

FAST (Faceted Application of Subject Terminology) Users: Summary and Case Studies

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Updates:

3 September 2013, pp. 30-33, updated RMIT Publishing case study.

16 September 2013, pp. 15, updated Universite of Quebec in Montreal details in Table 2; pp.

47, added screen shot to Universite of Quebec in Montreal case study.

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Introduction

Over the past ten years, various organizations, both public and private, have expressed interest in implementing FAST in their cataloging workflows. As interest in FAST has grown, so too has interest in knowing how FAST is being used and by whom.

Since 2002 eighteen institutions (see table 1) in six countries have expressed interest in learning more about FAST and how it could be implemented in cataloging workflows. Currently OCLC is aware of nine agencies that have actually adopted or support FAST for resource description. This study, the first systematic census of FAST users undertaken by OCLC, was conducted, in part, to address these inquiries. Its purpose was to examine:

- how FAST is being utilized;
- why FAST was chosen as the cataloging vocabulary;
- what benefits FAST provides; and
- what can be done to enhance the value of FAST.

Interview requests were sent to all parties that had previously contacted OCLC about FAST. Of the eighteen organizations contacted, sixteen agreed to provide information about their decision whether to use FAST (nine adopters, seven non-adopters).

This document presents:

- a brief overview of FAST;
- a brief analysis of common characteristics of parties that have either chosen to adopt FAST or chosen against using FAST;
- suggested improvements for FAST vocabulary and services;
- tables summarizing FAST adopters and non-adopters; and
- sixteen individual “case studies” presented as edited write-ups of interviews.

Please note: OCLC Research also uses FAST in several prototypes. Thus, it is treated as an adopter in the remainder of this report, including the case-study write-ups, in order to share our own assessment of FAST. (See table 4 for a comprehensive list of OCLC services using FAST.)

About FAST

FAST (Faceted Application of Subject Terminology)¹ is derived from the Library of Congress Subject Headings (LCSH), one of the library domain's most widely-used subject terminology schemes. The development of FAST has been a collaboration of OCLC Research and the Library of Congress.

The origin of FAST can be traced to observations by OCLC Research staff involved with the OCLC Cooperative Online Resource Catalog (CORC)², which focused on the cataloging of Web resources. CORC participants typically wanted to be able to adopt simple, low-cost, low-effort approaches to describing Web resources (e.g., using Dublin Core rather than AACR2 and MARC). In the course of the CORC project, it became clear that a significant barrier to minimal-effort resource description was the lack of an easy-to-learn and -apply general subject vocabulary.

Additionally, work during the same time period by the Subcommittee on Metadata and Subject Analysis of the Association for Library Collections and Technical Services' Subject Access Committee identified specific functional requirements of subject data in the metadata record (ALCTS 1999), and these requirements mapped well to the intended outcomes of what would become the FAST project.

So, FAST has been developed in large part to attempt to meet the perceived need for a general-use subject terminology scheme which is:

- simple to learn and apply;
- faceted-navigation-friendly; and
- modern in its design.

The full development of FAST has required several years and resulted in an eight-facet vocabulary with a universe of approximately 1.7 million headings across all facets. FAST facets are designed to be used in tandem, but each may also be used independently. The rules of application are very simple.

Documentation has been made available in the form of a published monograph (Chan and O'Neill 2010), and FAST has been made available by OCLC in various online tools and published as linked data³. Additionally, OCLC Research has made significant use of FAST for various research activities and in several prototypes, and these uses have led to improvements in FAST.

Adopters of FAST

Institutions which have implemented FAST have done so for a variety of purposes, from using it exclusively for cataloging digital materials to making it the primary cataloging vocabulary.

The FAST project team, based on anecdotal discussions over the years, has assumed that FAST would appeal most to agencies needing a rich but low-investment vocabulary. Adopters interviewed for this report validated this basic appeal of FAST.

A manual categorization of comments by adopters indicates [number reporting in parentheses] that: ease of use (8), simple syntax (5), FAST's suitability for use by non-specialist staff (5), one-to-one heading-to-authority record structure(4), and the rich vocabulary (4) features of FAST were the most-frequently cited, positive attributes of FAST. The next most cited attributes were: ease of learning (3), availability as linked data (3) , support for faceted navigation (2), ease of implementation (2), and FAST's potential value as a "super vocabulary" to facilitate uniform indexing of metadata from multiple sources and/ or for a diverse range of resources (see figure 1).

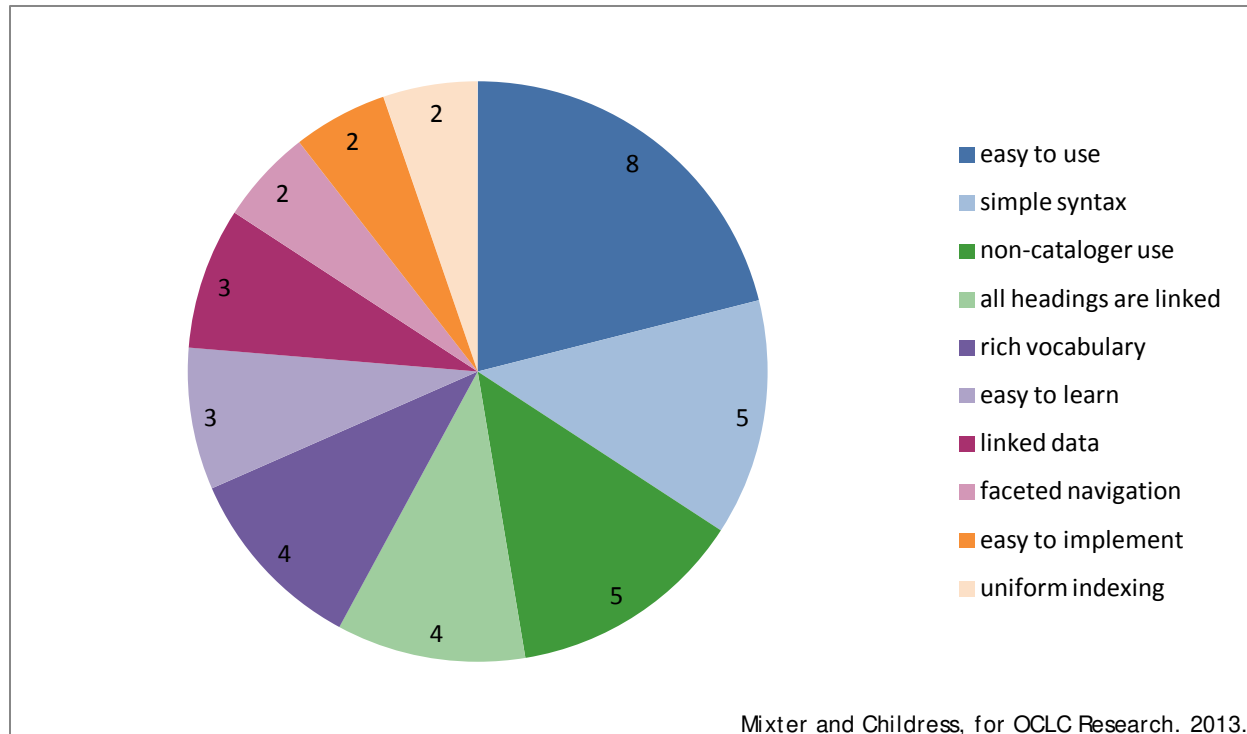


Figure 1. Positive attributes cited by FAST adopters

Other positive attributes, each cited by only a single agency, included: the usefulness of FAST tools (searchFAST, assignFAST), the ability to make quick assignment of FAST headings, FAST's short strings (when compared to other vocabularies), and the importance of FAST being published under an open license.

The types of resources for which FAST headings are being assigned are varied and include: main-stacks library materials, journal articles, book chapters, digital materials (including datasets, images, historical documents, and institutional repository resources), rare books, and state/ local government documents. Several of the agencies have used or considering using FAST for short-term special projects, but the majority of those interviewed are using FAST routinely for selected categories of resources.

For those agencies that have switched from another vocabulary to FAST, the most common predecessor vocabulary is LCSH. Several agencies report using FAST (selected facets) in combination with another vocabulary or vocabularies.

Based on mentions in the interviews of specific facets, the most frequently adopted facet is Topics followed by Geographic Name and Form/ Genre. Other facets are used far less frequently (see figure 2).

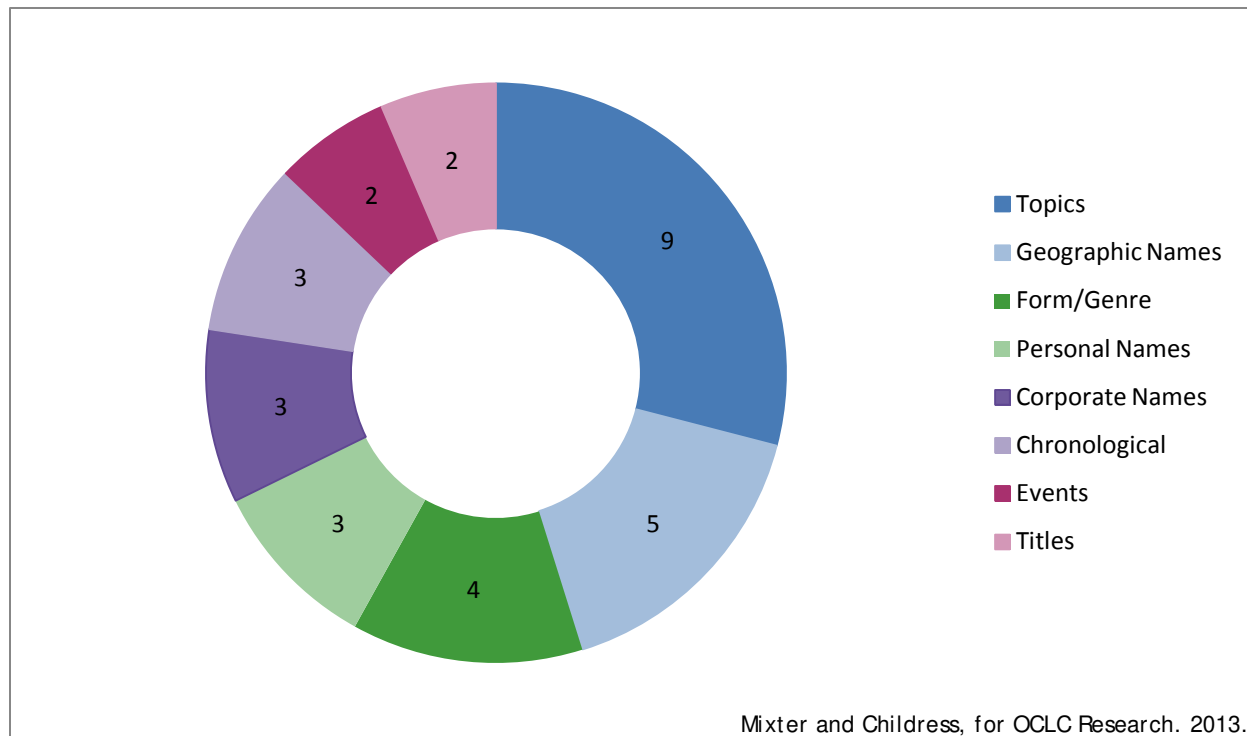


Figure 2. FAST facets use by adopters

The types of institutions represented among the adopters of FAST include four universities (Oxford, UvA, UIC, UND), a national library (the National library of New Zealand/ Te Puna Mātauranga o Aotearoa), a special library (the Clark), a publisher (RMIT), and other agencies (Databib, TRCDL, OCLC) (see table 1). Adopters are located in five countries: six in the United States, and one each in Australia, the Netherlands, New Zealand, and the United Kingdom.

