

and landscape architecture? It will be argued in this section that the circumstances under which urban design is practised today require a second-order approach. In the days of Pope Sixtus V and Baron Haussmann, and perhaps in the early part of this century, urban design could be a first-order design activity: very little about the project changed during the time it took to become reality; feudal systems allowed decision-making powers to be concentrated in the hands of a few individuals or even a single individual. In the more recent past, however, urban areas have been changing very rapidly, and this change is becoming even more rapid and widespread each passing year: it is hard to predict economic, technological, and social circumstances even a few years down the road. Compounding this rapid change, the increasing prevalence of democratic ideals necessitates increasingly distributed and perhaps decentralized decision-making powers.<sup>1</sup> Additionally, this distributed decision making presents the urban designer with multiple clients rather than the unitary client with which other designers interact. Further discussion of these issues is warranted.

### Turbulent decision environment

As schematically illustrated in Figure 6.3, there is a difference between the decision environments encountered in first-order design and urban design.

Though complex endeavours in themselves, first-order design projects involve factors that are relatively stable over the time it takes to realize the design project. Factors such as function, climate, topography, and aesthetics are often extremely challenging to address, but nonetheless the nature of these factors can be expected in most cases to remain relatively stable while an object is being designed and constructed. Urban design projects involve these kinds of factors, but they also involve factors of an economic, political, social, and legal nature. These latter types of factors are liable to change significantly, particularly over the rather long time frame that most urban design projects take to be realized, thereby contributing to a turbulent decision environment. Second-order design is more appropriate to a turbulent decision environment because it is based on a strategic approach to decision making ('What do we *really* need to specify? What can we ignore?') rather than the comprehensive decision making that characterizes first-order design (where every aspect of the designed object must be specified).

### Distributed decision making

In first-order design, the designer usually has control over, is involved in, or is directly responsible for all design decisions. In urban design, on the other hand, control over decisions that produce or alter

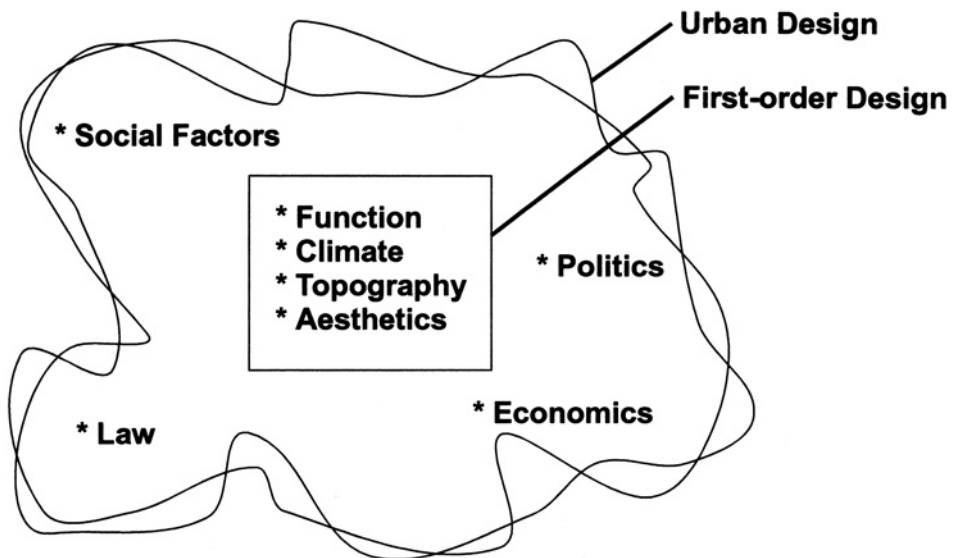


FIGURE 6.3  
Different decision environments.