

## **URBAN DESIGN AS HUMAN SETTLEMENTS**

By Barry Rae. Published in *URBAN* December 2007 issue.

The practice of urban design has evolved over the years as a necessary discipline for two main reasons. First, by the default of architects, engineers and other designers - who do not see their projects as inter-related parts of a larger whole - and secondly, by the failure of city planning to deal with design quality.

While surveyors design land subdivisions, architects design buildings, engineers design roads and bridges and landscape architects design the spaces in between - urban designers deal with human settlements.

Urban design attempts to integrate each bit of urban development into its settlement context, to create a meaningful and functional 'whole' at all scales, as settlements unfold at all stages of their transformation. Thus, urban design processes are by necessity higher-level, involve more players and are essentially trans-disciplinary.

*Urban design* (dealing with three dimensional space, form, and structure) and *urban planning* (dealing with land use, strategic resource management and development control) have historically battled for position as the leader in influencing built environment outcomes.

The apparent failure of bureaucratic and legalistic planning during the last few decades of the last century - and the current crisis of the quality of urban settlements around the world - has led to the current renewed interest in the role of urban design.

The truth of the matter is that we need the integration of both design and planning processes, as each alone cannot achieve the quality of human settlements that we so desperately lack.

Since the early 19<sup>th</sup> century, when mechanisation and urbanisation changed the fundamental nature of our settlements from relatively static and simple habitats to dynamic complex systems, there have been few attempts to develop a comprehensive and systematic understanding of the totality of human settlements.

### **Cerda and urbanisation**

The first to explore the need for such an understanding in the modern world was, perhaps, the Spanish civil engineer Cerda, who was responsible in the mid 19<sup>th</sup> century for the expansion of Barcelona and its transformation into a modern successful city.

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Cerda devoted 20 years of his life to transforming the 'complex whole we call the city' into the subject of a new discipline by establishing 'a body of principles, doctrine and rules to be applied ...so that buildings and groupings of buildings would serve to stimulate (man's) development and energies and increase individual well-being, the sum of which creates public happiness'.

Cerda felt that some type of urban structuring had become essential. He was a century or two ahead of his time. He brought together virtually every discipline that played some role in understanding the city as a new science. For this, he was of course scorned by the conventional professions of the time who considered city building to be an art rather than a science.

### **Doxiadis and Ekistics**

It was another century before the approach of Cerda was again taken up, independently as far as we know, by the Greek architect/planner Doxiadis. He proposed a new science of 'human settlements' (*settlements* to embrace all forms of habitat, and *human* to remind us of what they are for) which he called *ekistics*, but which was to be far more systematic, comprehensive, multi-scaled and visionary than the science of Cerda.

Ekistics was born during Doxiadis' involvement with the reconstruction of Greece after World War II, as deputy minister and director general of reconstruction. Later, he devoted the rest of his short life from 1955 to 1975 to establishing and directing his consulting company operating in some 20 countries, a tertiary educational institute and a research institute all dedicated to developing his ideas on ekistics and the balanced integration of the elements of nature, anthropos, society, shells (buildings) and networks.

For Doxiadis, the purpose of the city is to nurture human development while retaining a balance with nature. For him, the building module of the city was not the block but the human community that is limited in size to that which is walkable in ten minutes from its centre to its periphery (i.e. of human scale) and which includes a mix of uses basic to daily life. Ekistics is essentially a systems approach to the human habitat from the scale of the room through to the scale of global networks.

### **The Future of Urban Design**

Despite the influences of both of these men, the worlds of urban design and planning these days swing from one approach to another, muddled and confused, desperately searching for answers to the functional and environmental disasters that we call our human habitat.

Recently, a plethora of books presenting one urban 'ism' or another (traditional, new, transit-oriented, landscape, smart, infrastructure, etc) is both encouraging and disturbing.

Encouraging, because there is a renewed interest in the wider issues of the urban environment beyond conventional disciplines and professional practices, and

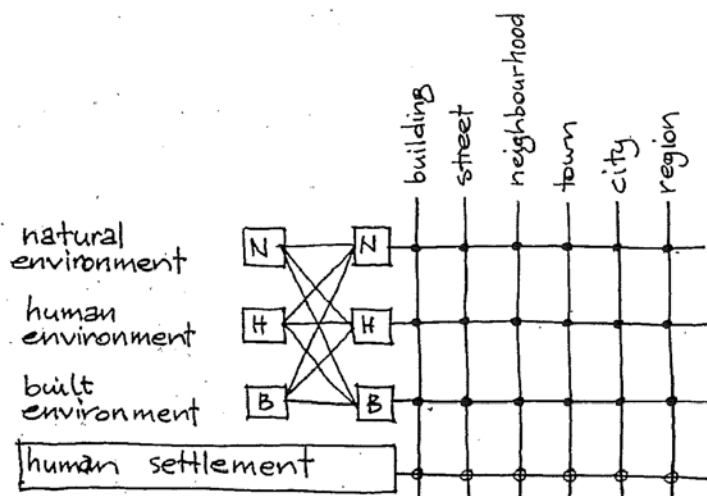
disturbing because these 'isms' are still only partial and contested approaches which need to be integrated. We need them all, but none on their own attains the holism of ekistics.

To further complicate the role of urban design, cities throughout the world currently see simplistic city branding (creative, eco, knowledge, etc) as the way to resolve issues, without realising that cities need to be all of these and more.

Urban design, now included in the policies of many countries and cities, runs the real risk of not delivering expected outcomes and becoming a political outcast, again. Of course, on its own, it cannot deliver everything in the field of human settlements. For this reason it must operate within an ekistic framework.

Perhaps the key future role of urban design will be mediation by design between the perceived opposites of art and science, project design and urban planning, global and local issues, town and country, public and private interests, activity centres and corridors, constancy and change and so on. These opposed and complementary notions are battlegrounds, where both sides are relevant, and their synthesis at various scales requires an ekistic framework that considers the natural, human and built environments as an inter-related system. In particular, the opportunities and design of every development project must be extended to enhance the relationships amongst all elements of human settlements and to give something to the life of the city, to heal the city, to make the city more "whole".

It is now 150 years since Cerda began developing his theories about the modern city and the need for a new urban science, and 40 years since Doxiadis proposed a science of human settlements. Needed, for all players, is a trans-disciplinary framework and common language for human settlements. It is time for all disciplines involved in creating bits of settlements, and especially for urban design that assumes a mediating role, to take the ideas of Cerda and Doxiadis seriously, to add contemporary approaches and conditions and to support the advancement of the art and science of human settlements as a subject in its own right.



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*Barry Rae was an urban designer/planner/architect and founder of Transurban Limited, consultants on urban development. Sadly he passed away in 2009. The company is now run by his son, Nick Rae, Urban Designer and Landscape Architect.*