A variety of system environments for metadata editing and user discovery were referenced, but only one system, CONTENTdm, received multiple mentions (by two of the agencies interviewed).

Many of the agencies have adopted FAST for specific categories of resources. The Databib and RMIT are relying on FAST as their sole or primary controlled vocabulary.

Databib initially made use of LCSH but found it cumbersome for their particular purpose, cataloging data repositories, and switched to FAST. FAST supports search and navigation on the Dababib website and is also expressed in linked data (RDFa) output by Databib.

RMIT, a publisher that provides subscription databases to libraries, has chosen to adopt FAST for metadata it creates to describe journal articles, book chapters, books, and other materials. In describing the choice to switch from LCSH to FAST, RMIT summarizes the reasons behind the choice this way (Note: Informit is the name of an RMIT system):

FAST enables Informit to continue to index with a subject scheme that has the richness of topics of LCSH, but in a more efficient form to use, apply and manage. Benefits for customers will include: easier searching across a wide spectrum of information resources in diverse formats; and faster turnaround for full text materials. (RMIT 2011, p. 2)

At least two of the adopters have engaged in structured evaluation of FAST. The National Library of New Zealand did a formal evaluation and issued an internal report, which they graciously shared with the FAST team at OCLC. UvA is making pilot use of FAST as part of a plan of evaluating whether to continue to use FAST going forward.

Broadly speaking, FAST has been perceived by adopters as a superior alternative because it is easier, cheaper, and faster to apply; and/or because of FAST's perceived added value as a means of achieving superior indexing and faceted displays in discovery systems.

Non-adopters of FAST

When interviewed for this study, non-adopters cited many of the same positive attributes of FAST as adopters, but with some differences in emphasis (see figure 3). FAST's simple syntax was the most-often-cited positive attribute. Because of the small number of agencies interviewed, many attributes were referenced by only a single interview subject.

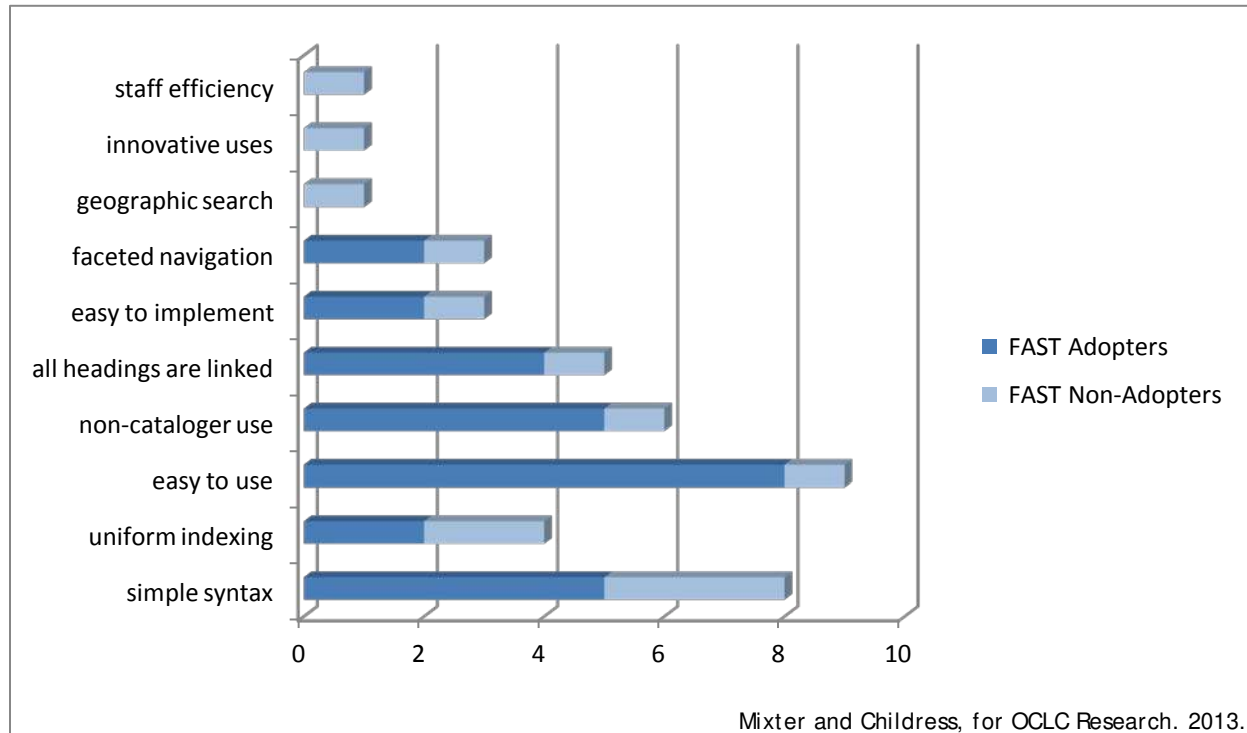


Figure 3. Positive attributes of FAST

Overall, reasons for not choosing FAST varied and often reflected specific time-and-place considerations that did not reflect any shortcomings in FAST. Nevertheless, there were some re-occurring themes in cases where FAST was not adopted in favor of alternatives; reasons such as an absence of customer support and concerns about OCLC's commitment to FAST going forward.

Three agencies (University Of Texas School Of Public Health at Houston, the Biodiversity Heritage Library, and People of the Founding Era) chose not to adopt FAST for funding and/ or administrative reasons. One agency (University of Quebec in Montreal) has developed a French language vocabulary similar to FAST.

Two parties did identify specific barriers to their use of FAST: Minnesota State University, Mankato had shown interest in using FAST geographic facets headings but abandoned the idea after communications between the school and OCLC broke down in late 2006. Olha Buchal, a former Ph.D. student at the Western University of Ontario, considered using FAST in her Ph.D. research but chose instead to use LCSH due to limitations in the geographic headings.

User feedback on FAST vocabulary and services

The interviews presented a welcome opportunity to learn about not just the respective agencies' use, or considered use, of FAST, but also their overall experience with FAST as a "product" (albeit not a true OCLC product, as FAST is still a research project). There were some consistently mentioned areas for improvement, issues that pose either barriers to use or cause for concern. These include:

- **Better customer service and communication:** The email correspondence from interested parties indicates that requests for further information regarding the development of FAST and FAST tools were frequently ignored or not followed up. The lack of communication caused at least one of the interested organizations to abandon the idea of using FAST. In particular, OCLC needs to communicate changes and updates, including development, release, and update notes, to FAST on its website and by other means.
- **User proposals:** Respondents have requested a way to suggest new or revised FAST headings for authorization consideration.
- **Implementation tips and advice and documentation:** Users want suggestions from OCLC on how libraries can use the FAST tools to help improve the FAST implementation as well as its user experience. At least four interview subjects mentioned the value of the Chan and O'Neill book, but there also were requests for briefer, online documentation as well.
- **Commitment:** Some respondents asked for a statement of commitment from OCLC in regards to how FAST will be supported in the future.
- **Enrichments:** The Geographic headings are of particular interest to current FAST users, but there is a need to assure that more headings have associated latitude and longitude coordinates.
- **Fix Form/Genre:** Some respondents would prefer the ability to choose between FAST and LC Form/ Genre Headings.
- **Add FAST to WorldCat:** Some respondents requested the addition of FAST headings to WorldCat records and the implementation of FAST into WorldCat.org.
- **Disclose user base:** University of Amsterdam, which is currently using FAST in a pilot study, is concerned that no other large research universities (that they are aware of) are currently using FAST.

All of the organizations that were interviewed expressed interest in the tools associated with the FAST project (searchFAST, mapFAST, assignFAST and the FAST linked data API). In addition to improving cataloging workflow, the tools could also be used for improving end-user experience (this is possible due to the simple syntax associated with FAST headings).

Table 1. Agencies known to have adopted FAST⁴

Agency (Country)	FAST Usage	Facets used	Notes	Case #
Bodleian Libraries, University of Oxford (UK)	Institutional repository, data catalog, institutional data archive	Topical	FAST is used in 3 services	1
Databib.org (US)	Used for cataloging data repositories	Topical	Using FAST Linked Data	2
National Library of New Zealand (NZ)	Indexing national articles	Geographic, Topical, and Forms	Replaced use of APAIS ⁵	3
OCLC (US)	Classify, Fiction Finder, Kindred Works, WorldCat Identities, more...	All facets	(Interview covers selected OCLC services)	4
RMIT Publishing (AU)	Article, book chapter, book indexing	All facets	RMIT's Informat service ⁶	5
Sterling and Francine Clark Art Institute Library (US)	Cataloging a rare books collection	Topical and Form	Used in CONTENTdm	6
Theodore Roosevelt Center Digital Library, Dickinson State U. (US)	Cataloging digitized materials	Topical, Event, Geographic, and Corporate names ⁷	Used in a DARMA system	[No Response]
University of Amsterdam (NL)	Cataloging monographic materials	All facets		7
University of Illinois at Chicago (US)	Cataloging IL state documents	[unknown]		8
University of North Dakota (US)	Cataloging digitized materials	All facets	Used in CONTENTdm	9

Table 2: Agencies known to have considered, but not adopted FAST⁸

Agency/Person (Country)	Possible Use	Facets	Notes	Case #
Biodiversity Heritage Library (US)	Cataloging digitized materials	Topical		10
California Historical Society (US)				[No Response]
Minnesota State University, Mankato (US)	Cataloging student research papers	Geographic		11
Monash University Library (CA)				[No Response]
Olha Buchel, University of Western Ontario (CA)	Visualization of Ukrainian materials	Geographic		12
People of the Founding Era (US)	Cataloging digitized materials			13
University of Quebec in Montreal (CA)	Mapping between thesauri, indexing all types of materials	All facets	FAST is similar to a vocabulary from UQAM	14
University of Texas School of Public Health at Houston (US)	Local materials			15
World Maritime University (SE)		Geographic, Topical, Uniform Titles		16

Conclusion

A primary motivation for undertaking this census of FAST adopters was to enumerate the agencies using FAST, understand their use cases, and gain a sense of the degree to which FAST was suitable to purpose. Since OCLC did not know in advance whether the agencies that had expressed interest in FAST were adopters, this census has also included information about non-adopters, the better to understand cases where FAST was considered but not adopted. This census is also a response to the most common question by parties that use FAST or are considering using FAST—“Who is using FAST?”

