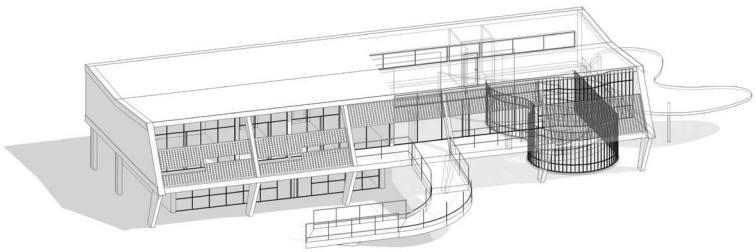
Ricerche di Rilievo e Rappresentazione
dal Progetto di Architettura al Design Industriale

When Brazil and India were modernist

Processes of digital documentation for the preservation of 20th century architectures

Luca Rossato



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Processes of digital documentation for the preservation of 20th century architectures

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This book investigates the current state-of-the-art of 20th century buildings in Brazil and India and the possible future challenges related to the preservation of both buildings and design processes through the use of contemporary methodologies and technologies. Thanks to international cooperation, it was possible to apply technological innovations to cultural heritage preservation, thus showing how technology could become an important tool to support the commitments of both conservator and researchers.
These technologies imply the hybridization of competences and skills of architects and conservators: indeed only a smart process of adaptation of methods and experimental protocols may allow the use of innovative techniques in this field.
If uncritically applied to cultural heritage preservation processes without the right methodology and proper use, technologies might not be economically competitive. Therefore this book aims at proposing an integrated methodology that could be adapted to local context thus being, at the same time, flexible and inexpensive.
The integration of survey and representation techniques applied to the modernist architecture could be very effective and significantly improve the knowledge towards peculiar aspect of the architectural object.
This publication examines first of all the implications of 20th century migration in relation to the spreading of new architectural styles in India and Brazil, providing a useful framework for understanding and examining the cross-cultural adaptation and hybridization of modernism principles that took place in both countries and societies.
The research path has been split in two parts: the first part deals with the evaluation of available tools, protocols and procedures, which make possible the use of equipment for modern heritage preservation. The second part analyzes more than 250 buildings (in Brazil and India) of the modernist period, on which three different filters of selection are applied. Within this framework, the research identifies 80 buildings for application of data sheet and representation techniques, 25 buildings for application of BIM approach and 3 for 3D laser scanner survey application.

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Since 2008 he has been cooperating with the Architecture Department of the University of Ferrara as Grant Researcher and Research Fellow.
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