Subject Headings in the
Catalog of U.S.
Government Publications
(CGП)

GPO Library Technical Services Webcast and Webinar Series, Part 14
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Presenters

Bob Luoma
Liselle Drake
Coverage

Rationale for use of controlled vocabularies for subject analysis

Thesauri: Used, not used, and new sources

GPO’s QC activities for subject headings

Tips for searching the CGP

In a keyword-driven search environment, why use controlled vocabularies for subject indexing and searching?
Here are entered works on drama as acted on the stage. Works on facilities used to stage drama are entered under Theaters. Works on drama as a literary form are entered under Drama.

- **UF**: Dramatics, Histrionics, Professional theater, Stage, Theatre
- **BT**: Performing arts
- **RT**: Acting, Actors
- **NT**: Amateur theater, Animals as represented on the stage, Apocalypse in the theater, Arena theater, Artists and theater, Authors and theater

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**Thesauri used in the CGP**

- **Library of Congress Subject Headings (LCSH)**
- **Medical Subject Headings (MeSH)** / U.S. National Library of Medicine
- **NASA Thesaurus (NASAT)**
- **Faceted Application of Subject Terminology (FAST)** / OCLC
- **Library of Congress Genre/Form Terms for Library and Archival Materials (LCGFT)**
Thesauri not used or not maintained in CGP

Art and Architecture Thesaurus / Getty Research Inst.
Canadian Subject Headings
Children’s Subject Headings / Library of Congress
Agricultural Thesaurus / National Agricultural Library
Sears List of Subject Headings
Thesaurus of ERIC Descriptors

Subject access fields & MARC codes

Topical headings as subject added entries:
650 Topics
and
Index Term for:
655 Genre/Form

Name headings as subject added entries:
600 Personal name, including name/title entry
610 Corporate body name
611 Conference name
630 Title
651 Geographic name

Source: LC Name Authority File: http://authorities.loc.gov/
Thesauri used in the CGP: LCSH

Library of Congress Subject Headings (LCSH)
http://authorities.loc.gov/
http://www.loc.gov/aba/publications/FreeLCSH/freelcsh.html

Structure – Elaborated
MARC field – 650 _0 [term]

Facets in subject heading strings: Patterns

Typical patterns:

Topic / Geography / Subtopic / Chronology / Form
or
Topic / Subtopic / Geography / Chronology / Form
Facets in subject heading strings

Topic / Geography / Subtopic / Chronology / Form

Earthquake damage—California--San Francisco--20th century--Pictorial works.

Medicine, Naval--United States—History--20th century--Interactive multimedia.

Information technology--United States—Management—Periodicals.

Facets in subject heading strings

Topic / Subtopic / Geography / Chronology / Form

Customs administration--Law and legislation--United States--Periodicals.

History—Study and teaching—United States—Evaluation—Periodicals.

Foodborne diseases—Economic aspects—United States.

Waterways—Political aspects—Arctic Regions.
Thesauri used in the CGP: MeSH

Medical Subject Headings (MeSH) / U.S. National Library of Medicine
https://www.nlm.nih.gov/mesh/

Structure – Elaborated
MARC field – 650 _2 [term]

040 NLM ≠b eng ≠c NLM ≠d COO ≠d OCLCO ≠d OCLCQ

245 Hospital nurse staffing and quality of care / Mark W. Stanton.

650 0Nurse administrators ≠x Standards ≠z United States.
650 0Health services administrators ≠x Standards ≠z United States.
650 0Medical care ≠x Standards ≠z United States.

65012 Nursing Staff, Hospital ≠x standards ≠z United States.
65012 Nursing Staff, Hospital ≠x supply & distribution ≠z United States.
65022 Quality of Health Care ≠x standards ≠z United States.
LCSH & MeSH subject headings

Title: Examining the implications of the Affordable Care Act on VA health care: hearing before the Committee on Veterans' Affairs …

LCSH
United States. Patient Protection and Affordable Care Act.
Health care reform +x Law and legislation +z United States.
Veterans +x Medical care +z United States.
United States. +b Veterans Administration +x Appropriations and expenditures.

MeSH
United States. +t Patient Protection and Affordable Care Act.
Health Care Reform +x legislation & jurisprudence +z United States.
Veterans Health +z United States.

