

A hand is shown placing a block onto a structure of binary code (0s and 1s) that forms a path leading to a large, stylized 'A' shape. The background is a dark blue gradient with a grid of binary digits.

JIA LIU

METADATA

and Its Applications
in the Digital Library

APPROACHES AND PRACTICES

Contents

Illustrations	xi
Preface	xv
Acknowledgments	xvii
Abstract in English	xix

PART I METADATA IN GENERAL

1. Metadata Basics	3
<i>1.1. Metadata Definitions</i>	3
1.1.1. Forms: Metadata, Meta Data, or Meta-data?	3
1.1.2. Attribute: Singular or Plural?	4
1.1.3. Definitions	4
<i>1.2. New Implications of Metadata</i>	6
<i>1.3. Metadata Functions</i>	9
2. Metadata Types	15
<i>2.1. General Typology</i>	15
<i>2.2. Descriptive Metadata</i>	18
2.2.1. Library Cataloging Record	18
2.2.2. Archival Description Record	21

CONTENTS

2.2.3. Metadata for Governmental Resources	24
2.2.4. Metadata for Art and Architecture Works	28
2.2.5. Metadata for Educational Materials	35
2.2.6. Metadata for Geographic Resources	39
2.2.7. Dublin Core Metadata Elements Set	48
2.3. <i>Structural Metadata</i>	51
2.4. <i>Administrative Metadata</i>	54
2.4.1. Administrative Metadata	55
2.4.1.1. A-Core	57
2.4.2. Technical Metadata	59
2.4.3. Preservation Metadata	60
2.4.4. Rights Metadata	64
3. Metadata Encoding Standards	75
3.1. <i>MARC</i>	77
3.2. <i>METS</i>	80
3.3. <i>SGML, HTML, XML, and XHTML</i>	82
3.4. <i>TEI</i>	89
3.5. <i>EAD</i>	94
3.6. <i>RDF</i>	96
4. Metadata Implementation	103
4.1. <i>Namespace</i>	103
4.2. <i>Application Profile</i>	105
4.3. <i>Metadata Schema Registry</i>	108
4.4. <i>Metadata Working Flow</i>	112
4.4.1. Metadata Creation	113
4.4.1.1. Creating Metadata with Web Crawlers	114
4.4.1.2. Creating Metadata with Resource Creators	115
4.4.1.3. Creating Metadata with Professional Metadata Creators	118
4.4.2. Metadata Harvesting	120
4.5. <i>Other Issues</i>	122

CONTENTS

4.5.1. Vocabulary	122
4.5.2. Crosswalk	124
4.5.3. Authority Control	125
4.5.4. Multilingualism	125

PART 2 METADATA PROJECTS AND THEIR APPLICATIONS IN THE DIGITAL LIBRARY

5. Metadata Projects	131
5.1. <i>BIBLINK</i>	132
5.2. <i>The MetaLib Project</i>	135
5.2.1. MetaLib Project	135
5.2.2. Subproject of MetaLib at the Goettingen State and University Library	137
5.3. <i>The MetaWeb Project</i>	138
5.4. <i>The Nordic Metadata Project</i>	141
6. Metadata Applications in the Digital Library	147
6.1. <i>Metadata Applications in the Digital Library</i>	147
6.1.1. Definitions of the Digital Library	148
6.1.2. Metadata in the Digital Library	149
6.2. <i>Metadata in PANDORA</i>	151
6.3. <i>Metadata in the Oxford Digital Library</i>	154
6.4. <i>DSpace Metadata</i>	157
6.5. <i>Metadata in the Peking University Rare Book Digital Library</i>	160
Appendix: GILS Data Elements and Corresponding USMARC Tags	165
References	169
Index	179