The case studies that follow present summaries of interviews with sixteen agencies, including nine adopters and seven non-adopters. The interviews were conducted by phone in late 2012 and early 2013. Initially, the intent was to create a brief report for OCLC’s internal use, but our interview subjects and other parties expressed such interest in seeing the report that we

returned to our interview subjects for permission to include their interviews in a publicly-accessible version of the document. All subjects readily agreed. Draft versions of the summaries were provided to the respective interview subjects for review and correction. Final edits to the summaries have been done by OCLC Research staff.

OCLC Research is very grateful to all of our interview subjects for being generous with their time and providing very useful information and in some cases screenshots and other material. It has also been very helpful and illuminating for the FAST team to have feedback on how FAST, FAST tools, and the customer service aspects of supporting FAST can be improved.

Case Studies

1. Bodleian Libraries (University of Oxford)

Interview Date: 17 May 2013

Contact: Sally Rumsey

Interview Notes: The Bodleian Libraries has recently been developing a variety of new services to help users from the University of Oxford community submit and retrieve deposited information resources (e.g., reports, papers and research datasets). In developing these services Bodleian staff decided that a single, preferred controlled vocabulary should be used to support uniformity in indexing across all of the new services.

One of the initial challenges in implementing this approach was identifying a single vocabulary that could cover the wide range of topics but also be specific enough to add a high amount of detail about a given topic. Additionally, the staff preferred a vocabulary that was easy and intuitive to use and implement. Finally, the library wanted to use Linked Data but did not want to reinvent the wheel and create their own custom linked data subject vocabulary.

Currently scholars of the University use a wide range of topic-specific vocabularies within their own specialist subject disciplines (e.g., the Journal of Economic Literature (JEL) Classification System⁹ and the Mathematics Subject Classification¹⁰ from the AMS (American Society of Mathematics)). FAST was identified as a candidate general-use vocabulary in the course of investigating various options and eventually selected as the vocabulary of choice for the Bodleian Libraries' research outputs services. One of the reasons for choosing FAST was the intuitive nature of navigating the various subject headings. Ms. Rumsey also noted that technical staff at the Bodleian Digital Libraries Systems and Services were impressed by the Linked Data that FAST supported. (Ms. Rumsey first heard about the FAST vocabulary around 2009 and noted that FAST was considered for use in the JISC-funded Building the Research Information Infrastructure (BRII) project¹¹, which attempted to create an entity store that could be used as a foundation for all of the Bodleian Libraries' repositories.)

The FAST vocabulary is being implemented in three different projects: the Oxford University Institutional Repository, the data catalog (DataFinder) and the DataBank institutional data archive. FAST will not be used by library catalogers, but, rather, manual deposit end-users

will use FAST to add subject terms to submitted works. Additionally, Oxford hopes to add FAST subject terms to material that is bulk-uploaded to the various systems though this will require the use of a mapping tool to convert existing subject headings to FAST. The library staff have not developed any training material for using the FAST vocabulary, but they intend to develop a short “how to” section for users.

2. Databib.org

Interview Date: 7 February 2013

Contact: Michael Witt, Purdue University

Interview Notes: Professor Witt first heard about FAST two years ago through an OCLC news release. The vocabulary looked very applicable to the work that he was doing with the IMLS-funded [Databib project](#),¹² but at the time, the OCLC FAST licensing was too restrictive, and therefore he opted not to use it. In December of 2011 OCLC released FAST as experimental Linked Data and changed the licensing agreement to an Open Data Commons Attribution License. This change in licensing as well as the fact that FAST was now available as Linked Data prompted Witt to reconsider using FAST in the Databib.org project.

Databib.org is a website that catalogs data repositories and allows users to quickly and easily find and access data for research (The repositories primarily contain research datasets such as instrument and sensor data, spreadsheets, interview transcripts, surveys, observation logs, bioinformatics data, software source code, etc.). Prior to using FAST, Databib.org was using LCSH for subject cataloging, but it decided that the complexity of the vocabulary was too frustrating, and it took too much time to assign terms to a record. The LCSH dataset that Databib.org was using included over 400,000 terms/ URIs, of which only about 3,000 were used. In October of 2012 Databib.org began using FAST as its primary cataloging vocabulary. The team used the FAST Converter to match the existing LCSH terms with FAST headings. Approximately 2,000 terms matched automatically; another 100 required manual intervention to match.

Databib.org switched to FAST (for a sample display, see figure 4) because the vocabulary was easier to use and implement than LCSH. Mr. Witt commented that FAST was developed for applications such as Databib.org. It allows inexperienced catalogers to add headings quickly, and also allows users to easily discover material by using facets. Databib.org users can submit records for data repositories and subsequently catalog them with appropriate subject terms. Consequently the team needed a simple vocabulary that could be used by people having little or no knowledge of cataloging vocabularies or practices.

Databib.org downloads the FAST Topical facet headings to its local system and has an auto-complete function that assists users in finding and selecting terms for use on a record. Users spend approximately 20 minutes cataloging a record, each of which requires a minimum of one subject heading. After a record is submitted to Databib.org, it is reviewed by the Editorial Board and, if need be, changes or additions are made.

Databib.org does not have any professional user's guide for FAST but does provide a one-page outline for users to reference when adding subject headings. Databib.org currently has over 500 repositories cataloged using FAST. In addition to simply adding the string subject term, Databib.org also exposes the FAST URI serialized as RDFa (see figure 5) with the hope that, as the Semantic Web continues to develop, Linked Data will become more relevant and important for data organization, data searching, and data retrieval.

Databib
Find Repositories | Submit | Connect | About Login/Register

[Go Back]

Title: Gene Expression Nervous System Atlas (GENSAT)
URL: <http://www.gensat.org/>
Authority: Nathaniel Heintz, Rockefeller University

Subjects:
 Gene expression Mice--Genetic aspects Mice--Genetics Nervous system
 Neurology Neurology--Data processing

Description:
 The GENSAT project aims to map the expression of genes in the central nervous system of the mouse. It is a collection of pictorial gene expression maps of the brain and spinal cord of the mouse.

Access: Open
Start Date: circa 2001
Location: United States

Reuse: Contents of this work may be downloaded, copied, and cited. The GENSAT database and its contents may not be redistributed or sold, in whole or in part, without specific written permission.

Deposit: Closed
Type: Institutional/Disciplinary

[Edit](#)

Like 0 Tweet 0 +1 0 Share

The GENSAT Project at The Rockefeller University
 GENSAT is a NIH-funded, publicly available gene expression atlas of the developing and adult central nervous system in the mouse. The project also generates transcript, BAC, cDNA, and EST cDNA complementary DNA (cDNA) libraries, which are available to researchers (contact us for more information).

Project Director: Nathaniel Heintz
Principal Investigator: Louis B. Barres
Supported by: National Institutes of Neurological Disorders and Stroke, contract # 1N01-NS-72019
National Institutes of Health Neuroscience Blueprint
Co-Investigator: Charles Carter, Oak Street Project
 Supported by National Institutes of Mental Health

Key Development Sites: **Key Support Sites:** **Key Support Sites:** **Key Support Sites:** **Key Support Sites:**
 Biogen Idec, Inc. (Boston, MA) Genentech, Inc. (San Francisco, CA) Genentech, Inc. (San Francisco, CA) Genentech, Inc. (San Francisco, CA) Genentech, Inc. (San Francisco, CA)

Annotations
 Add an Annotation:

[Post](#)

RDFa **PUBLIC DOMAIN**

Figure 4. An individual record in Databib.org.

```

<?xml version="1.0" encoding="utf-8" ?>
- <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#" xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:dcterms="http://purl.org/dc/terms/" xmlns:foaf="http://xmlns.com/foaf/0.1/"
  xmlns:cc="http://creativecommons.org/ns#" xmlns:ore="http://openarchives.org/ore/terms/" xmlns:databib="http://databib.org/ns#"
  - <rdf:Description rdf:about="databib.org/repository/598">
    <dcterms:title>Gene Expression Nervous System Alias (GENSAT) </dcterms:title>
    <foaf:homepage>http://www.gensat.org/</foaf:homepage>
    <dcterms:publisher>Nathaniel Heintz, Rockefeller University </dcterms:publisher>
    <dcterms:description>The GENSAT project aims to map the expression of genes in the central nervous system of the mouse. It is a collection of pictorial gene expression maps of the brain and spinal cord of the
      mouse. </dcterms:description>
    <databib:status>Open </databib:status>
    <dcterms:created>circa 2001 </dcterms:created>
    <dcterms:spatial>United States </dcterms:spatial>
    <databib:reusePolicy>Contents of this work may be downloaded, copied, and cited. The GENSAT database and its contents may not be redistributed or sold, in whole or in part, without specific written
      permission. </databib:reusePolicy>
    <databib:depositPolicy>Closed </databib:depositPolicy>
    <databib:type>Institutional/Disciplinary </databib:type>
    <dcterms:subject>http://id.worldcat.org/fast/939613 </dcterms:subject>
    <dcterms:subject>http://id.worldcat.org/fast/1019359 </dcterms:subject>
    <dcterms:subject>http://id.worldcat.org/fast/1019357 </dcterms:subject>
    <dcterms:subject>http://id.worldcat.org/fast/1036392 </dcterms:subject>
    <dcterms:subject>http://id.worldcat.org/fast/1036390 </dcterms:subject>
    <dcterms:subject>http://id.worldcat.org/fast/1036080 </dcterms:subject>
    <dcterms:rights rdf:resource="http://creativecommons.org/licenses/by-nc/2.5/" />
  </rdf:Description>
</rdf:RDF>

```

Figure 5. An RDF sample in Databib.org.

3. National Library of New Zealand (Te Puna Mātauranga o Aotearoa)

Interview dates: 17 and 25 October 2012

Contacts: Karen Rollitt and Diana Sola (interviewed on separate occasions)

Interview Notes:

Karen Rollitt, 17 October—Ms. Rollitt first heard about FAST when Eric Childress and Ed O’Neill ran a tutorial at the 2003 Dublin Core Conference (DC-2003) in Seattle, Washington (USA). The National library of New Zealand (NLNZ) is currently using FAST for indexing national articles in [Index New Zealand](#)¹³. They began using FAST in 2005, and currently the article collection includes approximately 750,000 items. Prior to using FAST, the library used the APAIS (Australian Public Affairs Information Service) Thesaurus for all of their indexing. It was determined that APAIS was not detailed enough, and there was fear that the thesaurus would cease to be updated or maintained. The library adopted FAST because it was more intuitive and easier to use than LCSH. Since the library is only indexing articles, it was not cost-effective to train staff—some of whom are not catalogers—to use LCSH. In addition to being easier to use than LCSH, the library liked the fact that all FAST files are authority files. This saves time and effort for indexers. The library also uses *Ngā Ūpoko Tukutuku / Māori Subject Headings*¹⁴ to help provide localized and culturally specific terms.

