

ALAN BRAUN

# THEORETICAL MODELS AND CONTEMPORARY PRINCIPLES OF THE PRESERVATION OF MODERN ARCHITECTURE

## TEORIJSKI MODELI I SUVREMENI PRINCIPI OČUVANJA MODERNE ARHITEKTURE

The research investigates valuation activities and procedures, protection and preservation of the Modern movement heritage, with research focus directed towards defining contemporary principles and theoretical models for preserving and conserving Modern architecture. Comprehensive research has been undertaken in order to meticulously elaborate and critically analyse selected international and Croatian best-practice examples of Modern architecture conservation-restoration projects, the results of which have been used to methodically develop contemporary principles and theoretical models for the preservation of Modern architecture.

Traditional conservation theory grounds valuation and preservation of built heritage in the concept of *Truth*, i.e. derives it from the application of principle of historical integrity as affirmed through preserved material authenticity. However, the Modern Movement built heritage, recognized as cultural heritage during the last quarter of the 20<sup>th</sup> century, and specifically its intrinsic features (such as the use of new, industrially produced building materials, large planar building systems, the use of the then-contemporary building technologies and techniques, or the presumed limited lifespan of buildings) considerably challenge the application of canonical principles of traditional conservation practice when confronted with complex processes and issues in building preservation.

The first signs of change in traditional conservation paradigm were identified in the valuation of Modern architecture which led to its recognition as the built cultural heritage. For some time now, researchers have been aware that the established principles of integrity and material authenticity do not fully and comprehensively affirm the cultural value and relevance of Modern architecture buildings. Gradually, the concept of *Truth* gave way to the concept of *Design Idea*, whereby the main criterion for the evaluation of Modern architecture became the existing level of preserved integrity of the architect's original intention. The research has put forward a proposition that the values of Modern archi-

ecture are primarily affirmed within its conceptual and intangible essence, even though the material contribution does remain a significant aspect of the valuation process. The value of architect's personal design contribution (architectural concept or intention) dominates over the conventional material value of the largely industrially mass-produced components, becoming, moreover, a fundamental element of the Modern architecture building's integrity. The very procedure of valuation and protection of Modern architecture does not differ from the process already established by the traditional conservation theory; however, valuation criteria are significantly different. The value of architect's design contribution and the level of preserved visual integrity established by extensive scientific research are the basic criteria for evaluating the significance and the required protection regime of a Modern building.

Modern architecture conservation is intrinsically specific and demanding in its own right due to manifold reasons inherently connected to the very characteristics of Modern architecture. Built by using new construction materials and industrialized building systems, then-new technologies and innovative, often experimental construction techniques, typically devoid of unnecessarily detailing and artisan works, and with commonly built-in presumption or ignorance of limited lifespan of buildings, this building stock regularly requires an individualized case-by-case approach and always brings demanding challenges to specialized architects and conservation professionals.

A comprehensive research analysis of selected best-practice examples of protected Modern buildings – six European and three Croatian case studies – has demonstrated the fact that the same conservation methodology indeed remains relevant and applicable, i.e. an integrated approach to the conservation of built heritage, with particular emphasis on research of all the characteristics of applied built-in materials and originally used construction technologies. Traditional methods in preserving the built heritage have been ap-

plied in these case-study examples without any substantial differences in relation to conservation of historical architecture continuously built until the end of the 19<sup>th</sup> century. A fundamental difference, however, is exemplified by the emerging approach to the preservation of Modern architecture which substantially differs from the one established by the application of traditional conservation principles based on minimal intervention principle, and focused towards preserving the integrity and material authenticity.

This extensive analysis has resulted in the identification and theoretical explication of eight principles relevant for the contemporary practice of preservation and conservation of Modern architecture. These principles are: 1) preservation of visual integrity, 2) preservation of the original design idea, 3) sustainability, 4) novelty and constant maintenance, 5) acceptable change, 6) replacement material, 7) removing technical deficiencies of the original design, and 8) improving energy efficiency. Developing on the theoretically explicated synthesis of traditional and contemporary conservation principles, and substantiated by the in-depth elaboration of selected case studies, it was possible to identify and present three theoretical models for the preservation of Modern architecture: 1) Restitution of the original condition model, 2) Improvement of the original condition model, and 3) Rehabilitation model.

Preservation of Modern architecture is a truly comprehensive, specific and timely task for the profession which is nowadays confronted with new architectural conservation challenges on a daily basis. The emerging contemporary principles and theoretical models of Modern architecture preservation, which have been explored and presented in the dissertation, offer comprehensive, holistic and theoretically verified approach to complex and demanding projects in the preservation of Modern movement heritage. Moreover, they enable for a quality-based expert application in planning and developing demanding and complex programs for the preservation of valuable examples of Modern architecture.

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