## FAST: Faceted Application of Subject Terminology

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## Agenda

- LCSH
- FAST
- History of FAST
- Structure of FAST
- Examples of FAST Subject Authorities
- Demonstration of Test Database
- Examples of Implementations of FAST
- Summary
- Questions

Large increase in the number of web resources

Need a system of searching these web resources using a standardized subject vocabulary

The subject vocabulary needs to be userfriendly and compatible with many different metadata standards

- ALCTS/SAC/Subcommittee (1999) identified the following as attributes of a subject metadata scheme for the web
  - Be simple and easy to apply and to comprehend,
  - Be intuitive so that sophisticated training in subject indexing and classification, while highly desirable, is not required in order to implement,
  - Be logical so that it requires the least effort to understand and implement,
  - Be scalable for implementation from the simplest to the most sophisticated.

- The ALCTS/SAC/Subcommittee on Metadata and Subject Analysis identified three basic approaches to selecting an indexing/subject heading schema for Internet resources:
  - Using an existing schema(s),
  - Adapting or modifying existing schema(s),
  - Developing new schema(s).

- The Library of Subject Headings (LCSH) is the most commonly used subject vocabulary
- LCSH is a model for many other controlled vocabularies
- LCSH complex syntax and rules for construction limit its effectiveness for automated authority control

Introduction to Library of Congress Subject Headings (LCSH)

- LCSH is the most widely used indexing vocabulary and offers many significant advantages:
  - Its rich vocabulary covers all subject areas,
  - It has the strong institutional support of the Library of Congress,
  - It imposes synonym and homograph control,
  - It has been extensively used by libraries,
  - It is contained in millions of bibliographic records, and
  - It has a long and well-documented history.

Introduction to Library of Congress Subject Headings (LCSH): Application of LCSH to the Web

- LCSH is not compatible in syntax with most other controlled vocabularies;
- LCSH is not amenable to search engines outside of the OPAC environment
- Few LCSH headings are established
- Complex subject heading strings in bibliographic or metadata records are costly to maintain
- LCSH does not lend itself to automatic indexing or authority control
- The use of LCSH requires highly trained personnel

### Introduction to FAST

- What is Faceted Application of Subject Terminology (FAST)?
  - A rich controlled vocabulary based on the terminology of *Library of Congress Subject Headings* (LCSH)
  - A simplified application syntax

## Introduction to FAST

FAST was designed to achieve the following objectives

- 1. Compatibility with existing metadata
- 2. Ease of assignment
- 3. Retrieval effectiveness
- 4. Cost of maintenance
- 5. Semantic interoperability

## History of FAST

FAST was a joint research and development project by OCLC and the Library of Congress

FAST was developed from OCLC research that began in 1998 to create a subject access system that optimizes the use of technology for Dublin Core metadata records

## History of FAST

Association for Library Collections and Technical Services Subject Analysis Committee (ALCTS-SAC) Sub-committee created the report titled:

Subject Data in the Metadata Record Recommendations and Rationale: A Report from the ALCTS/SAC/Subcommittee on Metadata and Subject Analysis. 1999

## Structure of FAST

#### Seven facets:

- 1. Topical
- 2. Geographic
- 3. Form
- 4. Chronological
- 5. Personal Name
- 6. Corporate Name
- 7. Title

#### Structure of FAST: Topical Facet

#### □ The topical facet consists of the following: (including events, meetings, conferences)

- Topical main headings
- Topical subdivisions

Examples of topical facet consists of the following:

- Biology—Abstracting and indexing
- Women—Legal status, laws, etc.
- Revolution (France : 1789-1799)
- Donald Duck (Fictitious character)
- Richmond Friends Conference

#### Structure of FAST: Geographic Facet

#### In FAST, these place names will be established and used in indirect order

 For example: Ontario—Toronto (established form in FAST) NOT Toronto (Ontario)

#### Geographic headings will be established in an authority file

#### Examples of the Geographic Facet

- North America
- Arizona—Glen Canyon Dam
- United States—Yellowstone National Park
- Ohio—Columbus—German Village
- Arkansas—Illinois (Washington County : Township)

Structure of FAST: Form Facet

Form facet includes all form subdivisions

Forms were identified by extracting form subdivisions from LCSH authority records

#### Examples of form facet:

- Case studies
- Bibliography—Exhibition catalogs
- Dictionaries
- Biography -- Dictionaries

Structure of FAST: Chronological Facet

□ FAST chronological headings follows the practice recommended by the ALCTS-SAC sub-committee

Chronological headings reflect the actual time period of coverage for the resource

Chronological headings are expressed as either a single numeric date or as a date range.

- The date is expressed in LCSH as a century, such as 20th century, the heading is converted to the date range: 1900-1999
- periods related to geological eras would be expressed as dates in addition to the name of the period: Jurassic period - Jurassic and From 140 to 190 million years ago.

