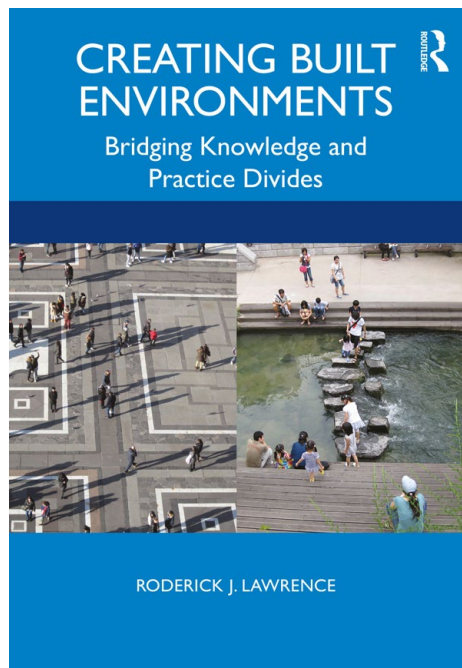

Book Review



Creating Built Environments: Bridging knowledge and practice divides

By Roderick J. Lawrence, *Routledge*, 2020, 266pp, 64 B/W Illustrations, ISBN: 978-081-538-53-94

Creating Built Environments: Bridging Knowledge and Practice Divides (2020) is a highly practical and theoretically innovative work by renowned author, Roderick J. Lawrence. The text is structured around the discussion of five strategic domains – ‘Constructing with nature in mind’; ‘Planning for health and well-being’; ‘Food for thought’; ‘Housing matters for all’; and ‘Creating incremental and radical change’. These are followed by a methodology divided into a conceptual foundations chapter and methods chapter. The research also includes a valuable postface, where Lawrence reminds us that the underlying purpose of the book was to rethink globality: “In essence, we have replaced ‘think globally, act locally’ by ‘thinking and acting globally and locally’” (2020, p.231).

The study includes numerous case studies from a diverse range of sources and geographical regions. In its reach and ambition, the research is both global in scope and local in application. This convergence of scales is matched by an emphasis on the proposed coming together of experts and lay people, from the public, private and associated non-profit sectors, including academics and professionals, government and non-governmental agents, as well as community-led groups, co-operatives and individuals. In essence, the book demonstrates that “members of

professional and academic corporations, public authorities, private enterprises and community-led associations, should converge, collaborate and share their knowledge and practice skills and competences to respond to many societal challenges in a rapidly urbanizing world” (2020, p.231). Lawrence argues that the best way to engage with the dynamic complexities of chronic - so called “wicked” - problems related to the built environment is to co-ordinate and apply a variety of knowledges and practices, simultaneously, and in multiple settings at various scales. Notably, he proposes that:

land-use planning, building construction and landscaping, and the conservation of natural ecosystems, should be reinterpreted as societal processes that require using different types of knowledge and know-how by concerted action between practitioners, policy makers, scientists and lay-people. (2023, p.19)

Thus, it is only by grasping issues within dynamic social, political, economic, and ecological processes, and through coordinated, multiple and complex responses that we can begin to tackle the problems arising from the rapid pace of urbanization occurring around the world.



While structured differently, Lawrence's comprehensive approach recalls that of Constantinos A. Doxiadis, who set down in numerous texts his vision for an applied body of theory and practice emerging from the analysis of historical and contemporary case studies. In his seminal work, *Ekistics: An introduction to the science of human settlements* (1968), Doxiadis begins with a description of "the crisis" affecting human settlements (1968, p.5). The causes discussed by C.AA Doxiadis are strikingly familiar: The rapid pace of urbanization, the environmental impact (footprint) of cities, the negative effects of car-based transport networks, short-term and inflexible plans, and the misconception of cities as mainly physical environments. Lawrence's study addresses these issues, while identifying new complexities within them. The failure of cities and states to cope with the transnational and global nature of these problems, is but one example.

