Chapter 4
Adaptive Reuse as a Contemporary Approach:
A Design Studio Experience With Local Authorities

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ABSTRACT

Environmental and economic problems like climate change and the energy crisis have made it necessary to develop contemporary manifests, approaches, and policies that can be applied locally and globally. In this context, universities have also focused on updating their strategies to carry out research and education activities in line with local, regional, and national goals. The subject of this section is the manifest of an architectural design studio in Gazi University, Department of Architecture, in line with the university's academic priorities and strategies. Introducing current ideals and real-world issues into studio-based architectural design education is a difficult process that calls for novel instructional perspectives and methods. From this respect, authors share and discuss their teaching approaches and experiences in structuring a new "architectural design studio" by focusing on Ulus - the historical city center of Ankara - and abandoned areas in the region and giving undergraduates an opportunity to critically observe, rethink, and design for the built environment.

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INTRODUCTION

The importance of working with existing buildings to maintain, repair, and restore them for future use has grown in contemporary architectural practice. The need for sustainable development goals in today's world, the necessity for less expensive architectures in the current economic situation, and the growing appreciation of the advantages of revitalizing existing building stock are just a few of the factors contributing to this.

Moreover, building professions have been forced to redirect their attention from new construction to maintenance and renovation of the built environment as a result of global warming and climate change (Reed & Wilkinson, 2008; Gallego-Schmid et al., 2020). "If the lifetime of the building stock is longer sustaining its function, adaptive reuse with a new function is inevitable. Buildings may become redundant for various reasons, such as changing economic and industrial practices, demographic shifts, increasing cost of upkeep or maintenance. Mostly because they are no longer suited for the original function and a new use has not been identified" (Orbaşlı, 2008). "Adaptive re-use has become an integral strategy to ameliorate the financial, environmental and social performance of buildings" (Langston et al., 2007).

When a building or site loses its original function, adapting it to a new use can save them from abandonment or demolition (Casal, 2003). "The shift to building reuse and adaptation has become an increasing trend within the last decade" (Bullen & Love, 2011a). Increasing a building's lifespan through adaptive reuse can frequently reduce material, transport and energy consumption as well as pollution, which has a big impact on sustainability. "Adapting buildings for a new use generates less waste, uses fewer materials, and probably uses less energy than demolition and rebuilding" (Sev, 2009; Bullen & Love, 2011b; Yung & Chan, 2012).

Cramer and Breitling (2007) report that "between 50% and 70% of all construction work concerns interventions in existing buildings". "This is not only a response to a growing awareness of the cultural importance of built fabric, but also a response to the ecological impacts of the construction process within a wider understanding of sustainability" (Van Hees et al., 2014).

This paradigm shift necessitates reorganizing architectural education programs, especially design studios/ateliers. Adaptive reuse can be closely integrated to architectural design education; therefore, students need to know how to address the built environment. This chapter deals with the working method of a design studio created to explore the potential of the built environment. Atelier 8 is one of the 9 design studios in Gazi University's (GU) Department of Architecture, where the "vertical architectural design studio" (Çağlar & Uludağ, 2004) system is applied. Each design studio has a different conceptual formation (Akalin & Sezal, 2009).