



Metadata: Dublin Core and supporting metadata resources for the South African community

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LIASA IGBIS Workshop 2012

by

Ansie van der Westhuizen

watkiapj@unisa.ac.za

Outline

- What is metadata
- Purpose and functions of metadata
- Types of metadata
- Standardisation
- Dublin Core Element Set
- Practical Session
- Metadata Harvesting
- Conclusion

Liebetrau, P. 2010. Metadata. In: Managing digital collections: a collaborative initiative on the South African framework. Pretoria: National Research Foundation.p.30-34. <http://digi.nrf.ac.za/publ/Managing Digital Collections.pdf>

1. INTRODUCTION TO METADATA

<http://www.youtube.com/watch?v=c1R-DGt6aQ&feature=channel&list=UL>

YOUTUBE VIDEO ABOUT METADATA

What is metadata?

- Data about data
- Description of a digital object
- Structured information
- Digital format
- Describing digital resources
- Stored as computer data, readable by humans
- Also understood by computers
- Enables digital resources on the web to be discovered via search engines (Liebetrau 2010)

Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource. Metadata is often called data about data or information about information (NISO 2004)

Traditional library cataloguing is a form of metadata and MARC21 and the AACR2 used with it are metadata standards

Purpose and functions of metadata

Metadata is the key to ensuring that resources will survive and continue to be accessible into the future

Is searchable and aids the identification and retrieval of resources

Helps the end user to do accurate searching and retrieval and will also help to evaluate the resource

Types also assist in managing , maintaining and preserving digital collections

Facilitate interoperability

Supports archiving, security and authentication of digital resources.

Breytenbach, A & Groenewald R. 2006

Types of Metadata

- Collection level
- Item Level

Descriptive: title , author, extent, subject and keywords

Structural: unique identifiers, page numbers, special features (table of contents, indexes)

Administrative: (Preservation/ rights/technical) file formats, scanning dates, file compression format, image resolution

Standardisation

Standards are created by international or internationally recognised bodies such as IFLA, ISO, W3C, NISO

This is often a long , expensive and labour intensive process with expansion, adaptation and extension according to dynamic needs.

Standards establish a uniform set of ground rules for tagging information

Standards help ensure consistency in metadata application

Standards support interoperability of applications and resource sharing

Standards pave the way for new technologies

- Data structure standards
- Data value standards
- Data content standards
- Schemes and element sets
- Encoding
- Interoperability

Data structure standards

MARC <http://www.loc.gov/marc/>

DCMES (Dublin Core Metadata Element Set)

<http://dublincore.org/documents/dces/>

MODS (Metadata Object Description Scheme)

<http://www.loc.gov/standards/mods/>

EAD (Encoded Archival Description)

<http://www.loc.gov/ead/>

TEI (Text Encoding Initiative) <http://www.tei-c.org/index.xml>

LOM (Learning Object Metadata)

http://www.imsglobal.org/metadata/mdv1p3pd/ims_md_bestv1p3pd.html

METS (Metadata Encoding and Transmission Standard) <http://www.loc.gov/mets/>

Data structure standards (cont.)

MIX (Technical Metadata for Digital Still Images Standard) <http://www.loc.gov/standards/mix/>

VRA Core (Visual Resources Association data standard for the cultural heritage community) <http://www.vraweb.org/projects/vracore4/>

PREMIS (Preservation Metadata Implementation Strategies) <http://www.loc.gov/standards/premis/>

Darwin Core (Biodiversity Information Standard) <http://rs.tdwg.org/dwc/index.htm>

EML (Ecological Metadata Language)

<http://knb.ecoinformatics.org/software/eml/>

SANS 1878 (South African Spatial Metadata Standard)

Data value standards

LCSH (Library of Congress Subject Headings)

<http://www.loc.gov/cds/lcsh.html>

MeSH (Medical Subject Headings)

<http://www.nlm.nih.gov/mesh/>

AAT (Art and Architecture Thesaurus)

http://www.getty.edu/research/conducting_research/vocabularies/aat/

TGN (Getty Thesaurus of Geographic Names)

http://www.getty.edu/research/conducting_research/vocabularies/tgn/

Data content standards

AACR (Anglo American Cataloguing Rules)

RDA (Resource Description and Access)

<http://www.rdaonline.org/>

RAD (Rules for Archival Description)

<http://www.cdncouncilarchives.ca/archdesrules.html>

FRBR (Functional Requirements for Bibliographic Records) <http://www.ifla.org/VII/d4/dbc.htm>