Compounding the effects of the forces described above was the lack of a coordinated, scientific, data-driven, and holistic response that would be capable of systematically coping with the dynamic, interrelated and complex nature of the problems facing human settlements. Ekistics was proposed as a means of treating settlements as evolving entities, analogous to living organisms, whose problems could be understood as symptoms, and therefore diagnosed and treated according to proven principles applied to knowledge of the underlying issue (see Doxiadis, 1968, pp. 265-279). This approach required groups of specialists from all domains who could develop a detailed and systematic understanding of particular cases. These specialists would be guided by ekistic principles and "Ekisticians" - re-imagined town planners - capable of coordinating such groups (See Doxiadis, 1968, pp. 74-80). The goal was to achieve a synthesis of their thinking.

Creating Built Environments: Bridging knowledge and practice divides articulates, explores, and demonstrates an approach that aims at a similar problem-centric, data-driven, synthesis in thinking, which promotes action and practicality of outcome as the most desirable results. In contrast to ekistics, however, Lawrence's approach has the benefit of being better informed by more developed disciplines and its author's expertise in thinking through complexity, interdisciplinarity, and transdisciplinary methodologies. When introducing the strategic discussion of building with nature, for example, Lawrence outlines how his approach seeks to move beyond two dominant conceptualizations regarding cities. The first is expressed through "'nature-based' architecture and urban planning, especially green building design and urban infrastructure" (19), while the second is derived from biological sciences and treats "cities and urban regions as metabolisms with the provision of infrastructure and services to supply all that is required to sustain human populations" (19). Critical of both approaches - the former for being misguided in its denial of the relationship between interior and exterior spaces and the effectiveness of so-called "green technologies," the latter for assuming that populations can be supported within cities independently of what occurs beyond a settlements' environs. Lawrence points to the fact that cities now form global networks connected by supply chains whose carbon footprints expose the idea of cities drawing on surrounding areas as

an outdated concept. Accordingly, the study rethinks core principles of human ecology to highlight "the interrelations between the abiotic, biotic and anthropologic of ecosystems across several geo-political levels, extending from local to international" (20). This focus, discussed in depth in the conceptual section of the text, demonstrates the innovative and pioneering spirit of Lawrence's ecologically inspired focus on synthesis and interrelatedness, which is clearly visible in the conceptual diagram provided in the text (Fig. 1).

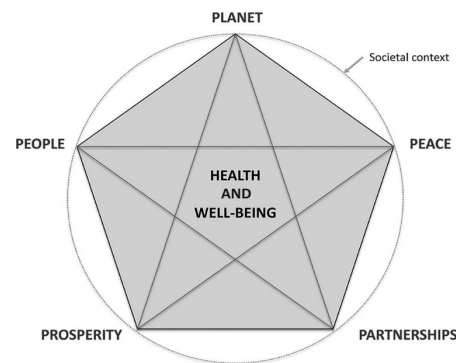


Figure 1: Schema showing holistic thinking allowing planetary-human health interrelations to be identified within key components and all their constituents in specific places and situations. (Source: Lawrence, 2020)

The graphic representation of Lawrence's conceptual framework of synthesis and Doxiadis's schema showing the ekistic elements and their interrelationships highlights both the similarity and differences between their approaches. Lawrence's text is structured around relationships, but his work deliberately goes further than binary oppositions or relations such as between *Anthropos* and *Nature*, or *Anthropos* and *Society* (Figure 2). Lawrence's circle, indicating the specific societal context, is crucial to note here, as it highlights the specific locality and situation that impacts all of the elements and their relations - extending to an impact on the planet itself. Figure 1 can be viewed as an image of thinking and acting globally and locally.

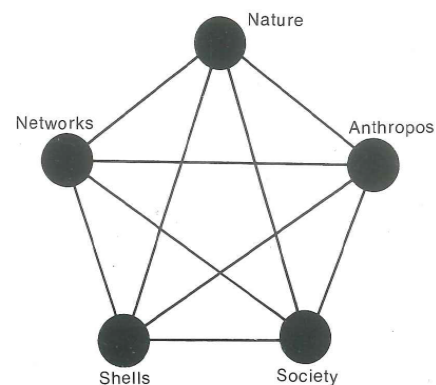


Figure 2: The five elements of human settlements
Source: Doxiadis, C. (1975). *Building Entopia*. Athens Publishing Center. p. 44.



