

was able to provide mathematical arguments supporting the principles of larger block sizes and perimeter rather than pavilion development.

Chapter 9 is Douglas Kelbaugh's 'Typology: An architecture of limits', published as a chapter in his 2002 book, *Repairing the American Metropolis* (University of Washington Press, Seattle). Focusing on a discussion of limits and constraints in design and how, for example, site and programmatic constraints may actually make the design process easier, this chapter presents a valuable argument about functionalism and typology and the more general shift from Modernism to contemporary ideas of urban space design. Typology formalises the processes of learning from experience and precedent and revives a traditional way of looking at function. While, for functionalists, the design process starts with analysis of the problem at hand, typologists look at how design problems have been solved in the past, especially in similar physical and cultural milieus, and assert that typology is a better point-of-departure when designing a building or part of a city.

It is important to note, however, that the use of types and typology have generally been more readily accepted among the urban design community than among the architectural community. This relates both to urban design being a 'second-order' design

activity (see Section One) and to the value placed on originality and novelty within the architectural community. Kelbaugh makes a very valuable commentary on the relationship between scale and originality in design. He asserts that typology has 'shifted the scale at which the freedom to invent occurs' and argues that: '*Getting the types right for a given street, neighbourhood, or community is usually more important than the architectural brilliance of individual buildings.*' Indeed, at the start of his chapter, he quotes Andres Duany's comment on the 'appalling' win/loss ratio of Modernist architecture:

*'I would have no problem with modernist architecture were it not for its appalling win-to-loss ratio. I am not prepared to tolerate the thirty million modernist buildings that have destroyed the cities of the world in exchange for the three thousand (or is it three hundred?) undeniable masterpieces of modernism'* (cited in Kelbaugh, 2002: 94).

Kelbaugh's argument is that not only did architectural Modernism pursue novelty and originality for their own sake, but that it also pursued them at the wrong scales.

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