FRAD (Functional Requirements for Authority Data formerly Functional Requirements for Authority Records) <http://www.ifla.org/VII/d4/dbc.htm>

FGDC (Federal Geographic Data Committee)

<http://www.fgdc.gov/metadata/csdgm/>

Schemes and element sets

Nature of collection
Individual objects
Community of users
Required granularity of metadata (collection or item level)
Skills resources and expertise of metadata creators
Purpose (access, preservation, exchange)
Technical infrastructure
Budget

Encoding

Extensible Markup Language (XML)

Characteristics of XML:

- Text

- Modular

- Enables mapping

- Open standard

National Research Foundation. Digitisation and Data Preservation Centre.
Metadata Guidelines.

<http://digi.nrf.ac.za/publ/metadataIntro.php>

THE DUBLIN CORE ELEMENT SET

Dublin Core Element Set

Elements

Are simple to understand and apply
Optional and repeatable
International and cross-disciplinary in scope

Unqualified

For coarse-grained discovery of resources

Qualified

For richer description to enable more refined resource discovery
Qualified DC – employs additional qualifiers to the basic 15 elements to further refine the meaning of an element. Qualifiers allow application to increase the precision of the metadata.

Unqualified Dublin Core

Content	Intellectual Property	Physical Manifestation
Title	Author /creator	Date
Subject	Publisher	Type
Description	Contributor	Format
Source	Rights	Identifier
Language		
Relation		
Coverage		

Breytenbach, A & Groenewald R. 2006

- National Research Foundation. Digitisation and Data Preservation Centre. Metadata Guidelines.

<http://digi.nrf.ac.za/publ/metadataIntro.php>

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ZK Mathews Collection

A1.10

2687 Yale Station,
Yale University,
New Haven, Conn.
16-10-33.

Dear Professor Loram,
I herewith beg to apply to be admitted as a candidate for the M.A. degree in the Department of Race and Culture Contact at the end of the current year 1933-1934.

I obtained the B.A. degree of the University of South Africa in 1923, and the Education Diploma of the South African Native College in 1924. Since then I have been engaged in teaching as Principal of the High School Department of Amanzimtoti Institute, Adams Mission Station, Natal, South Africa. In 1930 I obtained after three years study the Bachelor of Laws degree of the University of South Africa.

I have already submitted to the Registrar of the University details regarding the work I have done in connection with the above mentioned courses. If any further information is required I shall be glad to furnish it later.

I have the honour to be, Sir,

Yours respectfully,

2687 Yale Station, A1.16
Yale University,
New Haven, Conn., U.S.A.
December 26, 1933.

Dear Mr Jabavu,

I have just received from Professor Loram a brochure giving the particulars of a very important Conference to be held in South Africa next year under the auspices of the New Education Fellowship at Capetown and Johannesburg. I have no doubt you are aware of the fact that this is a Conference at which native opinion should be adequately represented, especially as the subject of Native Education is going to occupy the attention of the gathering for a considerable time. When Dr E. C. M. M. M. was here at Yale a few months ago, he urged upon us the necessity of returning to South Africa in time to attend this important, and all those of us who are from South Africa are making arrangements to attend.

My point in writing you is to offer my services as one of the delegates of the South African Native Teachers Federation. I have no doubt that at your last meeting, you elected a new Executive of which I am not a member; but that will not disqualify me, I hope, as a delegate of the Federation. My present plan is that I hope to arrive in South Africa on the 8th of July, will thence proceed to Kimberley for a short stay and pass on to the Johannesburg Conference which begins on July 16th and at which I gather Native Education is to be fully discussed. I realize that this is perhaps too early for you to take up the question of representation with the affiliated Teachers Associations, but as I am so far away I thought that it would expedite matters if I wrote you in sufficient time for you to send me a reply before the final date for registration of delegates.

I am enjoying my work at Yale immensely, and am taking advantage of my sojourn here to learn as much as possible of America and the Americans generally. I am going up to Canada this week to attend the Canadian-American S.C.A. Conference to be held at Hamilton, Ontario, and to speak on South African Problems. Early in the spring we are going on a tour of the Southern States to study the Negro Problem at first hand. I am looking forward to the Southern States where one will come into touch again with the racial discrimination which is conspicuous by its absence in places like Yale.

I meet quite a lot of your friends in different parts of the States, especially among those who attended the Buffalo Conference at which you represented us so well.

