

Abstract – The Essence of the Thesis

Current understandings of Urban Design point towards the fact that it is the art and science of city making. Like other aspects of Architecture, it begins with a site analysis, followed by the formulation of a vision for the built environment and thereafter a process of transforming the vision into reality (Carmona et.al, 2003). Thus, Urban Design is perceived as a discipline that gives rise to the form and definition of the full spectrum of forces including social, economic, cultural, ecological, political and aesthetic dynamics (Dixon, 2005). The role of the Urban Designer can therefore be understood as central to a number of other stakeholders such as Traffic Engineers dealing with vehicular movement, Civil Engineers concerned with structural design, Architects designing built form, Landscape Architects designing open space, Urban Planners formulating policy and the Property Developers involved in aspects of land investment. However, as urban populations grow, become more diverse and fragmented, the function of Urban Design and the role of the Urban Designer becomes questionable (Madanipour, 1996).

The past tradition of thought in Urban Design (visual artistic approach) incorporated a firm belief in the physical aspects of city making relying on built form as a primary informant. This tradition has, however, been replaced by a more recent tradition (social usage approach) which incorporates a firm belief in interpreting phenomena occurring in public space. This served as a response married to the phenomenon of increased population density and rapid urbanisation persistent in the developing city context due to global migration patterns (Watson, 2009). Consequently, in its plight to reframe Urban Design to sequence developing cities, this thesis conducts a comparative analysis between developed and developing world cities regarding national migratory, population density and urbanisation trends and the effects that it poses on

regions, cities and localities. In so doing, it progresses to a realisation that increased living densities in turn spills over into the public realm and onto the street edge for retail and social service access purposes. Thus, a greater mix of uses in the built environment is forged. The increased density of people on sidewalks in essence stimulates transport movement as a collector service which structures street connectivity systems around retail facilities and social services. From the analytical findings here, this thesis recognises that there exist relationships between built form configuration and socio-economic activities occurring in public space. In light of the above, the thesis employs the combination of the visual artistic and social usage approaches to form the making places approach, which can be appropriate for Urban Design in developing cities.

After establishing a new approach, the thesis structures the above-mentioned operations into an evolved conceptual framework. Thus, the conceptual framework recognises that time change in developing cities in conjunction with population density and migration cause overlapping relationships between building density, housing and social services, retailing, land use mixes, transport/movement and street connectivity across various scales and within the formal, semi-formal/semi-informal and informal realms. With this being the case, the thesis analyses current literature which argues that the broader problem is the fact that the interrelatedness of the above-mentioned concepts is negated in theory. It develops the problem statement further by stating that a lack of the interrelatedness of the concepts contained in the conceptual framework has in turn influenced a lack of such in current research and urban design practice in developing cities. This is confirmed through

measuring the extent to which three South African Urban Design practice case studies consider concepts of building density, housing and social services, retailing, land use mixes, transport/movement and street connectivity across various scales and acknowledging the lack thereof.

As a means of responding to the problem identified above, a set of research techniques is investigated using a Yeoville/Bellevue, Johannesburg site-specific case with the aim of assisting designers to better apply the evolved conceptual framework. Simultaneously, the thesis uses Yeoville/Bellevue as a focus area to illustrate the manner in which building density, housing and social services, retailing, land use mixes, transport/movement and street connectivity can be considered across various scales. This essentially progresses into the creation of an Urban Design Framework for Yeoville/Bellevue that strengthens the linkages between housing and social services, retailing and transport/movement through using principles of street connectivity, land use mix and building density creation. An implementation strategy for the Design Framework is then established.

Through the execution of the above process the collective consideration of building density, housing and social services, retailing, land use mixes, transport/movement and street connectivity across various scales serves as the basis for reframing Urban Design to suit developing cities.