Doxiadis's representation served to identify the multifaceted and interconnected nature of a problem, with the purpose of isolating and focusing on specific relationships. These could then be reconsidered as a whole, and their interrelationships explored. Importantly, intensive data collection was needed to situate a case-study on the ekistics grid, and then to complete a holistic analysis that constituted a "ekistic approach." The all-encompassing grid spanned from an individual in a single room to the global ecumenopolis, which represented an interconnected worldwide network of settlements and urban centers. In this respect, ekistics methodology anticipates the kind of relational thinking proposed by Lawrence.

Similar to Doxiadis's research, Lawrence's study places much emphasis on using particular case studies with high levels of context and data relating to measurables (both qualitative and quantitative) that enable experts to understand situations more fully; and not just in a partial or overly general way. The rigor of the text is a key feature of all of the case studies, many of which were chosen as "innovative projects that can serve as beacons for change" (Lawrence, 2020, 19). Like Doxiadis, Lawrence is not content with theorizing or accumulating knowledge for its own sake. The research examines case studies purposively; to use them as a basis for action. The analysis of housing is a case in point: Beginning with a description of the mismatch between the recorded desires and needs of residents and those projected upon them by professional designers, planners, architects, developers and politicians, Lawrence identifies how the provision of housing by the private and / or public sectors is typically dictated by political and economic forces that privilege the interests of real estate agents, developers and investors over those of residents; all the while reinforcing social inequalities in the market (2020, 108). This mismatch exemplifies a "knowledge-practice divide" that the text demonstrates how to bridge.

Lawrence draws on Heidegger's concept of dwelling to highlight the ontological need for people to be involved in the co-creation of the places they inhabit, enabling them to foster a sense of place: to belong. Presenting an alternative to the private / public provision of housing, the case studies he chooses offer examples of viable alternatives from the collective / cooperative sector that demonstrate that co-creation of housing and other spaces can be realized in practice, as well as the processes and mechanisms that allow such co-creation. The analysis also critically reevaluates celebrated sustainable developments, which under closer scrutiny, live up to expectations promised by their "green" credentials but nevertheless fail in other respects. Lawrence astutely details how the misperception among scholars and practitioners of the environmental success of certain developments arises from the narrow metrics used for evaluation. He then proposes more holistic ways to evaluate housing, ones that, with the benefit of hindsight, not only take into account the empirically determined and changing values of those using them, but also explain why certain sustainability targets were not met.

These case studies underline the text's key message: That in order to effectively create and evaluate chronic issues, such as housing, empirically based holistic consultation,

inclusive and participatory development, and broader values-based evaluation needs to occur. Planning processes should encompass a diverse range of experts and non-experts whose views reflect a range of knowledges, experiences, and knowledge-in-practice. Lawrence concludes his analysis of housing optimistically, noting: "Hopefully, the synergies between fundamental principles of housing, building and dwelling that Heidegger eloquently described over 60 years ago will be applied to manageable projects in the future" (2020, 109).

In his seminal work, Doxiadis articulated his understanding of human settlements, developed through theory and practice. His articulation was intended as the basis for action, and the realization, ultimately, of an ideal settlement: 'Entopia'. Although Lawrence does not seek to identify a single set of principles nor a unique and prescriptive approach to urban design, his recognition and adoption of diverse practices and theories is navigating towards the same distant star; the creation of an entopia, arrived at via collectively enhancing the built environment, according to principles, in line with a range of values and a strong ethical commitment, underpinned by detailed and case-specific knowledge, combined with knowledge-in-practice from diverse perspectives.

The aim of this review was to highlight where Lawrence's text diverges from Doxiadis's approach, while highlighting points of convergence. In Lawrence's discussion of five strategic domains, we find the five elements of Ekistics (Nature, Man, Society, Shells, Networks) which form the basis of a complex of inter-relationships, an understanding of which leads to synthesis. Significantly, though, we also discover new principles and relationships inspired by ecology and behavioral sciences that connect health and well-being to nature and settlements, while promoting new approaches to implementing radical in incremental change. Lawrence's approach opens critical space to explore and act in response to these new connections that Ekistics did not emphasize, or recognize.

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