M., 1991, *Reviving the City: towards sustainable urban development*, London

Williams, K., Burton E. and Jenks, M., 2000, *Achieving Sustainable Urban Form*, London

Rem Koolhaas, 1978, *Delirious New York*

Rem Koolhaas, *Mutations*

Pine-Gilmore, 1999, *The Experience Economy*

Jensen, 2000, *the Dream Society*

Saskia Sassen, *Cityness in the urban age*

Lars Lerup, 1994, " Stim & Dross: rethinking the metropolis,"

Rem Koolhaas, 1995, S,M,L,XL