Thesauri used in the CGP: NASA Thesaurus

NASA/SP–2012–7501/VOL1

NASA THESAURUS

VOLUME 1
Hierarchical Listing With Definitions

NASA/SP–2012–7502/VOL2

NASA THESAURUS

VOLUME 2
Rotated Term Display
Lunar Polar Environmental Testing: Regolith Simulant Conditioning

Author and Affiliation: Kleinhenn, Julie E. (NASA Glenn Research Center, Cleveland, OH, United States)

Abstract: As ISRU system development approaches flight readiness, there is a need to test hardware in relevant environments. Extensive laboratory and field testing have involved relevant soil (lunar regolith simulators), but the current design iterations necessitate relevant pressure and temperature conditions. Including significant quantities of lunar regolith simulant in a thermal vacuum chamber poses unique challenges. These include facility operational challenges (costs, personnel, etc.), difficulty maintaining a pre-defined soil state during pump down (sintering, moisture retention). For ISRU purposes, the regolith at the polar regions will be of most interest due to the elevated water content. To test at polar conditions, the regolith simulant must be cooled with water to an appropriate percentage and then chilled to cryogenic temperatures while exposed to vacuum conditions. A 1m tall, 20cm diameter bin of simulant was developed for testing these simulated preparation and drilling operations. The bin itself was wrapped with liquid nitrogen cooling loops (100%) so that the simulant bed reached an average temperature of 163K at vacuum. Post-test sampling was used to determine desorption of the bed due to vacuum exposure. Depth dependent moisture data is presented from frozen and thawed soil samples. Following simulated only excavation tests, drill hardware was incorporated into the vacuum chamber to test augering techniques in the frozen soil at thermal vacuum conditions. The focus of this testing was to produce cuttings plans for a newly developed spectrometer to evaluate. This instrument, which is part of the RESOLVE program science hardware, detects water signatures from surface regolith. The drill performance, behavior of simulant during drilling, and characteristics of the cuttings plans will be offered.

NASA Terms: IN SITU RESOURCE UTILIZATION; DRILLING; REGOLITH; ENVIRONMENTAL TESTS; POLAR REGIONS; LUNAR SOIL; SOIL MOISTURE; MOISTURE CONTENT; SOIL SAMPLING; CRYOGENIC TEMPERATURE; THERMAL VACUUM TESTS; LIQUID NITROGEN

NASA Thesaurus

074 (a) 0830-D (online)
0860 (a) NAS 1.15:2014-218295
1001 (a) Kleinhenn, Julie E., author.
24510 (a) Lunar polar environmental testing: 1 (b) regolith simulant conditioning / (c) Julie E. Kleinhenn.
264 1 (a) Cleveland, Ohio: (b) National Aeronautics and Space Administration, Glenn Research Center, (c) May 2014.
300 (a) 1 online resource (12 pages): (b) illustrations (some color).
336 (a) text (b) bit (c) 2 resource
337 (a) computer (b) c (c) 2 delivery
338 (a) online resource (b) c r (c) 2 delivery
4901 (a) NASA/TM : (v) 2014-218295
500 (a) Title from title screen (viewed Oct. 20, 2014).
500 (a) "May 2014."
500 (a) "Prepared for the SoTech 2014 sponsored by the American Institute of Aeronautics and Astronautics, National Harbor, Maryland, January 13-17, 2014."
504 (a) Includes bibliographical references (page 12).
500 (a) "AIAA-2014-0689."
650 7 (a) In situ resource utilization, (b) nasat
650 7 (a) Drilling, (b) nasat
650 7 (a) Regolith, (b) nasat
650 7 (a) Environmental tests, (b) nasat
650 7 (a) Polar regions, (b) nasat
650 7 (a) Lunar soil, (b) nasat
650 7 (a) Soil moisture, (b) nasat
650 7 (a) Moisture content, (b) nasat
7102 (a) NASA Glenn Research Center, (b) issuing body.
830 0 (a) NASA Technical Memorandum : (v) 2014-218295.
85640 (u) http://pubs.dtic.mil/GPO/gpo52767
8564 (u) http://ntrs.nasa.gov/archive/nasa/casi/ntrs.nasa.gov/2014000861.pdf
Thesauri used in the CGP: FAST

Faceted Application of Subject Terminology (FAST) / OCLC


The broad purpose of adapting the LCSH with a simplified syntax to create FAST is to retain the very rich vocabulary of LCSH while making the schema easier to understand, control, apply, and use. The schema maintains upward compatibility with LCSH. … FAST has evolved into an eight-facet vocabulary with a universe of approximately 1.7 million headings …

Structure – Enumerated
MARC field – 6XX _7 [term] $2 fast #0 (OCoLC)fstnn

FAST contrasted with LCSH

Title: Out of bounds: transnational sanctuary in irregular warfare.

LCSH:
Transnational sanctuaries (Military science)—Case studies.
Transnational sanctuaries (Military science)—History—20th century.
Irregular warfare.

FAST Terms:
Soviet Occupation of Afghanistan (1979-1989)
Vietnam War (1961-1975)
Irregular warfare.
Military campaigns.
Transnational sanctuaries (Military science)
Afghanistan.
1900 – 1999.
Case studies.
History.
Why are both LCSH and FAST terms retained in CGP records?

