

Museums and Interactive Multimedia

MUSEUMS AND INTERACTIVE MULTIMEDIA

Proceedings of an International Conference
held in Cambridge, England
20-24 September 1993

The Sixth International Conference of the MDA
and
The Second International Conference on
Hypermedia and Interactivity in Museums (ICHIM '93)

Edited by
Diane Lees, MDA

Publication design and
copy editing by
Alison Wheeler and
Tania Flack, MDA

Published as
Archives & Museum Informatics Technical Report No. 20

Published by
The Museum Documentation Association

Museums and Interactive Multimedia

Published by
The Museum Documentation Association
Lincoln House
347 Cherry Hinton Road
Cambridge
CB1 4DH
Tel: +44 (0)223 242848
Fax: +44 (0)223 213575

Published as
Archives & Museum Informatics Technical Report No. 20
Archives & Museum Informatics
5501 Walnut Street, Suite #203
Pittsburgh, PA 15232 - 2311
USA
Tel: +1 412 683 9775
Fax: +1 412 683 7366

© Volume Copyright
The Museum Documentation Association, 1993

Chapter I,1 © Science Museum, London
Chapter II,14 © Smithsonian Institution, Washington D.C.

ISBN 0 905963 89 X

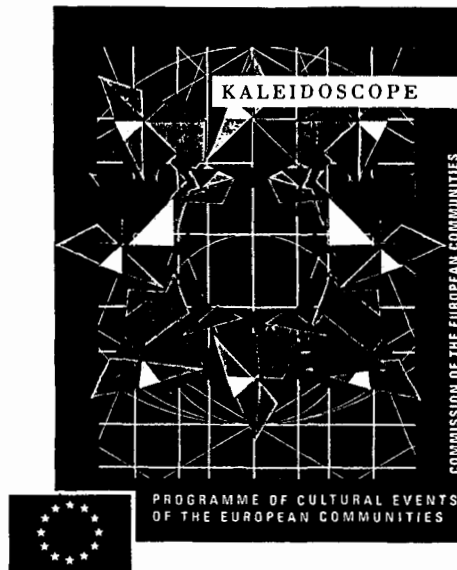
The MDA is a registered charity, no. 273984

Printed in the United Kingdom by
Larman Printers
Cambridge CB1 3JS

The work of MDA is supported by:
The Museums & Galleries Commission
The Council of Museums in Wales
The National Museum of Wales
The Department of Education in Northern Ireland
The Scottish Office of Education Department



Supported by:



Sponsored by:



CONTENTS

Foreword xiii

Acknowledgements xv

I APPLICATIONS IN MUSEUMS

Applications in Museums 2
Xavier Perrot

Ii Multimedia Collection Databases

1 High resolution digital image storage at the National Railway Museum, York 14
Ben Booth, Christine Heap

2 Museum and interactive multimedia information service 20
Michel Lefttz, Christine Demblon

3 Ethnographic treasures in the computer 26
Electronic access to a total museum collection
Tine Wanning

Iii Multimedia in Exhibitions

4 Multimedia in exhibitions 34
Jane Callaghan

5 Free the visitors: the museum's documentation through interactive systems 35
Suzanne Jean

6 The evolution of interactive interpretive media 41
A report on discovery and progress at the Minneapolis Institute of Arts
Scott Sayre

7 A comparison of museum exhibits in three areas: art, sports, and science 52
Carol Strohecker

Iiii Multimedia in Interpretation

8 Multimedia in interpretation 58
Selma Thomas

9 Making the punishment fit the crime 61
Integrated interactive systems in the Museum
Larry Friedlander

10	The electronic guide at the museum of Dion Nikolaos Dessipris	68
11	Education and access, the New National Gallery videodisc on American Art Ruth Perlin	79
 Iiv The City as a Model for Hypermedia Applications		
12	Visualisation of historic urban data Howard Besser	86
13	Malmö in time and space Annika Bergquist, Lena Wilhelmsson	92
14	HyperMilano: hypermedia navigation in a city information point Franca Garzotto, Luca Mainetti, Paolo Paolini	95
 Iv Local and Wide Area Networking		
15	Networking multimedia John Perkins	106
16	SuperJANET: multimedia information services over a gigabit network Michael Breaks	107
17	The holy grail of museum multimedia Moving beyond the box Jim Oker	112
18	Telecommunications in museums Dominique Delouis	117
 Ivi Low Cost Software Applications		
19	Low-cost software applications Ecaterina Geber	130
20	Dynamic hypermedia from a museum database The Gold of Greece Application Costis J. Dallas, Franca Garzotto	131
21	The commonwealth information database A case study - Multimedia on a shoestring Scott Ewings	140
22	The Portinari Project Science and art team up together to help cultural projects R S G Lanzelotte	146