Let me not trespass any further upon your valuable time, but conclude by wishing Mrs Jabavu and yourself and family the best compliments of the season. Give my kind regards to Mrs Bokwe when you meet her. Tell her I am enjoying the snow of America; it has been snowing all day today and we are having great fun walking about in the snow.

Hoping to hear from you at your earliest convenience, I am

Yours sincerely,

J. K. Mathews

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[Extract from Dr. Loram's letter.](#)

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[Year at Yale University : Letter from ZK Matthews to Messrs. Dean and Dawson.](#)

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[Year at Yale University : Letter from ZK Matthews to Mr. Jabavu.](#)

Matthews, Z. K. (2011-11-16)

[Das Tagebuch des Missionars Albert Nachtigal = The Diary of the Missionary Albert Nachtigal Volume 1: part 2 1866 - 1869](#)

Nachtigal, Johann Albert; Hesse, August Otto (Unisa Library, 1973)



ZK Matthews Papers (ACC101)

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Zachariah Keodirelang Matthews was born in Kimberley in 1901. After finishing high school, he enrolled for a BA degree at Fort Hare, and completed it in 1923 – thereby becoming the first African to obtain a BA degree at a South African Institution. After private study, Matthews became in 1930, the first African to earn an LL.B. degree in South Africa, and was admitted as an attorney to the Johannesburg bar and the Transvaal division of the Supreme Court. In 1933 he was invited to study at Yale University in the United States, and the following year he completed an MA there. Afterwards he spent a year at the London School of Economics to study anthropology. He returned to South Africa in 1935, and in 1936 he was appointed lecturer at Fort Hare in Social Anthropology and Native Law and Administration. In 1944 Matthews became head of Fort Hare's department of African Studies, and he was also promoted to professor. On the political front, Matthews became ANC provincial president for the Cape in June 1949. He proposed the basic idea of the Congress of the People in his presidential address to the Cape annual conference in August 1953. In December 1956, when he was the acting principal of Fort Hare, he became one of the accused in the Treason Trial. On his release from the trial in late 1958, he returned to Fort Hare. In 1962 Matthews moved to Geneva to become secretary of the Africa division of the World Council of Churches. In 1966 he accepted the post of ambassador to the United States and chief United Nations representative for Botswana. He died in the United States in 1968. Bridging the gap between the old guard and the more militant younger members of the African National Congress in the late 1940's and 1950's, Matthews exercised a major guiding and moderating influence on African political history in its most crucial period. He was at the same time South Africa's, and perhaps the continent's, most distinguished African intellectual. (Extracted from): From Protest to Challenge: A documentary history of African politics in South Africa 1882 – 1964, edited by Thomas Karis and Gwendolen M Carter, 1977. This collection consists of handwritten manuscripts, letters, pamphlets, photos, typed reports and lectures, with bound and loose leaf pages. 1453 items.

Collections in this community

- [ZK Matthews: A1 Yale University](#)
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[Year at Yale University : Letter from ZK Matthews to Mr. Jabavu.](#)

Matthews, Z. K. (2011-11-16)

[Year at Yale University : Letter from ZK Matthews to Mr. Murray Brown.](#)

Matthews, Z. K. (2011-11-14)

Year at Yale University : Letter from ZK Matthews to Mr. Jabavu.

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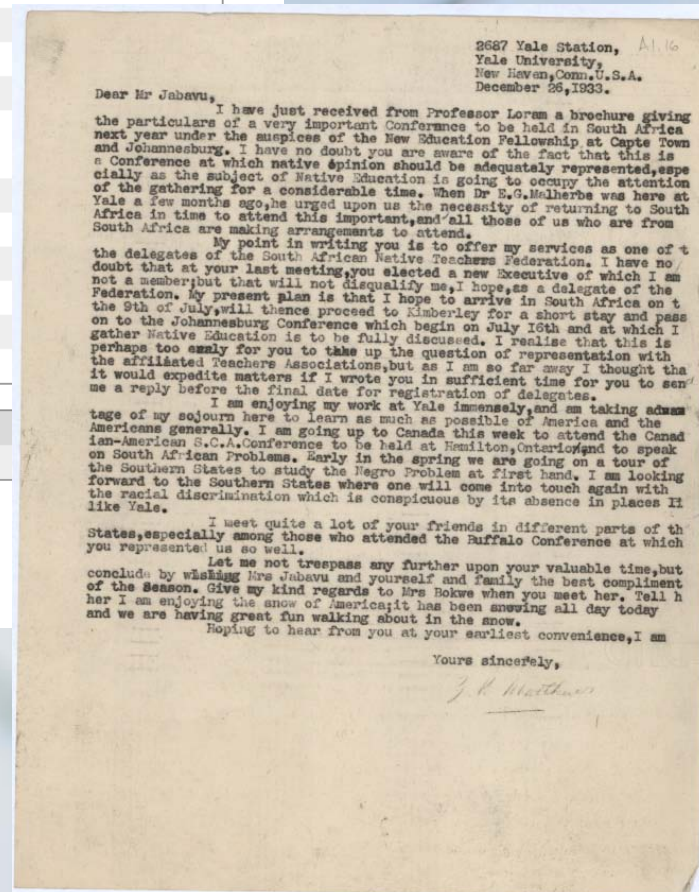
dc.contributor.author	Matthews, Z. K.
dc.date.accessioned	2011-11-16T07:09:06Z
dc.date.available	2011-11-16T07:09:06Z
dc.date.issued	2011-11-16
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dc.language.iso	en
dc.subject	Native education
dc.subject	Teachers education
dc.subject	New Education Fellowship
dc.subject	South African Native Teachers Federation
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dc.type	Other