For the purposes of indexing articles, NLNZ uses FAST topical and geographic headings (for a sample record, see figure 6). The library has been using FAST since 2005. The library has had problems downloading FAST updates and would like continued support or maintenance of the vocabulary. Ms. Rollitt is also concerned that there is little communication from OCLC about updates or development news regarding FAST. Even though the library has a local copy of the FAST authority files, the indexers frequently use searchFAST to find the most up-to-date terms. This is due primarily to difficulties downloading new facet headings to their local systems. The source of these difficulties remains unclear.

Diana Sola, 25 October—Ms. Sola first became aware of FAST in 2007, while working with the NLNZ Indexing Team. Like Karen Rollitt, she also mentioned that the library had used APAIS prior to adopting FAST. When concerns arose about future maintenance and the broad use of subject terms in the APAIS thesaurus, the library began to consider other possible

vocabularies to use for article indexing, including LSCH. They decided to test FAST for one month due to its relative ease to learn and implement, and the fact that its facets lent themselves well to indexing. The library currently employs 12 indexers, 10 of whom are full-time employees. While the staff is well experienced, not all have cataloging experience. This was one of the factors considered when determining what vocabulary to adopt. After FAST was implemented, the library had initial problems converting from APAIS to FAST, due primarily to problems associated with the local database. There was no initial effort made to retroactively add FAST headings to older records, but the staff is currently doing so during routine database maintenance.

As part of the initial implementation, the NLNZ Indexing Team developed internal training programs and tutorials for indexing staff on how to implement and use FAST. The library currently uses the topical, geographic, and form facets. It has mapped most APAIS headings to FAST, although manual work is required to convert APAIS headings with no direct match to FAST headings. In addition to using FAST authorized headings for indexing, the staff also use FAST's personal names syntax and format for creating their own local list of personal names.

Since 2009, FAST terms have been linked with the library's indexing database so users can use them to search the article database for desired material. In the future, the library would like to be able to suggest new or revised FAST headings for authorization consideration. Additionally, the library would like to receive more regular updates about current FAST developments and releases.

Ms. Sola was familiar with services such as mapFAST, but had not considered using them for any future end-user services. She was interested in hearing about how OCLC researchers think these tools can be used or leveraged by libraries to help improve the FAST implementation as well the end-user experience.


```

000 02028caj a2200289z 450
001 729346
005 20120618122202.0
007 ca aa ---aaaaa
008 120618s2008 nz | g |00 0 eng d
040 __ |a DDQ
045 0_ |a 20080101
245 00 |a China transformed : FTA, socialisation and globalisation |c / by Yongjin Zhang
250 __ |a Offers a different interpretation of the great economic transformation in China today. Argues that there is a deeper and more significant economic transformation in China than spectacular economic growth. Advances the idea that the great economic transformation in China and globalization are mutually constitutive. Looks at the WTO (World Trade Organisation) and the FTA. Examines the processes of China's recent socialization into international society. Investigates China's socialisation with other global norms and common values such as arms control and human rights. Discusses the implications of Chinese economic transformation for the global political economy.
500 __ |a Includes notes
500 __ |a Gathers a selection of papers presented at public events during 2008 and 2009 under the broad theme of 'Challenges facing Aotearoa New Zealand'
521 __ |a Research
630 07 |a Free trade agreement between the government of New Zealand and the government of the People's Republic of China |2 fast
650 17 |a Free trade |x International cooperation |2 fast
650 17 |a International trade |2 fast
650 _7 |a Socialization |2 fast
650 _7 |a Globalization |x Economic aspects |2 fast
651 _7 |a China |2 fast
700 10 |a Zhang, Yongjin |g (University of Bristol)
400 __ |t Yearbook of New Zealand Jurisprudence (Online), |g 2008/2009; v.11/12:p.15-35 |x 2253-363X
773 0_ |t Yearbook of New Zealand Jurisprudence (Online), |g 2008/2009; v.11/12:p.15-35 |x 2253-363X
776 __ |w 635296
856 40 |u http://www.waikato.ac.nz/law/research/centre_for_nz_jurisprudence/volumes-11-and-12,-2008-and-2009 |z Vols 11 & 12, 2008 & 2009 - Te Piringa - Faculty of Law : University of Waikato

```

Figure 6. National Library of New Zealand's use of FAST

4. OCLC Online Computer Library Center, Inc.

Interview Date: 16 January 2013

Contact: Diane Vizine-Goetz, Ph.D.

Interview Notes: Dr. Vizine-Goetz has used FAST in three of her OCLC research prototypes: Classify (see figures 7 and 8 for samples of FAST headings displayed in a search result), Kindred Works, and Fiction Finder. She chose to use FAST primarily because all of the headings were controlled, whereas LCSH is not controlled in WorldCat.org. Her research projects primarily used the topical and geographic facets although in both Kindred Works and Fiction Finder the Form facet was also implemented. FAST is a frequently-used index in OCLC Classify (see table 3 for FAST-use metrics for 2012).

In addition to the authority control of FAST headings, Dr. Vizine-Goetz also liked not having to deal with long LCSH strings that could be confusing to end-users at times. Overall Dr. Vizine-Goetz is very impressed with FAST in regards to its ease of use for both researchers as well as end-users. She noted that she intends to continue to use FAST for internal, self-contained OCLC projects.

Although FAST is easy to use, there were a few problems with some of the current headings and Dr. Vizine-Goetz mentioned a few improvements that could be made to improve the overall utility of the vocabulary for future projects. A challenge with using FAST is that FAST headings are not currently added to a large number of OCLC bibliographic records in the production version of WorldCat, and so are not in WorldCat.org, which makes information retrieval using FAST headings problematic. She suggested that if FAST was implemented into WorldCat.org, search and retrieval using FAST in projects such as Kindred Works could be greatly improved.

Another area of concern for Dr. Vizine-Goetz was FAST's Form facet. She thinks that the various form headings need to be cleaned up to conform to the expanding LCTGF Vocabulary. FAST currently imports and maps headings from both vocabularies, which can cause overlap and confusion on the part of catalogers.

Another facet that Dr. Vizine-Goetz would like to see improved is the chronological headings. She thinks that the headings should be cleaned up to allow the chronological time periods to be matched more accurately with resources.

Another suggestion about possible FAST improvements that Dr. Vizine-Goetz offered was that the FAST team should continue ongoing efforts to add latitude and longitude coordinates to geographical headings.

As a final note, Dr. Vizine-Goetz thought that it would be interesting to see how end-users responded to the FAST's presentation of Uniform Title headings. She is interested in seeing how they use and understand not only the concept of a uniform title while conducting searches but also the structural form of uniform titles (e.g., *Romeo and Juliet* (Shakespeare, William) or *Real Housewives of Atlanta* (Television Program)).

The screenshot displays the FAST search interface. At the top, there are three search input fields: 'Standard Number' (with a help icon), 'Title/Author', and 'Subject Heading'. Below these is the 'Search Results' section, which shows 'Subject results for: Ohio-Columbus'. The results are displayed in a table with columns for 'Heading', 'Type', and '# Works'. The table shows 101 results, with the first 25 displayed. The results include various headings such as 'Ohio-Columbus', 'Ohio-Columbus Metropolitan Area', and 'Columbus Public School Systems (Ohio)', each with a corresponding type and number of works.

Heading	Type	# Works
Ohio-Columbus	Place	4494
Ohio-Columbus Metropolitan Area	Place	257
Ohio Penitentiary (Columbus, Ohio)	Corporate Body	68
Columbus Public School Systems (Ohio)	Corporate Body	68
Ohio-Columbus Region	Place	67
Ohio-Columbus Suburban Area	Place	47
Ohio-Columbus-Frankinton	Place	41
Ohio-Columbus-German Village	Place	35
Evangelical Lutheran Theological Seminary (Columbus, Ohio)	Corporate Body	13
Columbus (Ohio). Division of Police	Corporate Body	13
Catholic Church. Diocese of Columbus (Ohio)	Corporate Body	12
Columbus Metropolitan Library (Franklin County, Ohio)	Corporate Body	12
Greater Columbus Convention Center (Columbus, Ohio)	Corporate Body	12
Columbus (Ohio). Division of Water	Corporate Body	11
Columbus and Southern Ohio Electric Company	Corporate Body	10

Figure 7. A list of FAST subjects in search result for OCLC Classify

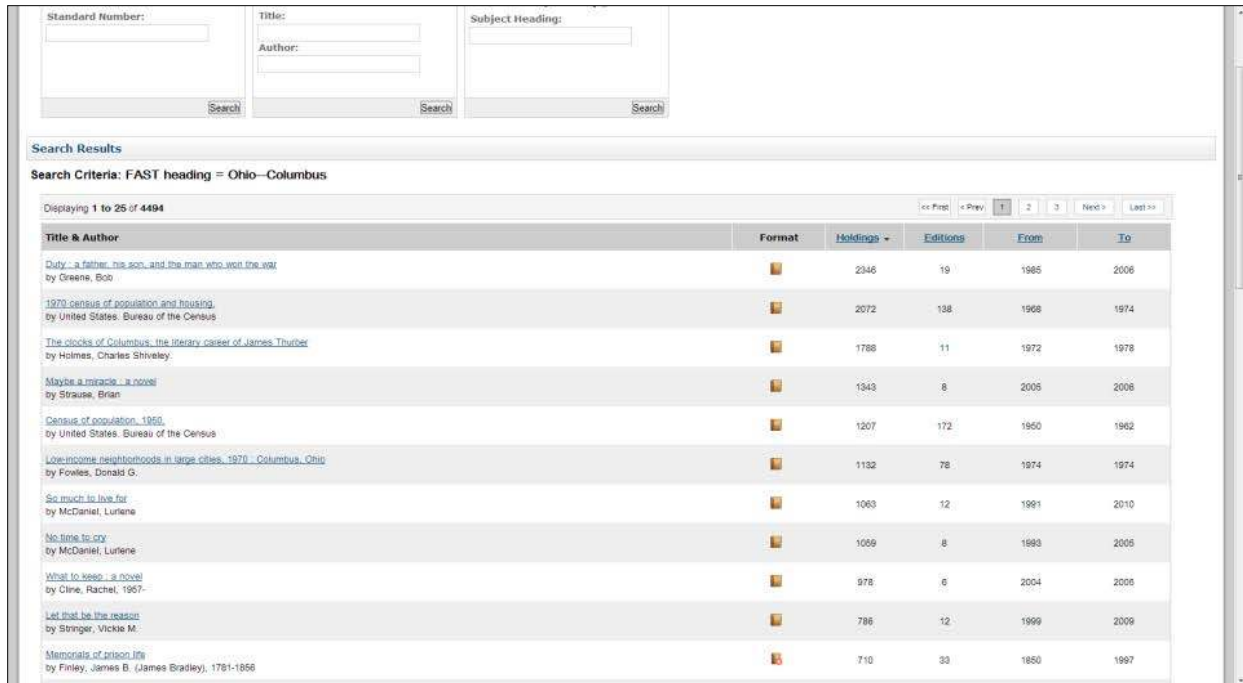


Figure 8. A list of titles in Classify

Table 3 and its associated bar chart below show the number of FAST heading queries that were conducted in Classify throughout 2012.