II DESIGN AND DEVELOPMENT

Design and Development of Systems for Museums and Galleries 160
James Hemsley

III Design Principles and Concept

1 Engaging the visitor 174
Relevance, participation and motivation in hypermedia design
Johnathan Cooper

2 Interacting with works of art - with and without computers 178
Alex Morrison

3 Multimedia interface design 181
Tom Wujec

IIIi Interface Issues

4 Hypermuse: A prototype hypermedia front-end for 190
museum information systems
Anne Fahy, Alan Poulter, Goff Sargent

5 Evaluating interface design through user data collection 198
A study at the Minneapolis Institute of Arts
Lisa Nebenzahl

6 A hypertext for an interactive visit to a science and technology museum 204
Oreste Signore, S Malasoma, R Tarchi, L Tunno, G Fresta

IIIii Retrieval Strategies

7 Retrieval strategies 212
Howard Besser

8 From text to image 213
An experimental multimedia information system based on
querying texts in natural language
Anne-Marie Guimier-Sorbets

9 The visual thesaurus: a practical application 223
Corinne Jörgensen, Peter Jörgensen, Matt Hogan

10 Automatic system for lexicon control of iconographic description 229
In the Accademis Carrara Painting Database
Matteo Panzeri

IIiv Standards

- 11** The CIMI standards framework
And the interchange of multimedia information 244
John Perkins
- 12** Developing text standards 255
Susan Hockey

IIv Legal and Copyright Issues

- 13** Legal and copyright issues 262
Jeremy Rees
- 14** Multimedia licensing contracts: uses and rights 263
Christine Steiner

IIvi Publishing and Distributing

- 15** Publishing and distributing 270
Jostein Hauge
- 16** Interactive multimedia for museum publishing 271
Jim Hoekema
- 17** CD-I applications at the British Golf Museum
And the United States Golf Association Museum and Library 276
Peter Lewis, Karen Bednarski
- 18** Interactive multimedia in small museums and archives 282
A case study
Peter Olaf Looms

III IMPACT AND IMPLICATIONS OF MULTIMEDIA

Impact and implications of multimedia 290
Kent Lydecker

IIIi International Co-operation

- 1** International co-operation 296
Andrew Roberts
- 2** Network of art research computer image systems in Europe (NARCISSE) 298
Christian Lahanier, Michel Aubert
- 3** International co-operation 305
A project in theory and practice
Jeremy Rees
- 4** Visual arts network for the exchange of cultural knowledge 311
(VAN EYCK)
Jan van der Starre

IIIii National Developments

- 5** Multimedia and central, Eastern Europe (CEE) 320
Ecaterina Geber
- 6** Why and how, multimedia - the Japanese situation 331
Eiji Mizushima
- 7** Multimedia in museum, museum in multimedia 335
Lev Noll

IIIiii Inter-Institutional Co-operation

- 8** Inter-institutional co-operation and interactive multimedia 342
David Bearman
- 9** Eight European museums teaming up for EMN 344
And where to go from now
Achim Lipp, Winfried Schmitz-Esser
- 10** Inter-institutional co-operation in multimedia production 350
Simon Hill

IIIiv Impact on Museum Profession

- 11** Impact on museum profession 358
Tine Wanning

12	Museums, information and multimedia John Burnett, Ian Morrison	360
13	Hypertext and museum documentation Ana Garvas Delic, Jadranka Vinterhalter	367
IIIv Changing Institutional Environments		
14	The rocky road to multimedia: museum politics and institutional change Peter Samis	374
15	Multimedia technology at the Orsay Museum Institutional experience and future prospects Françoise le Coz, Fabrice Lemessier	377
16	Design driven organisation Extending the museum context Robert Semper, Kristina Hooper Woolsey	384
17	Multimedia and the politics of museum organisational change Philip Yenawine	391
IIIvi Impact on Schools and Museum Studies		
18	Impact on schools and museum studies Anne Fahy	396
19	Multimedia, museum studies, a bridge Georgia Freedman-Harvey	397
20	"Virtual museum" for school children Olga Kissel	401
	Biographies	407
	References	423
	Index	431