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File checksum: MD5:f00bae616aeb39ec3e51a733269231e0					
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METADATA HARVESTING



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Registration Record

element name	element value
Base URL	http://uir.unisa.ac.za/oai/request
Repository Name	Unisa Institutional Repository (UnisaIR)
Protocol Version	2.0
Email	uir@unisa.ac.za
Registration Date	2011-10-06T09:58:53Z
Date Last Validated	Thu Oct 6 09:58:53 2011
OAI Repository ID	

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- Contact

<http://www.openarchives.org/Register/BrowseSites?viewRecord=http://uir.unisa.ac.za/oai/request>

Examples of Harvesters

- National ETD Portal (<http://www.netd.ac.za/>)
- BASE (Bielefeld Academic Search Engine) (<http://base-search.net>)
- ND LTD (Networked Library of Theses and Dissertations) (<http://ndltd.org>)

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Additional word forms

Multilingual synonyms (Eurovoc Thesaurus)



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Sat, 12 May 2012 10:00:10 UTC
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Sat, 12 May 2012 10:00:10 UTC
5. Situational analysis of free-living elderly in Umlazi township
Sat, 12 May 2012 10:00:10 UTC

Collection Statistics

Collection	Total
Cape Peninsula University of Technology	541
Durban University of Technology	533
North-West University	3546
Rhodes University	2347
Stellenbosch University	5047
UCT Computer Science	57
University of Fort Hare	279
University of Johannesburg	2911
University of Kwazulu-Natal	2766
University of Limpopo	221
University of South Africa	3272
University of Pretoria	7110
University of the Western Cape	1619
University of Zululand	927
Vaal University of Technology	18
Total	31194

<http://www.oclc.org/gateway/gettingstarted/default.htm>

- Learn to use the Gateway
- Enable your OAI Repository and prepare your metadata
- Register your institution to use the Gateway
(<http://worldcat.org/digitalcollectiongateway/register.jsp>)
- Log on to the Gateway and start uploading

Register your institution to use the WorldCat Digital Collection Gateway

Institution name	<input type="text"/>	?
OCLC Symbol	<input type="text"/>	Don't know symbol? -> Leave blank.
Institution's City, State, Country	<input type="text"/>	?
Contact Name	<input type="text"/>	?
Contact phone number	<input type="text"/>	?
Contact e-mail address	<input type="text"/>	?
Confirm contact e-mail address	<input type="text"/>	

[Register](#) [Cancel](#)

Add a user to your Gateway account

E-mail Address	<input type="text"/>	
Confirm E-mail Address	<input type="text"/>	
User Name	<input type="text"/>	?
Password	<input type="text"/>	
Confirm Password	<input type="text"/>	
Phone Number	<input type="text"/>	
Key	<input type="text"/>	

[Add User](#) [Cancel](#)

Acknowledgements

Breytenbach, A & Groenewald R. 2006. University of Pretoria Metadata Workshop Manual.

http://www.dspace.up.ac.za/metadata_workshop.pdf

National Research Foundation. Digitisation and Data Preservation Centre. Metadata Guidelines.

<http://digi.nrf.ac.za/publ/metadataIntro.php>

Liebetrau, P. 2010. Metadata. In: Managing digital collections: a collaborative initiative on the South African framework. Pretoria: National Research Foundation.p.30-34.

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