A new field of the study (or an agglomerate of the old ones) has been emerging in the United States and in other countries since the turn of the last century. This is the field of ‘urban design’. Increasingly, however, questions have been raised by academicians, theorists, and professionals concerning the essence, legitimacy, knowledge base and content and methods of inquiry of the field. Lynch (1984), for example, considers city-design as an artistic activity, and based on the way it was taught and practiced in early 1980s calls it as ‘immature arts’. Sorkin (2007, 2009), in two controversial statements on the status and fate of urban design states: Urban design has reached a dead end. To justify his claim, he continues: Estranged both from substantial theoretical debate and from the living reality of the exponential and transformative growth of the world’s cities, it finds itself pinioned between nostalgia and inevitabilism, increasingly unable to inventively confront the morphological, functional, and human needs of cities and citizens. While the task grows insurgency and complexity, the disciplinary mainstreaming of urban design has transformed it from a potentially broad and hopeful conceptual category into an increasingly rigid, restrictive, and boring set of orthodoxies. Cuthbert (2007) believes that traditional Urban Design ‘theory’ is anarchistic and insubstantial in the sense that there is no cement binding the pieces together. This is, according to him, the situation, which has been ongoing for the best part of 50 years, offering unprecedented opportunity for debate and resurrection.

Cuthbert (2007) suggests that the discipline of urban design should not seek to justify its existence through any of the normal channels adopted by mainstream theory. It should avoid the vain attempt to generate an internally coherent theory and instead reorient its efforts to making connections with social science through the mechanism of political economy, a synthesis discipline which already has a history of two and half centuries. Here in this book, however, the synthesis discipline is language with a much longer history and better qualifications to represent knowledge and construct an integrative theory.
In many ways, however, the practice of urban design today may be more widely recognized in the public and private sectors as a source of potential solutions to urban problems than it has been over the past 50 years (Soja 2009; Schurch 1999). This is the case, where confusion as to the content, purpose, knowledge base, and tools of urban design has influenced its adequacy and effectiveness. In this regard Madanipour (1997, 2004) claims that, in spite of growing attention to the subject and the rising number of academicians and professionals who are engaged in urban design and widespread popularity, the term is still suffering from ambiguities. Dualities of scale (macro vs. micro), subject emphases (visual vs. spatial and spatial vs. social), process versus product, public versus private, objective-rational versus expressive-subjective, and also discipline versus interdisciplinary activity are of major concern to the members of the society and others.

Inam (2002), criticizing the contemporary urban design as a vague, superficial, and product-oriented field, because it is an ambiguous amalgam of several disciplines, including architecture, landscape architecture, urban planning, and civil engineering; obsessed with impressions and esthetics of physical form and is practiced as an extension of architecture. He then concludes that urban design lacks a clear definition (and hence, a useful understanding) and a clear direction (and hence, a useful purpose). Lang (2009), while believing that of all the design fields, urban design has the greatest impact on the nature of cities and city life, regards the term ‘urban design’ as confusing.

The illusiveness of its definition raises significant debate about exactly what urban design is? From ‘large-scale architecture’ to ‘project-scale design’, to architecture and urban design are but a single profession. Design is at the heart of these efforts’, ‘an extension of architecture’, ‘urban design is not architecture. The function of urban design, its purpose and objective, is to give form and order to the future. As with the master plan, urban design provides a master program and master form for urban growth. It is primarily a collaborative effort involving other professionals (Marshal 2009). Since the late 1860s, urban design as a discipline has flourished, and in recent years the ideal of the synthesis of architecture, landscape architecture, and planning in the three-dimensional design of urban environments has returned as a key organizing concept for many designers in the field. A new interest has emerged in the theoretical basis of this synthesis (Mumford 2009).

In recent years, the field’s physical scope and content and the way it touches the human experiences have expended and also the kind of people with whom urban designer joins forces has grown significantly (Brown et al. 2009).

Some 30 years ago Jonathan Barnett (1981) made this critical statement that nothing is more frustrating than to watch the continuous misapplication of huge sums of money that are spent in rebuilding of our cities and developing the countryside. Thirty years later he rephrased his concern by stating that the world is urbanizing faster than current city-design can keep up; refer to three challenges of rapid urban change, climate change, and natural and man-made disasters (Barnett 2011).
By addressing these fundamental issues, this book intends to, through an epistemological approach, first identify the potentially unique knowledge base of the field of urban design, and then introduce an appropriate medium to construct urban design theory in a way to properly and adequately represent that knowledge base. This knowledge base, which is represented here through its language, has been sought in relation to the genuine goals and purposes of the field of urban design as they have been historically established and are currently modified on the basis of the contemporary needs and desires of society. This knowledge base consists of two distinctive areas: substantive and procedural elements. Substantive elements consist of urban form and space, and urban activities, while procedural elements consist of intuitive and scientific methods. Urban design, as proposed here, is the application of these integrative rules and principles (as grammar) to substantive elements (as vocabulary) in order to establish order in the physical environment (see Alexander 1992, pp. 94–98). This may be considered as a plausible approach to develop a general theory for urban design (Figs. 1 and 2).

Fig. 1 The interrelationship of the procedural and substantive elements of the language of urban design
Fig. 2 Integrated rules are applied to the disordered environment, manipulating its elements to establish order.
Toward an Integrative Theory of Urban Design
Bahrainy, H.; Bakhtiar, A.
2016, X, 113 p. 248 illus., Hardcover
ISBN: 978-3-319-32663-4