#### Structure of FAST: Chronological Facet

- Restriction on periods is that when a date range is used, the second date must be greater than the first
- Authority records for period headings are not routinely created
- Examples of chronological facet
  - 1975
  - Since 1951
  - To 1856
  - 1939 1945
  - From 140 to 190 million years ago
  - 146 B.C. 323 A.D.
  - 2001 (September 11)
  - 1989 (December 1) 1990 (January 20)

#### Structure of FAST: Personal and Corporate Name

- Personal and corporate name facets are limited to their use as subjects and do not include name-title entries
- Examples of Personal and Corporate Names
  - Abdullah, King of Jordan, 1882-1951
  - Clinton, Bill, 1946-
  - Cappella Sistina (Vatican Palace, Vatican City)
  - United Nations. Administrative Tribunal
  - Dallas Cowboys (Football team)

#### Structure of FAST: Uniform Title

- Uniform title facets were not included in the initial phase of the development, they were included in the later development of FAST
- These facets appear as subject access points
- Format: Title of work (Name of creator)
- Examples of Uniform Title:
  - Children Act 1989 (Great Britain)
  - Hamlet (Shakespeare, William)
  - Final Act (Conference on Security and Cooperation in Europe)

#### Example of bibliographic record

600 10 Lincoln, Abraham, \$d 1809-1865. 650 0 Political leadership \$z United States\$v Case studies. 650 0 Genius \$v Case studies. 600 10 Lincoln, Abraham, \$d 1809-1865 \$x Friends and associates. 650 0 Presidents \$z United States \$v Biography. 651 0 United States \$x Politics and government\$y 1861-1865. 600 17 Lincoln, Abraham, \$d 1809-1865 \$2fast 648 7 1861 - 1865 \$2fast 650 7 Political leadership \$2fast 650 7 Genius \$2fast 650 7 Friendship \$2fast 650 7 Presidents \$2fast 650 7 Political science \$2fast 651 7 United States \$2fast 655 7 Case studies \$2fast 655 7 Biography \$2fast

#### Authority records

FAST uses MARC 21 authority format
 Authority records are created for all FAST headings ,except chronological headings
 100 Personal name

- 110 Corporate name
- 130 Uniform title
- 148 Chronological term
- 150 Topical term
- 151 Geographic name
- 155 Genre/Form

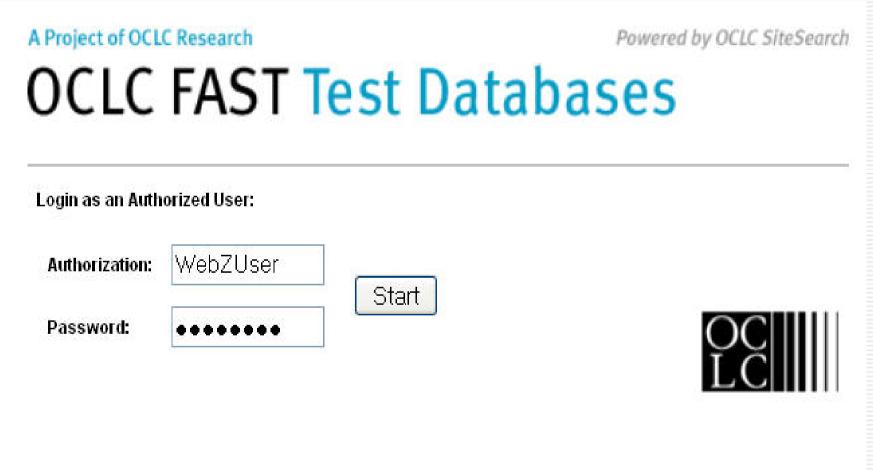
#### Example of authority record

000 cz n 001 fst01103521 003 OCoLC 005 20080715102403.0 008 041024nn anznnbabn || ana d 016 7 fst01103521 **\$2** OCoLC 040 OCoLC **\$b** eng **\$c** OCoLC **\$f** fast 150 Sailing \$x Safety measures 688 LC (2008) Subject Usage: 11 688 WC (2008) Subject Usage: 57 750 0 Sailing \$0 (DLC)sh 85116532 \$w nc

In 2006: Personal name headings 510,095 Corporate name headings 283,581 Topical headings 412,709 Geographic name headings 148,960 Form headings 694 **Total FAST authorities 1,356,039** 

In 2009: 1,600,000

#### FAST database (http://fast.oclc.org)



Only the default account/password is currently required. Press Start to begin.

#### Search Results

(hw: sailing) not rs= "obsolete"

#### 70 Hits Found

refine sort

Fast Authority
 File : 70

- 44. 150 Sailboats Database: Fast Authority File
- 45. 150 Sailing Database: Fast Authority File
- 46. 150 Sailing barges Database: Fast Authority File
- 47. 150 Sailing barges--Models Database: Fast Authority File
- 48. 150 Sailing cards Database: Fast Authority File
- 49. 150 Sailing clubs Database: Fast Authority File
- 50. **150** Sailing--Computer-assisted instruction Database: Fast Authority File