Table 3. FAST heading queries in Classify (2012)

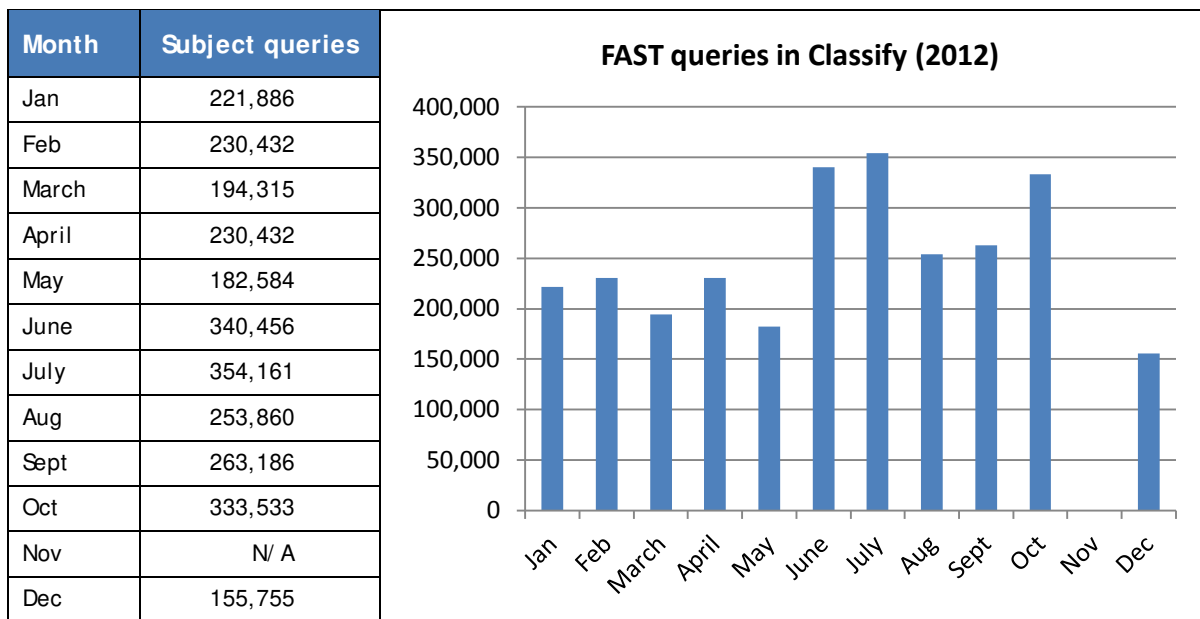


Table 4. OCLC Research projects using FAST

Project Name	URL	Information	Contact Email
OCLC Linked Data	http://www.oclc.org/us/en/news/releases/2012/201238.htm	API: http://oclc.org/developer/documentation/worldcat-identities/response-details	Rick Bennett bennetr@oclc.org
WorldCat Identities	http://worldcat.org/identities/	API: http://oclc.org/developer/documentation/worldcat-identities/response-details	Ralph LeVan levan@oclc.org
WorldCat Genres	http://www.worldcat.org/genres/		Diane Vizine-Goetz vizine@oclc.org
WorldCat Facebook App	https://apps.facebook.com/worldcat/		Bruce Washburn washburb@oclc.org
Enhanced WorldCat (Research Version)	(OCLC internal access only)	Enriched version of WorldCat stewarded by OCLC Research	Kerre Kammerer kammerer@oclc.org
Kindred Works	http://experimental.worldcat.org/kindredworks/		Diane Vizine-Goetz vizine@oclc.org
Classify	http://classify.oclc.org/classify2/api_docs/index.html	API: http://classify.oclc.org/classify2/api_docs/index.html	
Fiction Finder	http://www.oclc.org/research/activities/fictionfinder.html	Currently on hiatus	
assignFAST	http://experimental.worldcat.org/fast/assignfast/	API: http://oclc.org/developer/services/assignfast	
mapFAST	http://experimental.worldcat.org/mapfast/	API: http://oclc.org/developer/services/mapfast	
searchFAST	http://fast.oclc.org/searchfast/	GUI for FAST	
FAST Linked Data	http://experimental.worldcat.org/fast/	API: http://oclc.org/developer/services/fast-linked-data-api	

5. RMIT Publishing¹⁵

Interview Date: 23 January 2013

Contact: Leanne Whitby

Interview Notes: Ms. Whitby first heard about FAST after having discovered and read chapter 12 in *Library of Congress Subject Headings: Principles and Application* by Lois Mai Chan (2005). Her initial reaction to the new vocabulary was that it would be a great replacement for RMIT's existing indexing vocabulary, which at the time relied on LCSH (having used *APAIS Thesaurus* for a number of years). RMIT primarily indexes articles, reports, conference papers (both professional and academic), book chapters and books. All of their indexed materials are available through their website www.informit.com.au.¹⁶

In early 2011 RMIT underwent a project to develop a new indexing interface that used FAST headings as a replacement for LCSH (see figures 9 and 10 for sample displays). The reason for making the switch was primarily based on the ease of use that FAST offered when compared to LCSH. Since the indexers are generally not trained in cataloging or librarianship, there was difficulty in using the lengthy and sometimes complicated LCSH strings to create article subject indexes. Ms. Whitby expressed the concern that LCSH was simply too complex for the average indexer. She also commented that FAST offered improved term governance since all FAST heading are also authority records¹⁷.

The updated indexing interface was launched in February of 2012 (RMIT 2012)¹⁸. The system uses a custom indexing interface that allows indexers to select FAST headings from a dropdown menu with an auto-suggest included to help decrease the time spent finding a desired term. If a specific term is not found, the indexers are instructed to use the OCLC searchFAST service to find the appropriate term and manually import it into their indexing system. Every morning a computer scans all new FAST headings in the RMIT systems, and cross-references them with the FAST SRU database in order to verify they are valid. RMIT utilizes all FAST (i.e., all of the facets) and keeps their database up-to-date by regularly downloading FAST file dumps from the OCLC website¹⁹. RMIT has not created any specific training material for using FAST but has produced and distributes to their indexers guidelines on how to use the custom interface to index material, which also includes coverage on indexing with FAST.

In addition to creating a custom user interface from which indexers can select and assign FAST headings, the RMIT development team also created a custom algorithm to convert existing LCSH terms into FAST headings. RMIT used approximately 169,000 LCSH terms (80,000 of which were only used once), and through using their algorithm they successfully converted 82% over to FAST headings.²⁰ Once the algorithm converted an LCSH term into a FAST term, the RMIT team used FAST Converter to validate the accuracy of the conversion. One of the questions that Ms. Whitby posed was whether OCLC had the ability to help them convert the remaining 18% of the un-encoded LCSH headings into FAST headings. As of now, RMIT still uses the old LCSH headings for terms that could not successfully be converted over to FAST. The algorithm has subsequently been used to retroactively assign FAST headings to material that had previously been indexed using LCSH.

The success of the new system has prompted RMIT to expand the use of FAST to other areas of indexing. The organization is currently implementing FAST indexing into an update of RMIT's Informit TVNews service²¹, which will allow users to search for and find news programs online. Ms. Whitby thought that FAST's faceted nature is very intuitive for users to understand, and thinks it could be leveraged by RMIT to improve overall information search and retrieval. She is also interested in exploring the possibilities of using FAST's Linked Data for future research and development.

Some questions and comments Ms. Whitby had regarding further improvement to FAST included developing better reference guides and vocabulary guidelines. One of the main guidelines utilized during RMIT's FAST vocabulary research and development that went into its indexing system came from Chan and O'Neill's *FAST: Faceted Application of Subject Terminology* (2010). This book was published when RMIT was in the final stage of implementing FAST and was used to guide this effort through completion. Prior to that, the RMIT development team utilized these resources and tools to guide their FAST product development work:

Databases and Tools

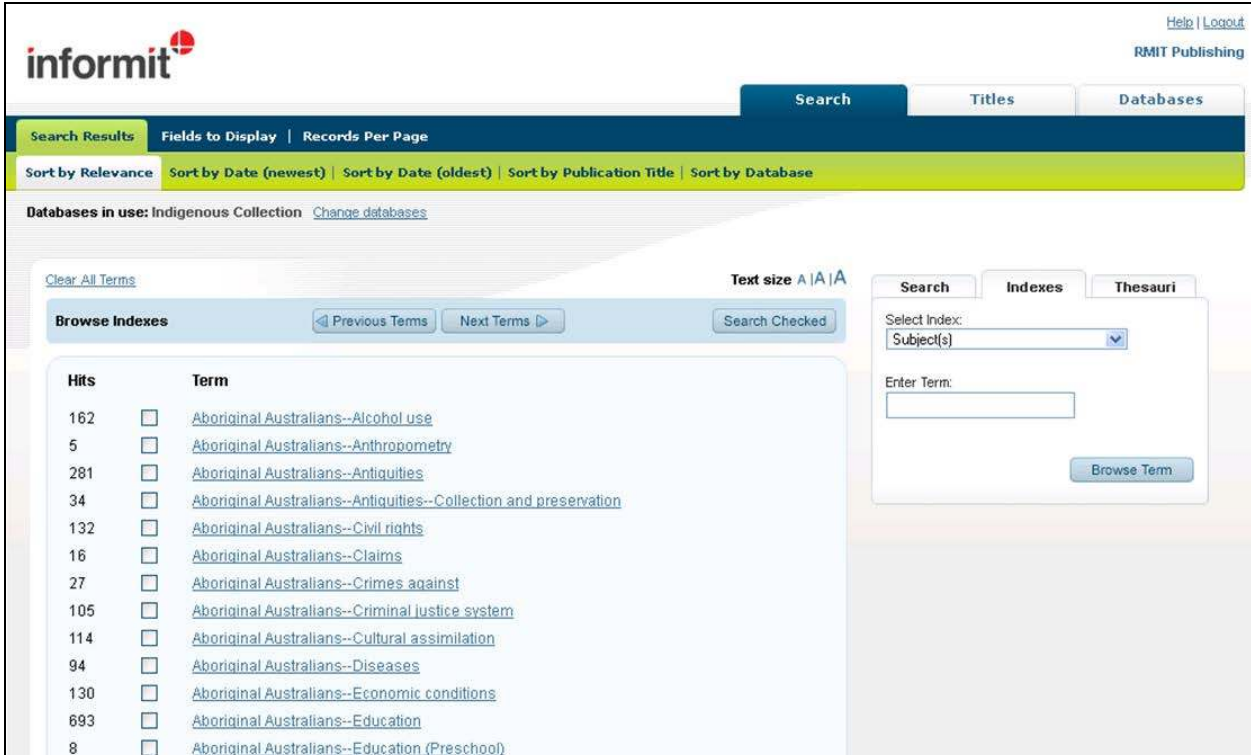
- FAST—full authority file: <http://fast.oclc.org/>
- FAST Converter: <http://experimental.worldcat.org/fast/fastconverter/>
- FAST SRU database: <http://tspilot.oclc.org/fast/?operation=explain&version=1.1>

Resources

- Chan, Lois Mai. 2005. *Library of Congress Subject Headings: Principles and Application*. Westport, Connecticut: Libraries Unlimited. <http://www.worldcat.org/oclc/57373683>.
- O'Neill, Edward T. O'Neill, Lois Mai Chan, Eric Childress, Rebecca Dean, Lynn M. El-Hoshy, and Diane Vizine-Goetz. 2001. "Form Subdivisions: Their Identification and Use in LCSH." *Library Resources & Technical Services*. 45 (October): 187-197. <http://www.ala.org/alcts/sites/ala.org.alcts/files/content/resources/lrts/archive/45n4.pdf>

Additional resources and tools are available at <http://www.oclc.org/research/activities/fast.html>

Ms. Whitby also expressed interest in a more up-to-date and detailed set of guidelines, as well as a more developed and connected forum for asking FAST related questions. She would like to see only FAST headings used in RMIT's subject index database; work remains ongoing until all LCSH terms are converted to FAST.



