

Although sometimes considered to be a matter of working in three dimensions, urban design is four-dimensional – the fourth dimension being time. Time impacts on almost every aspect of urban design – on the way the environment is perceived (i.e. over time and on the move) (see Section Five); on the way places become imbued with meanings – over time (see Section Three); on how places last and adapt; how robust they are (i.e. on how places change over time); their morphological processes (see Section Two); and on the length of time that urban design processes take. Some of the most stimulating discussions of time are found in related fields such as cultural geography, philosophy, anthropology and phenomenology, but a number of theorists have also attempted to relate time factors directly to urban design.

This section presents a set of three chapters exploring the temporal or ‘time’ dimension of urban design. Chapter 29 is from **Peter Bosselmann’s** 1998 book, *Representations of Places: Reality and Realism in City Design* (University of California Press, Berkeley). Building on Cullen’s original work on serial vision, Bosselmann presents an excellent comparative discussion and presentation of the visual/aesthetic experience of moving through urban environments. Noting how Gordon Cullen and Ed Bacon’s work showed how movement can be read and understood as a pictorial sequence (Cullen, 1961; Bacon, 1967), Bosselmann describes the rich and varied experience of a walk – measuring three-hundred-and-fifty metres and taking about four minutes – in central Venice. This walk is used to show how our perception of time passing and distance travelled differs from reality and is in part a function of the visual and experiential qualities of the environment we are moving through. Noting that the Venice walk seems both to be longer and to take more time than it actually does, he then assesses the aesthetic (and kinaesthetic) experience of the same length of walk in fourteen other cities. The perception of time varies in each as a direct consequence of visual-aesthetic qualities, particularly how monotonous or varied the experience is.

Chapter 30 is drawn from one of **Kevin Lynch’s** less well-known books, *What Time is This Place?* (MIT Press, Cambridge Mass). Published in 1972 at a time when Modernist ideas were being questioned and replaced – or, at least, supplemented – by a greater focus on conservation, continuity and sense-of-place, the paper presents a valuable discussion of conservation – although Lynch tends to use the American term ‘preservation’ – and change. Urban environments and buildings are continuously and inexorably

changing, shaped and reshaped by technological, economic, social and cultural change. Furthermore, any intervention into the physical fabric of a place irreversibly changes its history for all time, becoming part of that history. Never static, the built environment stands as testament to processes of continuity, change and the passage of time within a particular place.

The emergence of conservation resulted in an increased concern and respect for the uniqueness of places and their history and, in large part, was instrumental in the evolution of the contemporary concept of urban design, which attempts to respond to the existing sense of place and stresses ‘continuity-with’ rather than a ‘break-from’ the past. In a world of rapid change, visual and tangible evidence of the past is valued for the sense-of-place and enduring qualities of its character and identity. Taken to extremes, however, extensive preservation and conservation can obstruct and even halt a city’s evolution and development. Emphasising the necessity of adaptability, Lynch argues that environments that cannot be changed ‘invite their own destruction’ and that: ‘*We prefer a world that can be modified progressively against a background of valued remains, a world in which one can leave a personal mark alongside the marks of history.*’

To preserve the capacity for change, environments need to be capable of evolution. Thus, continuing in a similar vein as Lynch, working within established contexts requires an understanding of how environments adapt to change and, more importantly, why some environments adapt more successfully than others. Urban design often involves distinguishing between what is fundamental to the sense-of-place and should not change and what is less important and can change. The visual and physical continuity of valued places relates to issues of the ‘obsolescence’ of buildings and environments, the time frames of change, and the ‘robustness’ and ‘resilience’ of the built fabric and other physical attributes of that place. Accordingly, Chapter 31 is from **Stewart Brand’s** 1994 book *How Buildings Age: What happens after they are built* (Penguin Books, Harmondsworth). Brand was not an urban design practitioner – he was trained as a biologist and army officer. His book was originally a six-part television series.

Already a classic, Brand’s book presents an important discussion of how the different parts of a building age/change at different rates. He extends and develops Frank Duffy’s series of layers of longevities (Duffy, 1990) to create a series of six systems – ‘site’, ‘structure’, ‘skin’, ‘services’, ‘space plan’, and ‘stuff’.