Records: 41 - 50 Jump to: 1 11 21 31 41 51 61

<u>Keywords in</u> <u>All Headings</u>	<u>Advanced</u>	Keywords in All Headings Keywords in Topical Headings Keywords in Geographic Headings Keywords in Event Headings	
		Keywords in Personal Name Headings Keywords in Corporate Name Headings Keywords in Uniform Title Headings Keywords in Period Headings Keywords in LC Source Headings	ity File
		Full Headings Subfield Full SeeAlso Heading LC Source Headings	
	and 💌	FAST Authority Record Number (ARN) Record Status Level of Establishment Geographic Area Code (GAC) Geographic Feature	
No Related Topics	and 💌	Coordinate LCCN for LC Source Headings Keywords in All Headings	

003	OColC
005	20091009130205.0
008	060620nn anznnbabn    ana d
016	7 fst01205798 <mark>\$2</mark> 0CoLC
034	<mark>\$d</mark> W0792459
040	OCoLC <mark>\$b</mark> eng <mark>\$c</mark> OCoLC <mark>\$f</mark> fast
043	n-cn-on
151	Ontario <mark>\$z</mark> Toronto
451	Ontario <mark>\$z</mark> Corporation of the City of Toronto
451	Ontario 🗦z City of Toronto
670	GeoNames [algorithmically matched]
688	LC (2008) Subject Usage: 1,798 (1,831)
688	WC (2008) Subject Usage: 23,270 (23,659)
751	0 Toronto (Ont.) <mark>\$0</mark> (DLC)n 79079328
751	7 Toronto <mark>\$0</mark> (GeoNames)6167865 <mark>\$2</mark> geonames <mark>\$w</mark> nnna

## Mapping from FAST to DC

MARC 21 tag	FAST Facet	Qualified Dublin Core
650 \$a	Topical	Subject
6xx \$x	Topical	Subject
бхх \$у	Topical	Subject
6xx \$y	Chronological	Coverage.temporal
6xx \$v	Form	Туре
651 \$a	Geographic	Coverage.spatial
6xx \$z	Geographic	Coverage.spatial
600 \$abcdq	Personal name	Creator/Contributor
610 \$abndc	Corporate name	Creator/Contributor

## Review by ALA ALCTS Subject Analysis Committee, Subcommittee on FAST

#### Conclusion:

- Topical headings and topical subdivisions appear to be properly constructed.
- Most topical headings cover the "aboutness" when postcoordinated. Some become very generic.
- There are relationship problems when some pre-coordinated strings of different facets are broken up.
- Geographic headings make sense as constructed in indirect order.
- Users might not know how FAST geographic headings are constructed.
- Separation of terms from 600 could create ambiguities and relation problems.

## Review by ALA ALCTS Subject Analysis Committee, Subcommittee on FAST

Example:

LCSH: 651 0 India \$x History \$y 18th century 651 0 Great Britain \$x Colonies \$z Asia \$x Administration

FAST: Topical: Colonies \$x Administration

Topical: History Geographic: India Geographic: Asia Geographic: Great Britain Chronological: 1700-1799

## Pilot projects

By U of North Dakota, U of Florida, Brigham Young U.

Conclusion:

- Easy to assign
- Brief training to non-cataloguing staff would led to good results.
- Searching on FAST database is difficult and confusing.
- Training non-cataloguing staff to assign FAST headings is not a real problem. The real problem is training them to do subject analysis and specificity.

## Implementation at University of North Dakota (http://www.und.nodak.edu/dept/library/digital/McDonald.htm)

## NORTH DAKOTA

#### CHESTER FRITZ LIBRARY DIGITAL COLLECTIONS

#### STUART MCDONALD CARTOON COLLECTION

Search

or Browse

## STUART MCDONALD EDITORIAL CARTOONIST

#### The Stuart McDonald Cartoon Collection

Stuart McDonald's cartoons appeared in the Sunday edition of the Grand Forks Herald from 1961-1967. His cartoons also appeared in the North Dakotan from 1965-1968. The original cartoons measure 11x14 inches, and may be found in <u>the Stuart McDonald Papers, OGL #390</u>.

In 1963, the Grand Forks Herald published a compilation of 112 of Stuart McDonald's cartoons in a book entitled The McDonald Book: A Collection of Editorial Cartoons by the Grand Forks Herald's Award Winning

#### Implementation at University of North Dakota

Dakota

A First Hand Introduction

Uncle Sam; American Legion Auxiliary,

#### Title Subject

Subject.topical.FAST Uncle Sam (Symbolic character) Richardson's ground squirrels Subject.topical.FAST.2 Subject.topical.FAST.3 Women - Education Subject.topical.FAST.4 Political science - Study and teaching Subject.topical.FAST.6 Democracy - Study and teaching Subject.topical.FAST.5 Citizenship - Study and teaching Subject.geographic.FAST North Dakota Subject.chronological.FAST 1961-1969 Subject.nameCorporate.LCSH American Legion. Auxiliary Subject.nameCorporate.LCSH.2University of North Dakota Subject.nameCorporate.LCSH.3 Flickertail Girls State

#### Updates from ALA Midwinter by SAC Subcommittee on FAST

The development phase is now completed.

The book by Lois Chan and Ed O'Neill is being published by Libraries Unlimited and is expected to be available before the annual conference.

Efforts now focus on enrichment of FAST authority records with additional information and supporting different applications.

The FAST team is interested in finding more opportunities for collaboration and experimentation.

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