The screenshot shows the Informit website interface. At the top left is the Informit logo. The top right has links for 'Help | Logout' and 'RMIT Publishing'. Below the logo is a navigation bar with 'Search', 'Titles', and 'Databases' tabs. Underneath is a search results bar with options for 'Search Results', 'Fields to Display', and 'Records Per Page'. Below that is a sorting bar with options: 'Sort by Relevance', 'Sort by Date (newest)', 'Sort by Date (oldest)', 'Sort by Publication Title', and 'Sort by Database'. The main content area shows 'Databases in use: Indigenous Collection' with a 'Change databases' link. Below this is a 'Browse Indexes' section with 'Previous Terms' and 'Next Terms' buttons, and a 'Search Checked' button. A table of hits is displayed, listing terms with their respective hit counts and checkboxes. To the right of the table is a 'Search' panel with 'Indexes' and 'Thesauri' tabs, a 'Select Index' dropdown menu, an 'Enter Term' input field, and a 'Browse Term' button.

Hits	Term
162	<input type="checkbox"/> Aboriginal Australians--Alcohol use
5	<input type="checkbox"/> Aboriginal Australians--Anthropometry
281	<input type="checkbox"/> Aboriginal Australians--Antiquities
34	<input type="checkbox"/> Aboriginal Australians--Antiquities--Collection and preservation
132	<input type="checkbox"/> Aboriginal Australians--Civil rights
16	<input type="checkbox"/> Aboriginal Australians--Claims
27	<input type="checkbox"/> Aboriginal Australians--Crimes against
105	<input type="checkbox"/> Aboriginal Australians--Criminal justice system
114	<input type="checkbox"/> Aboriginal Australians--Cultural assimilation
94	<input type="checkbox"/> Aboriginal Australians--Diseases
130	<input type="checkbox"/> Aboriginal Australians--Economic conditions
693	<input type="checkbox"/> Aboriginal Australians--Education
8	<input type="checkbox"/> Aboriginal Australians--Education (Preschool)

Figure 9. A list of FAST index terms displayed in Informit

The screenshot shows the Informit search interface. At the top left is the Informit logo. On the top right, there are links for 'Help | Login' and a 'Welcome: Guest User' message. Below the logo is a navigation bar with 'Search', 'Titles', and 'Databases' tabs. A secondary navigation bar includes 'Search Results', 'Fields to Display', and 'Records Per Page'. A third bar offers sorting options: 'Sort by Relevance', 'Sort by Date (newest)', 'Sort by Date (oldest)', 'Sort by Publication Title', and 'Sort by Database'. Below this, it states 'Databases in use: Literature & Culture Collection' with a 'Change databases' link.

The main content area features a search bar with the query 'SU_PHRASE="Aboriginal Australians--Education"'. To the right of the search bar are options for 'Create Alert', 'Manage Alerts', and 'Manage Search History', along with 'Results found: 40'. Below the search bar, there are links for 'Select all', 'Clear all', and 'View selected', and options for 'Citation Save', 'Print', 'Email', and 'Text size A|A|A'. The search bar also has 'Search', 'Indexes', and 'Thesauri' tabs, and sub-tabs for 'Simple Search' and 'Advanced Search'. The search query is displayed in a text box, and there are buttons for 'Clear search', 'Search hints', and 'Search'. Below the search bar, there are options to 'Also Search Full Text of Articles' and a 'Limit To:' section with checkboxes for 'Full Text Records Only' and 'Date Range: 1970 to 2013'.

The 'Recent Searches' section shows a table with the following data:

Query	Recs
3 SU_PHRASE="Aboriginal Australians--Education"	40
Database changed	
2 SUBJECT:history	6483
1 SUBJECT:history	6483

The main record display shows the following details:

- Title:** At the Gateway of Hope: Back to Remote Australia
- Personal Author:** Goldenberg, Howard
- Source:** Griffith REVIEW, No. 31, Autumn 2011: [162]-[166]
- Journal Title:** Griffith REVIEW
- Issue:** 31
- Pagination:** [162]-[166]
- Peer Reviewed Article Indicator:** No
- Date of Publication:** Autumn 2011
- Publication Year:** 2011
- Document Type:** Journal Article
- Subject(s):** Aboriginal Australians--Education; Aboriginal Australians; Aboriginal Australians--Health and hygiene; Aboriginal Australians--Social conditions
- Abstract Indicator:** Yes
- Abstract:** On a number of occasions over the years 2005 to 2007 I worked as a relieving doctor in the Kimberley. Three times I was in Halls Creek, and once each in Balgo, Ringers Soak, Mullum and Fitzroy Crossing. In these desert places I saw degradation and I contracted a condition new to me: a sort of hopeless resignation.
- Language:** English
- Geographic Location:** Western Australia--Kimberley
- ISSN:** 1839-2954
- Full Text Indicator:** Yes
- Full Text:** <http://search.informit.com.au/documentSummary;dn=370679625634517;res=IELLCC>
- Last Revision Date:** 20111118
- Date Last Modified:** 20121031143622
- Document Number:** 370679625634517

At the bottom of the record display, there are links for 'Back to results' and 'Browse issue', and the text 'Record 2 of 40' with 'prev' and 'next' navigation buttons. The database is identified as 'Literature & Culture Collection'.

Figure 10. Individual record display in Informit

6. Sterling and Francine Clark Art Institute Library

Interview Date: 12 February 2013

Contact: Penny Baker

Interview Notes: Ms. Baker first heard about FAST through a presentation given at a conference in 2006. She recalls that the new vocabulary was receiving a large amount of attention and hype because it was being presented as compatible with Dublin Core.

In 2012, the library began an IMLS-funded project to digitize and provide cataloging for a portion of the Mary Ann Beinecke Decorative Art Collection. The records for the rare books (approximately 400) in the collection were originally cataloged between 1977 and 1978 and contained very few subject terms. The team's plan was to add new subject terms to each record in order to enhance access and visibility of the materials in the Library's CONTENTdm collection (for a sample record display, see figure 11). The team selected FAST as their cataloging vocabulary because of its simplicity and ease of use. Since the majority of the cataloging was being done by library interns with little cataloging experience, there was a great interest in using a vocabulary that was easy to use and did not have the complexity typical of LCSH.

The existing assigned headings (primarily LCSH) were retained, and FAST headings and AAT (*Art and Architecture Thesaurus*) terms were added. There was no attempt to convert existing LCSH headings into FAST headings. The team is using the FAST Topical facet as well as the Form facet. The terms are found and selected using assignFAST, which Ms. Baker said was very easy to use and worked well. She noted that assignFAST's cut and paste function was similar in concept to the OCLC Connexion (OCLC's cataloging service interface) and therefore easy to use and explain.

One of the minor problems that Ms. Baker had in implementing FAST was the lack of any guidelines or training material. The team purchased and used *FAST: Faceted Application of Subject Terminology* (Chan and O'Neill 2010), but she commented that it was not designed to allow for quick look-up or reference. She also was slightly annoyed by the lack of updates and release notes on the FAST project website. In addition to using the FAST string headings, the team is also including the FAST Linked Data URI, though they are not packaging them in RDF markup.

The IMLS-funded project is set to end in October of 2013, and Ms. Baker said that there are no current plans to use FAST in any upcoming projects. She did say that she would use FAST again in another digital cataloging project, or non-MARC based cataloging project. Otherwise, there is no interest in using FAST for everyday cataloging.

Rating	★★★★★ Based on 0 rating(s)
Title	American dyer : a practical treatise on the coloring of wool, cotton, yarn and cloth in three parts...
Creator	Gibson, Richard H. (author)
Place of Publication	Philadelphia
Publisher	Henry Carey Baird
Date Issued	1873
Extent	1 online resource (239 pages)
Notes / Description	Mounted samples of colored wool and cotton waste, etc. "Part first gives a descriptive account of the dye stuffs; if of vegetable origin where produced, how cultivated, and how prepared for use; if chemical, their composition, specific gravities, and general adaptability, how adulterated, and how to detect the adulterations, etc. Part second is devoted to the Coloring of Wool, giving recipes for one hundred and twenty-nine different colors or shades, and is supplied with sixty colored samples of Wool. Part third is devoted to the coloring of raw cotton or cotton waste for mixing with wool, colors in the manufacture of all kinds of fabrics, gives recipes for thirty-eight different colors or shades. And is supplied with twenty-four colored samples of cotton waste. Also recipes for coloring beavers, doeskins, and flannels. With remarks upon anilines, giving recipes for fifteen different colors or shades, and nine samples of aniline colors that will stand both the fulling and scouring process. Also, recipes for aniline colors on cotton thread, and recipes for common colors on cotton yarns, embracing in all over 200 recipes for colors and shades. And ninety-four samples of colored wool and cotton waste, etc. By Richard H. Gibson, Practical Dyer and Chemist."--Title page
Source	Electronic reproduction of (manifestation): Gibson, Richard H. -- The American dyer : a practical treatise on the coloring of wool, cotton, yarn & cloth... / By Richard H. Gibson. -- Philadelphia : H.C. Baird, 1873. -- 239 p. : 94 mounted col. illus. ; 24 cm. Call number of original: NK8804 G5
Collection	Mary Ann Beinecke Decorative Art Collection
Subjects	Dyes and dyeing
FAST Headings	Dyes and dyeing--Chemistry Dyes and dyeing--Cotton Dyes and dyeing--Textile fibers Dyes and dyeing--Wool Dye plants Formulas, recipes, etc.
AAT Terms	Natural dye
Genre/Form	Wool (Textile)--Samples Cotton (Textile)--Samples
Contributors	Henry Carey Baird & Co. (publisher)
Repository	Sterling and Francine Clark Art Institute. Library
Language	eng
Digital Project Sponsor	This project is supported by funding from the Massachusetts Board of Library Commissioners. Library Services and Technology Act. (2011-2012)
Date	1873
Clark Bibliographic Record No.	b10788323
Link to Library OPAC Record	http://francine.clarkart.edu/record=b1078832

Figure 11. A record display in the Sterling and Francine Clark Art Institute Library's CONTENTdm system

7. Universiteitsbibliotheek Amsterdam (University of Amsterdam Library)

Interview date: 27 November 2012

Contact: Aad van Duijn

Introductory remarks: Late in 2007, inspired by a MARC21 conference in Frankfurt and a visit to the American Library Association (ALA), the University of Amsterdam Library initiated a nationwide transition program from Dutch metadata standards, rules and regulations to international metadata standards for all Dutch academic libraries. FAST was discussed as early as the initial brainstorming session in Amsterdam. In accordance with the nationwide initiative, the University of Amsterdam Library itself adopted MARC21 and AACR in 2009 while implementing a new ILS (Aleph). In 2012 they switched to English as the language of cataloging, working directly in WorldCat using the Connexion client. RDA and LCC will be implemented in 2013, and a decision on the active use of LCSH and/or FAST is to be expected shortly. The recent FAST pilot therefore forms part of a long term strategy.

