# Chapter 37 Digital Archives for Preserving and Communicating Architectural Drawings

Roberta Spallone Politecnico di Torino, Italy

Francesca Paluan Politecnico di Torino, Italy

# **ABSTRACT**

Archives created by architects and engineers are unique and significant sources for scientific research, in relation with multiple disciplines. Contemporary architectural archives, as a documentary evidence, contain relations which cannot easily be read and contextualized because of the documents organization and order, given by the archival necessities and the producers' working activity. According to the archival science, the documents reorganization is forbidden even if it could be helpful for their analyses, so the use of digital databases at microscopic and macroscopic scale allows the contextualization of the archival data, in order to elaborate information and acquire relations. Digital archives are the virtual place in which researchers could play an active role in the discovering of innovative and unprecedented interpretations about the architectural documentation; such free interpretations are advanced by the critical use and support of the representation techniques and technologies, restoring the building image in a more synthetic or analytic level.

### INTRODUCTION

Archives created by architects are unique and significant sources for scientific research in understanding architecture in all its features connected with multiple disciplines (history of architecture and representation, conservation, city planning and landscape). Contemporary architectural archives contain relations which cannot easily be read and contextualized because of the documents organization and order, given by the archival necessities and the producers themselves. According to the archival science, the documents reorganization is forbidden even if it could be helpful for their analyses. As researchers in the

DOI: 10.4018/978-1-5225-7659-4.ch037

architectural representation field, the authors believe that the mere digitization of archival drawings is not sufficient to transmit the potential of knowledge and meaning that it is caught by the direct study of the sources. The use of digital databases at microscopic and macroscopic scale allows the contextualization of the archival data, in order to help the public to elaborate information and acquire new relations. The authors investigate this phenomenon underlining the benefits and the risks connected to the digitization of the contemporary architectural archives, focusing on their communicative potentialities thanks to the tools of the digital representation, in relation to the necessities of fruition and preservation of the original archival materials.

## **BACKGROUND**

Contemporary architectural archives constitute more than a documentary heritage, recently recognized and validated (Domenichini & Tonicello, 2004). Since the end of the Seventies, effectively, the principal North-American and North-European institutions engaged in the knowledge and diffusion of Architecture have been working hard and more carefully into conservation and enhancement of contemporary architectural drawings, which need specific standards for their description, preservation and fruition guaranteed by international associations, like the ICAM (International Confederation of Architectural Museums) and the ICA (International Council on Archives) since 1979.

The international archives take part to the ICA, whereas the archival cooperation in the European Union sphere is developed by a working group called European Archives Group (EAG), born in 2006.

Such a recent interest about the architectural documentary heritage, in fact, is carried out by different fields of research that starts from the analysis of the drawings and is elaborated according to numerous purposes, the study of the representation, the history of architecture and city planning. Its value is moreover justified by the same meaning taken: in addition to being a proof of a phase in the design process and a historical memory, the drawing may be considered a useful document to the reconstruction of the events happened to an artifact, or it could be evaluated as a work of art. For this motive, in the same years various institutions arose, engaged in the promotion and fruition of architecture in general, and particularly focused on the safeguard of the documentary heritage, made up of heterogeneous material. This trend, still of north European and North American origin, led to the foundation of museums or hybrid structures containing collections of architectural documents. Because of the documents complexity and heterogeneity, the need to establish new descriptive standard of the objects was immediately felt within the cataloging range. On the international level, the current state provides for standard (taken from the Library System and Document) derived initially from the archival cataloging specifications and gradually structured according to the new descriptive requirements for the architectural documents. Currently the standards most commonly used are those dictated by the International Council on Archives, such as: the ISAD (G), that is the General International Standard Archival Description; the ISAAR (CPF), that is the International Standard Archival Authority Record for Corporate Bodies, Persons and Families; the ISDIAH that is the International Standard for Describing Institutions with Archival Holdings (Ministero per i beni e le attività culturali, Direzione generale per gli archivi & Servizio documentazione e pubblicazioni archivistiche, 2003).

Since the nineties, the archival administration has arranged multiple informative systems, which matter as a kind of computerized registry of the archives.

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/digital-archives-for-preserving-and-communicating-architectural-drawings/215948

# Related Content

## Offshoring Entertainment and Media to India

Alyssa D. Schwenderand Christopher J.M. Leet (2008). *Journal of Information Technology Research (pp. 25-40).* 

www.irma-international.org/article/offshoring-entertainment-media-india/3707

## The eAssessment of Key Competences and their Relationship with Academic Performance

Fernando Martinez-Abad, Patricia Torrijos-Finciasand María José Rodríguez-Conde (2016). *Journal of Information Technology Research (pp. 16-27).* 

www.irma-international.org/article/the-eassessment-of-key-competences-and-their-relationship-with-academic-performance/172089

## Security for Electronic Commerce

Marc Pasquet, Christophe Rosenbergerand Félix Cuozzo (2009). *Encyclopedia of Information Science and Technology, Second Edition (pp. 3383-3391).* 

www.irma-international.org/chapter/security-electronic-commerce/14075

### Knowledge Management in E-Government

Deborah S. Carstens, LuAnn Beanand Judith Barlow (2009). *Encyclopedia of Information Science and Technology, Second Edition (pp. 2361-2367).* 

www.irma-international.org/chapter/knowledge-management-government/13912

# A Time Series Analysis of International ICT Spillover

Juan Juan Zhangand Sang-Yong Tom Lee (2009). *Handbook of Research on Information Management and the Global Landscape (pp. 132-145).* 

www.irma-international.org/chapter/time-series-analysis-international-ict/20618