**A Spatial Continuity**

If one of the major concerns of urban design and architecture is to develop vibrant inclusive urban environments, with streets being the most common and consequently most important elements, then strategies which increase activity and the enjoyment of streets are crucial. One possible adjustment to the commonly accepted conception of streets is to conceive of the street as a composition of linked spaces, with interior spaces that are accessible from the street viewed as necessarily part of the room of the street. If architecture and urban design are primarily concerned with meaningful relationships between spaces both interior and exterior, certainly the relationship between the exterior space of the street and the interior spaces adjacent to it should be conceived as an essential relationship. The careful consideration and design of this critical interface can radically improve the space of the street, creating more interest, activity and interaction.

Ever since Jane Jacobs challenged modernist design strategies and the 19th century social welfare conceptions of the street which underpinned them, the idea of the street as a positive urban component has grown. It is now a central tenant of urbanism that vital streets, full of activity, used by a mix of people for as much of the day and night as possible, are essential to healthy cities. Jacobs observed that populated streets, with defined public-private boundaries and a mix of uses created social interaction and performed important social functions, from the basic provision of needs, to safety and a sense of identity and community.1 Jacobs’ identification of the need for the interior spaces to condition and effect the public space of the street, her “eyes on the street”2, underlines a basic urban relationship; adjacent spaces are related and a considered well designed relationship supports human activity and social interaction. Most importantly streets that result from this are superior and are necessary for a healthy urban environment. As mentioned above, Allan B. Jacobs emphasises the need for a connection between the interiors along a street and the public way as a critical requirement for a successful street. Using examples from cities around the world, Jacobs points out the contributions that visual connections between the interior and the sidewalk make to the experience and perception of a street. On vibrant streets which attract people and activities, such as the Paseo de Garcia in Barcelona, the shop windows are described as part of the public space,3 or the example of the Boulevard Saint-Michele, Paris, where shop windows and an area for exterior displays create interest and encourage the imagination.4 Jacobs also discusses the damage caused by poor visual connections between interior and exterior spaces, describing the reduction in the sense of security and the lack of community identity.5

1. Jane Jacobs (1993). *The Death and Life of Great American Cities.* Modern Library ed. New York: Modern Library.

2. Jane Jacobs (1993). *The Death and Life of Great American Cities.* Modern Library ed. New York: Modern Library. Pg.29-54

3. Allan B. Jacobs, (1993) *Great Streets.* Cambridge: MIT Press. Pg.43

4. Allan B. Jacobs, (1993) *Great Streets.* Cambridge: MIT Press. Pg.286

5. Allan B. Jacobs, (1993) *Great Streets.* Cambridge: MIT Press. Pg.286-7

A recent book by Stipo, a group of Dutch architects and urban designers, *The City At Eye Level: Lessons for Street Plinths*,6 also discusses the importance of the street level spaces to the success of streets. The authors argue that the ground level of a building must be designed and managed to provide functional, social and psychological value. The book uses case studies to demonstrate that the design of ground floor spaces that are human scale, people centred, mixed use, adaptable and visually stimulating can create streets that attract people, activity and social interaction; building community and vital new neighbourhoods and interventions that can rehabilitate damaged or problematic streets.7 As discussed earlier in the chapter, Vikas Mehta’s research documented the impact of transparent and permeable street fronts, with more people using, gathering and staying for longer on the portions of streets which had visually and physically connected street frontage. Mehta found that people identified this attribute of a street as desirable and that people preferred to use these sections of a street. Mehta also documented the increase in social exchange on parts of a street which had stronger interior and exterior connections, with the higher usage rates contributing to more social interaction. These more desirable and active parts of the streets also held people for longer, with the duration of stay measurably increased.8 This provides empirical support for the intuitive understanding that the greater visual stimulation of transparent and permeable street fronts create more desirable and active streets. Similar findings were reported by Jan Gehl, et.al., in “Close Encounters With Buildings”, as the observations established that the physical features of ground floor facades, principally visual connection, had a measurable impact on people’s behaviour.9 Gehl and his colleagues compared the behaviour of pedestrians on sections of streets with blank facades with the behaviour on sections with visually connected and permeable facades. The research showed that people engaged open, visually stimulating frontages at much higher levels than blank, closed facades. People turned to look as they passed and stopped to view shop windows. People used these areas to stop for optional activities, such as resting, eating, smoking or talking. This increase in activity also attracted more people, as Gehl frequently points out in all his work, “people attract people.”10 This pattern of behaviour was even more pronounced at night, with people engaging lighted transparent facades at much higher levels than dark, closed fronatages.11

This is followed by cases studies to demonstrate models for regulating ground floor design in both historic and new urban environments, from which basic principles for ground floor facade design are derived. These principles stress the need for a mix of public uses, architectural detail, visual transparency, physical permeability, human scale, sensitivity to context and architectural features such as steps, niches and doorways.12 The article ultimately argues that the design of the ground floor street frontage has a significant impact on how a street is used and that the careful deployment of simple design strategies can improve streets.

6. Meredith Glaser, Mattijs van ‘t Hoff, Hans Karssenberg, Jeroen Laven and Jan van Teeffelen. eds. (2012) *The City At Eye Level: Lessons for Street Plinths.* Delft: Eburon.

7. Meredith Glaser, Mattijs van ‘t Hoff, Hans Karssenberg, Jeroen Laven and Jan van Teeffelen. eds. (2012) *The City At Eye Level: Lessons for Street Plinths.* Delft: Eburon. Pg. 61-71, 180-191 &122-133.

8. Vikas Mehta, (2013) *The Street: A Quintessential Social Public Space.* London: Routledge. Pg. 137-143.

9. Jan Gehl, Lotte Johansen Kaefer and Solvejg Reigstad. (2006). Close Encounters With Buildings. *Urban Design International*. 11 (1), pgs. 29-47.

10. Jan Gehl, Lotte Johansen Kaefer and Solvejg Reigstad. (2006). Close Encounters With Buildings. *Urban Design International*. 11 (1), pgs. 37.

11. Jan Gehl, Lotte Johansen Kaefer and Solvejg Reigstad. (2006). Close Encounters With Buildings. *Urban Design International*. 11 (1), pgs. 38.

The design of ground floor spaces should utilise the sophisticated tools of architectural practice to generate high quality and meaningful solutions. The careful modulation of thresholds, boundary conditions and spatial compositions can generate strong physical and visual connections between interior and exterior spaces. Architectural design which pursues urban relationships and considers the impacts of design choices on the street can lead to interesting and desirable streets, which attract use and support a vital urban environment. If architects conceive of the street as a room which the interior space they are designing is connected to, rather that moment where their design stops, a completely different approach to the design issue opens up. Most of the architectural solutions are self-evident and based on fundamental architectural principles, such as scale, threshold, composition, tectonics, materiality and spatial definition. The important alteration is the removal of the simplistic distinction between the interior space and the street. Once they are seen as two parts of one whole, the design problem is

transformed and the possibility of meaningful, interrelated interiors and exteriors is greatly improved. Streets where the interior and exterior are designed to complement and enhance each other can only result in more vital streets, which will improve urban space.

The most important contributor to a vibrant urban environment is the active street and the integrated design of the street and the ground floor is the best means of achieving this. The street is a civic room; the activity of the ground floor should necessarily overlap with the activity of the street. The blurring of interior and exterior space extends the architectural conception of a spatial continuum in an instrumental manner to urban thinking. The design of the relationship between the interior and the street is the most important task for an architect in an urban context and methodologies for understanding and designing active streets are essential tools for urban designers, architects and those who assess their designs.