Interview Notes: Mr. Van Duijn first came to know about FAST in a book about LCSH written by Lois Mai Chan (Chan 2005). He found additional information about FAST on the OCLC Research website. His manager first heard about FAST at an ALA conference several years ago. The University of Amsterdam Library used the *Gemeenschappelijke Onderwerpsontsluiting* (GOO) from the mid-1980s to June of 2012. Since the GOO is no longer maintained, and the Library is switching to English-language cataloging, an alternate, English-language, thesaurus was needed. FAST was chosen and is currently being used in a pilot program for original English-language cataloging of monographs²². Titles that are copy-cataloged already have LCSH assigned to them in most cases. The study is to see if FAST is adequate in terms of retrievability, visibility, and “clickability” in their local OPAC and their Primo search engine, as well as in WorldCat.

FAST was chosen because it has a simple syntax but still retains the semantic richness of LCSH. Mr. Van Duijn is the only cataloger currently using FAST. He has thus far not experienced any difficulties in incorporating FAST into his cataloging workflow. The Library has not developed

any training material, but Mr. Van Duijn has relied on the *FAST: Faceted Application of Subject Terminology* book by Ed O'Neill and Lois Chan as a reference guide (2010).

The features of FAST most appreciated include the extensive number of headings (over 1.6 million) and the extremely simple, easy-to-use syntax. All of the facets are being used for subject cataloging. The university is currently testing FAST to see if it is suitable for regular use. As a replacement of LCSH for day-to-day cataloging there are still some major concerns because FAST is not, to their knowledge, used by large research libraries and FAST is probably not included in third-party authority services (Marcive, LTI etc.). Additionally, FAST is not an international standard as LCSH *de facto* is. There is also a quality issue at stake as LCSH headings offer more context than FAST headings. The University of Amsterdam Library is considering the use of FAST for large digitization projects. Furthermore, the library is interested in mapping the Dutch GOO thesaurus to FAST²³.

Of the FAST tools Van Duijn is most impressed with searchFAST (for looking up terms) and assignFAST (for simply copy and paste term assignment). FAST headings can currently be found in cataloged items through the university's local OPAC as well as Primo and in WorldCat.

8. University of Illinois at Chicago

Interview Date: 22 February 2013

Contact: Joan Schuitema

Interview Notes: Joan worked with FAST when she was at the University of Illinois at Chicago (UIC) from 2005-2010. She learned about FAST through a presentation given at ALA and from various OCLC news releases. Joan was a member of the PCC Standing Committee on Standards with Eric Childress and after consulting him about FAST, decided that that it would be a good fit for her project at UIC.

UIC began to use FAST in 2007 to catalog local city/ suburban government documents from the American Planning Association (APA) collection held by the university. There were tens of thousands of documents in the collection. Prior to this project there had been little attempt to catalog any part of the collection. FAST was chosen because it was seen as being easier and faster to use than LCSH. Since the materials in the collection were very similar in type, location, and scope, the cataloger could set up templates for a particular group of documents. For example, a set of documents from a similar town would all have the same geographic heading. Therefore the only work needed for those documents would be to add specific topical headings. This saved time and effort for catalogers and helped improve uniformity across the collection.

The project was intended to be started by professional cataloger and then transitioned to less experienced library staff members. This proposed plan made the choice to use FAST even more appealing since the long-term goal was to use paraprofessional library staff to add headings to documents. Although FAST was very easy to use and implement, there was some push-back from experienced catalogers who wanted to continue to use LCSH. When Joan left UIC in 2010, the project was still ongoing, and FAST was still being used.

9. University of North Dakota

Interview date: 19 November 2012

Contact: Shelby Harken

Interview Notes: The University of North Dakota digital library has two full-time catalogers. Ms. Harken has over 45 years experience in cataloging and there is also an associate cataloger that has a bachelor's degree in art. The associate cataloger does not have a degree in library science but has been using FAST since the digital library was created in 2004.

Harken first heard about FAST in 2002. The University of North Dakota began using FAST in 2004 to catalog digital images in CONTENTdm. Their CONTENTdm items (see a sample record display in figure 12) use a custom Dublin Core template and FAST is used in conjunction with the *Art & Architecture Thesaurus* (AAT) and the *Thesaurus for Graphic Materials* in the creation of subject metadata for photos, pottery, and special collections. FAST is not currently used to catalog their "Writers' Conference" items, which include readings and writing of up-and-coming authors. The university began using FAST when it initiated the development of its digital collection in 2004, and therefore no vocabulary was used prior to FAST. FAST was chosen by the university primarily because it is easy for non-professionals to use and apply. This is in part because all of the terms in the FAST vocabulary have valid authority records. The digital collections library has continued its use of FAST because it has been easy to implement and apply to item records. When the library first began using FAST the application of subject terms required a fair amount of guesswork. This was primarily due to the fact that FAST was not yet completed, and the rule and guidelines for specific facets were not yet established. One example of this is the assignment of "bays" (FAST assigns bays with the associated body of water while LCSH assigns them to an associated land mass). The library has not developed any training material for the use or implementation of FAST but they do use *FAST: Faceted Application of Subject Terminology* book by Ed O'Neill and Lois Chan as a reference text (2010).

The feature that the library likes the most about FAST is the ability to easily and quickly look up terms online via searchFAST, and then apply them in CONTENTdm. The search interface is straightforward, and the faceted system allows for easy distinction between terms. Unlike

LCSH there is no need to string together multiple terms in order to form a valid subject term. Ms. Harken was familiar with the mapFAST and FAST linked data API, but the digital collection library is not currently using any of the services.

In the future Ms. Harken would like to integrate FAST into the regular cataloging workflow. Once the library gets Primo fully integrated, users will be able to search across the entire University of North Dakota library system for materials and use FAST headings to conduct searches.

Description	
Rating	☆☆☆☆☆ Based on 0 rating(s)
Title	Start of a New Season
Title.alternative	Start of New Season
Subject	North Dakota; candidates; election; Stuart McDonald; Richard Larsen
Subject.topical.FAST	Elections
Subject.topical.FAST.2	Gardens
Subject.topical.FAST.3	Political candidates
Subject.topical.FAST.4	Hoes
Subject.geographic.FAST	North Dakota
Subject.chronological.FAST	1961-1969
Subject.namePersonal.LCSH	McDonald, Stuart, 1931-
Subject.namePersonal.LCSH.2	Larsen, Richard
Description.subject	Cartoon depicts new candidates growing in "The State of North Dakota Political Garden (Test Plot)." Several new candidates announce that they are running for office, among them, Stuart McDonald and Richard Larsen for the September 6, 1966 primary election. This cartoon was re-published in the February 1968 edition of the North Dakotan.
Publisher	Grand Forks Herald
Publisher.place	Grand Forks, N.D.
Date.created	1966-05-08
Type.LCTGM	Cartoons (Commentary)
Type.GMGPC	Political cartoons
Format	28 x 36 cm.
Identifier.URI	http://www.library.und.edu/Collections/og390.html
Source	Grand Forks Herald
Language.ISO639-2	eng
Relation.IsIndexedby.URI	http://www.library.und.edu/Collections/og390.html
Relation.IsPartOf	Stuart McDonald Papers
Rights	Elwyn B. Robinson Department of Special Collections, Chester Fritz Library, University of North Dakota
Full Resolution File	8:Mc_05_259.tif

Figure 12. A record of display in the University of North Dakota's use of CONTENTdm system

10. Biodiversity Heritage Library (BHL) ²⁴

Interview Date: 11 October 2012

Contacts: Suzanne Pilsk and Bianca Crowley

Interview Notes: The Biodiversity Heritage Library project began in late 2006 and includes 14 member libraries, 2 of which are based in the UK. When the project first started, Ms. Pilsk was an advocate for using FAST but the opinion was not shared with the rest of the management team. The BHL contains records from all of the member libraries but the vocabularies in the MARC records vary greatly. These include LSCH, National Agricultural Library's *Agricultural Thesaurus* headings, as well as unique subject headings. In order to add uniformity to the records, the BHL currently uses a very basic algorithm to parse the headings and create a keyword list that can be used for searching.

The library did not get very far in pursuing the use of FAST, but they are still interested in the possibility of using it to standardize the various types of subject headings that their records contain. Since the library does not have the necessary underlying structure in place, there are no current plans to use the linked data features of FAST, but there is excitement about the end-user features that FAST supports. mapFAST was one such feature that Ms. Pilsk was familiar with and thought was of interest. Ms. Crowley was not familiar with mapFAST.

11. Minnesota State University, Mankato²⁵

Interview Date: 12 September 2012

Contact: Robert Bothmann

Interview Notes: Mr. Bothmann first heard about FAST when he met Ed O'Neill at an ALA conference in 2002. The university library is not currently using FAST, but FAST headings do appear in their catalog, presumably because of the presence of records created by libraries that are using FAST. The library currently uses LCSH as its cataloging vocabulary.

Mr. Bothmann was very interested in using the FAST vocabulary as a means of geographic location and searching. He mentioned that this feature would help regional researchers by showing them where in the state prior research had been conducted. This feature would also help Minnesota State University students decide on research proposals for their Capstone projects. His idea was for students to use the coordinates associated with FAST headings to identify locations that have already been the subject of research papers and use that information to develop unique proposal and as a means to find relevant research to help support their projects. He noted that it is very difficult to use MARC records to track location, but they have experimented using File Maker Pro to manually add latitude and longitude to individual records, and it worked well.

The cataloging staff at Minnesota State University, Mankato library consists of two expert catalogers. Their catalog is open to external users. He was very excited about the possibility of using the FAST geographic facet in the library's records.

After exploring mapFAST, Mr. Bothmann inquired why he could not find his thesis in WorldCat, when using mapFAST and searching for his home town (which was the topic of his thesis). The problem was that the subject heading he used for the thesis was an LCSH term and mapFAST was not able to parse the heading in WorldCat. This will no longer be an issue when FAST is implemented into WorldCat.

12. University of Western Ontario (Ph.D. Research Project)

Interview Date: 17 January 2013

Contact: Olha Buchel, Ph.D.

Interview Notes: Dr. Buchel initially heard about FAST through a presentation that Eric Childress gave at a conference in Canada. She was interested in using the geographic headings to assist in her doctoral research into how metadata records could be used by services to produce end-user data visualization tools. Her project²⁶ focused specifically on mapping visualizations for Ukrainian bibliographic holdings. She did not end up implementing FAST in her research primarily because there were not many FAST headings for the Ukraine that actually had latitude and longitude coordinates. Additionally, there were almost no bibliographic records that had FAST headings associated with them. She was also disappointed that there was not an option/ ability for users to submit or add coordinates for addition to FAST geographical headings.

With the continual improvement to FAST geographic headings, Dr. Buchel is considering using FAST in future geo-spatial research and possibly in further development of initial Ph.D. research.

13. People of the Founding Era

Interview Date: 15 January 2013

Contact: Susan Perdue

Interview notes: The People of the Founding Era had been interested in using FAST for tagging historical documents. Ms. Perdue had first heard about FAST from a co-worker who had previously worked as a programmer for the Theodore Roosevelt Center Digital Library (where FAST was being used). The plan to use FAST was never initiated due to complexity of the initial project. Ms. Perdue was very interested in using FAST because all of the people who would have been tagging documents were not professional catalogers and had no experience using or assigning the complex string that would have been necessary for LCSH. In their situation, the relative simplicity of FAST would have been a huge advantage not only for accuracy but more importantly for the speed at which workers could tag documents. Another advantage would be the retrieval of relevant historical documents based on controlled subject headings based on historical events.

Ms. Perdue was most interested in using FAST's event headings in order to connect relatively vague or obscure historical documents with broader and more widely known historical events. Previously, the collection was tagged using occupational headings, which could be problematic in terms of finding desired documents and related material. There was also some interest in using the names facet, but Ms. Perdue thought that it would have been slightly more problematic to match FAST names with the relatively obscure individuals that authored the historical documents in their collection.

While there are no current plans to use FAST in any set projects, Ms. Perdue is still very interested in using the vocabulary.

14. l'Université du Québec à Montréal (UQAM) [University of Quebec in Montreal]

Interview date: 10 October 2012

Contact: Benoit Bilodeau

Interview Notes: Mr. Bilodeau first heard about FAST at the 2008 10th International ISKO Conference in Montreal, where he heard Eric Childress give a presentation on the development of FAST. He was surprised at how similar the faceted vocabulary was to a project that he and his colleagues had been working on at the University of Quebec since 1994 (see figure 13). His project, called *le Répertoire des Autorités-Sujet de l'UQAM (RASUQAM)*,²⁷ developed out of the need to create a more robust thesaurus to replace the Uniterm automated system that the library had been using since 1970. The first use of the RASUQAM system was in November 1994. Currently the thesaurus has 52,000 terms, and it is still being developed. The University of Quebec in Montreal is currently the only user of the thesaurus. French is the indexing language used in the system, but English can be used as a searching language.

He decided to use facets because “they come naturally to users.” While the system does not employ the use of linked data, it does include reference links to Wikipedia.org for all applicable headings. This information is coded in the marc 670 \$u field. Five years ago, the team began to map RASUQAM to both LCSH and *Répertoire de vedettes-matière (RVM)*²⁸.

<p>600 14 a Lincoln, Abraham, d1809-1865. 648 _7 a1860-1869 2 rasuqam <u>RASUQAM</u> 650 _7 a Gouvernement 2 rasuqam 650 _7 a Guerre de Sécession (1861-1865) 2 rasuqam 650 _7 a Histoire 2 rasuqam 650 _7 a Leadership politique 2 rasuqam 651 _7 a Etats-Unis 2 rasuqam 655 _7 a Biographie (Descripteur de forme) 2 rasuqam</p>	
<p>600 17 a Lincoln, Abraham, d1809-1865 2 fast 648 _7 a1861-1865 2 fast <u>FAST</u> 650 _7 a Friendship 2 fast 650 _7 a Genius 2 fast 650 _7 a Political leadership 2 fast 650 _7 a Political science 2 fast 650 _7 a Presidents 2 fast 651 _7 a United States 2 fast 655 _7 a Biography 2 fast 655 _7 a Case studies 2 fast</p>	
<p>600 10 a Lincoln, Abraham, d 1809-1865. <u>LCSH</u> 600 10 a Lincoln, Abraham, d 1809-1865 x Friends and associates. 650 _0 a Genius v Case studies. 650 _0 a Political leadership z United States v Case studies. 650 _0 a Presidents z United States v Biography. 651 _0 a United States x Politics and government y 1861-1865.</p>	

Figure 13. Individual record illustrating the resemblance between University of Quebec’s RASUQAM system and FAST

15. University of Texas School of Public Health at Houston²⁹

Interview Date: 13 September 2012

Contact: Richard L. Guinn

Interview Notes: Mr. Guinn first heard about FAST in 1998/ 1999 and contacted OCLC about to the possibility of implementing it in the library. Local issues prevented the library's adoption of FAST. His library has a large local collection of material that uses both MeSH and LC as subject vocabularies. The library uses Ex Libris and has a lot of local records, and Mr. Guinn was hoping to use FAST as a means to standardize all of the headings. On initially hearing about FAST, he thought that it would be very well adapted at the task of standardizing local library records. In contrast to LCSH, it appeared that FAST had comprehensively authorized terms and that the syntax was much simpler to use and implement.

Mr. Guinn's cataloging staff consists of himself and another part-time cataloger. He described their cataloging skills as "well experienced" since together they have about 20 years' of cataloging experience combined. Mr. Guinn had not heard any update news on FAST since he last made contact with OCLC back in 2008, expressing interest in the use of the FAST website.

16. World Maritime University

Interview Date: 4 March 2013

Contact: Chris Hoebeke

Interview Notes: Mr. Hoebeke was a student of Dr. Lois Chan and became familiar with the FAST vocabulary through *FAST: Faceted Application of Subject Terminology* authored by Chan and O'Neill (2010). Since the interview, he has converted fifty thousand bibliographic records and loaded them on a test instance of their Koha ILS.

Mr. Hoebeke mentioned that one of the reasons he was attracted to FAST was because the faceted outline of the vocabulary makes it easy to use (both as a cataloger and as an end-user conducting searches). For the purposes of his library, traditional LCSH is too complex for faceting. One aspect of LCSH that Mr. Hoebeke does like is that the vocabulary lends itself well to browsing by subject and subject hierarchies, whereas facets serve only to limit or narrow an existing result set. He postulated that using LCSH in combination with FAST could make for a very powerful and easy to use search system.

If the library were to use FAST in any future projects, Mr. Hoebeke mentioned that he would be particularly interested in the Geographic and Topical headings, but he thought that the Uniform Titles might also be of interest. In considering FAST's approach to geographic headings, Mr. Hoebeke disagreed with some of the body of water second level headings, suggesting that they should probably be valid first level headings. In particular he questioned whether anyone living in Europe would think of the Baltic as a subordinate region of the Atlantic (Atlantic Ocean—Baltic Sea), and he thought it would be more useful as a first level geographic heading.

Notes

- 1 FAST project page: <http://www.oclc.org/research/activities/fast.html>
- 2 CORC: <http://www.oclc.org/research/news/1998/09-28.html>
- 3 FAST tools and data: <http://fast.oclc.org/searchfast/>
- 4 As known to OCLC staff
- 5 Australian Public Affairs Information Service [thesaurus]: <http://www.nla.gov.au/apais/>
- 6 FAST implemented in 2012 (see RMIT 2011)
- 7 LCNAF is used for all personal names: <http://id.loc.gov/authorities/names.html>
- 8 As known to OCLC staff
- 9 JEL Classification System: http://www.aeaweb.org/jel/jel_class_system.php
- 10 AMS Mathematics Subject Classification: <http://www.ams.org/mathscinet/msc/msc2010.html>
- 11 BRII project: <http://brii.medsci.ox.ac.uk/>
- 12 Databib project: <http://databib.org>
- 13 Index New Zealand: <http://innz.natlib.govt.nz>
- 14 Ngā Ūpoko Tukutuku / Māori Subject Headings: <http://mshupoko.natlib.govt.nz/mshupoko/index.htm>
- 15 “RMIT Publishing is a business unit of RMIT Training Pty Ltd, a wholly owned subsidiary of RMIT University”: <http://www.informit.com.au>
- 16 Note: RMIT content is indexed in WorldCat Local
- 17 Exception is Chronological headings (FAST facet 148): “Authority records for chronological headings are established only when needed for references or linkages” (Chan and O’Neill 2010, 99)
- 18 See (RMIT Publishing 2012)
- 19 Available at: <http://tspilot.oclc.org/fast/?operation=explain&version=1.1>
- 20 4% of the LCSH terms were set up as LC-to-FAST-mapping test cases to verify the conversion.
- 21 Informit TVNews: <http://www.informit.com.au/tvnews.html>
- 22 For an example of a WorldCat record created by UvA using FAST, see <http://www.worldcat.org/oclc/706651462>
- 23 Note: OCLC Research has a project underway to test algorithms to map GOO to FAST.

- ²⁴ As a follow-up, OCLC sent both Pilsk and Crowley links to the most recent version of the FAST website as well as a [searchFAST PowerPoint](#) (O'Neill, Bennett and Kammerer 2010) that Ed O'Neill presented at the IFLA Satellite Post-Conference in 2010.
- ²⁵ As a follow-up to the interview, Mr. Mixter sent Mr. Bothman links to [mapFAST](#) (OCLC Research 2012), and a [searchFAST PowerPoint](#) (O'Neill, Bennett and Kammerer 2010) that Ed O'Neill presented at the IFLA Satellite Post-Conference in 2010.
- ²⁶ Collection About Local History of Ukraine (DK508):
[http:// abuchel.apmaths.uwo.ca/ ~obuchel/ maps/ VICOLEX.php](http://abuchel.apmaths.uwo.ca/~obuchel/maps/VICOLEX.php)
- ²⁷ *le Répertoire des Autorités-Sujet de l'UQAM* (RASUQAM):
[http:// www.bibliotheques.uqam.ca/ services-techniques/ RASUQAM/ presentation](http://www.bibliotheques.uqam.ca/services-techniques/RASUQAM/presentation)
- ²⁸ Répertoire de vedettes-matière (RVM): [https:// rvmweb.bibl.ulaval.ca/ en/ a-propos](https://rvmweb.bibl.ulaval.ca/en/a-propos)
- ²⁹ As a follow-up to the interview, Mr. Mixter sent Mr. Guinn the URL for the [searchFAST](#) website (see note 3 above).

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