Thesauri used in the CGP:LCGFT

Library of Congress Genre Form Terms for Library and Archival Materials (LCGFT)

http://www.loc.gov/aba/publications/FreeLCSH/GENRE.pdf
http://id.loc.gov/authorities/genreForms.html
http://www.loc.gov/catdir/cpso/genreformgeneral.html

Structure – Enumerated
MARC field – 655 _7 [term] $2 lcgft
## LCGFTs in CGP records

### Audio-visual materials
- Documentary films
- Educational films
- Educational radio programs
- Instructional films
- Internet videos
- Public service announcements (Motion pictures)
- Public service radio programs
- Public service television programs
- Radio public service announcements
- Video recordings for the hearing impaired

### Cartographic materials
- Maps
  - Aeronautical charts
  - Atlases
  - Index maps
  - Nautical charts
  - Pictorial maps
  - Quadrangle maps
  - Remote-sensing maps
  - Road maps
  - Topographic maps
  - Tourist maps
  - World maps
LCGFTs in CGP records

Legal materials

Legislative hearings
Legislative materials
Statutes and codes
Treaties

Newest development:

Library of Congress Genre/Form Terms for General Terms (LCGFTs)
http://www.loc.gov/catdir/cpso/genre_form_general_terms.html

Commemorative works | Informational works
Creative nonfiction | Instructional and educational works
Derivative works | Recreational works
Discursive works | Tactile works
Ephemera | Illustrated works
## Important pilot project:
**LC Demographic Group Terms (LCDGT)**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Nationality/regional group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational group</td>
<td>Educational level group</td>
</tr>
<tr>
<td>Ethnic/cultural group</td>
<td>Religious group</td>
</tr>
<tr>
<td>Gender group</td>
<td>Sexual orientation group</td>
</tr>
<tr>
<td>Language group</td>
<td>Social group (all other)</td>
</tr>
<tr>
<td>Medical, psychological,</td>
<td></td>
</tr>
<tr>
<td>&amp; disability group</td>
<td></td>
</tr>
</tbody>
</table>

### Extent of subject headings & types of CGP records

<table>
<thead>
<tr>
<th>Record Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitions / Brief bib. records</td>
<td>0</td>
</tr>
<tr>
<td>Historic Shelflist Project &amp; K-level records</td>
<td>1</td>
</tr>
<tr>
<td>Other catalog records</td>
<td>3-5</td>
</tr>
</tbody>
</table>

(average)
Extent of subject headings

Monographs and Analytics versus Serials and Collection-level records

Serial record examples

Title: U.S. imports of merchandise.
LCSH:
Imports -- United States -- Statistics -- Periodicals.

Title: National healthcare disparities report.
LCSH:
Medical policy -- Social aspects -- United States -- Periodicals.
Medical care -- Needs assessment -- United States -- Periodicals.

Title: Maine's forest resources.
LCSH:
Forests and forestry -- Maine -- Statistics -- Periodicals.
Timber -- Maine -- Statistics -- Periodicals.
Collection record example

Title: THOMAS. House committee live streams.
Abstract: A streaming video collection of live and recorded live hearings conducted by committees of the U.S. House of Representatives …

LCSH:
Legislative hearings -- United States -- 21st century.
Governmental investigations -- United States -- 21st century.

LCGFTs:
Legislative materials.
Internet videos.

Collection record example

Title: The National Archives blogs.

LCSH:
United States. National Archives and Records Administration-- Blogs.
United States -- Archival resources -- Blogs.
United States -- History -- Sources -- Blogs.
Government information -- United States -- Blogs.
Archival materials -- United States -- Blogs.
Public records -- United States -- Blogs.
National archivists -- United States -- Blogs.
Monograph record example

Title: NAFTA at 20: North America’s free trade area and its impact on agriculture.

LCSH:
North America -- Commercial treaties.
International trade -- Statistics.
Free trade -- North America -- Statistics.
Agricultural industries -- North America -- Statistics.
Agricultural productivity -- North America -- Statistics.
Exports -- United States -- Statistics.
Farm produce -- North America -- Statistics.

Quality control of subject headings

Vendor-executed actions
Conduct monthly checks of all subject access points
Generate reports of errors

Internal actions
Execute quality control of the QC vendor
Identify anomalies id’d by vendor software
Prompt corrections in records
Quality control: Flipped heading

LCSH subject : linked to: **sh 87007340** -- all subfields
old: 650 -aGays in the military xGovernment policy zUnited States
new: 650 -aGay military personnel zUnited States

LCSH subject : linked to: **sh2006000714** -- 1 of 3 subfields
old: 650 -aGays in the military xLegal status, laws, etc. zUnited States
new: 650 -aGay military personnel xLegal status, laws, etc. zUnited States

LCSH subject : linked to: **sh 87007340** -- all subfields
old: 650 -aGays in the military zUnited States
new: 650 -aGay military personnel zUnited States

CGP search interface for thesauri:
“Advanced” option
CGP search interface for thesauri:
Sample search and search results

CGP search interface for thesauri:
“Expert” option
CGP search interface for thesauri: “Browse” option

Search tips for CGP

States’ policies and practices: “United States—States”

**Title:** Laboratories of democracy: the economic impact of state energy policies: hearing …

**LCSH:** Energy development--Government policy--United States--States.

**Title:** Federal implementation of Obamacare: concerns of state governments: joint hearing

**LCSH:** Health insurance -- Government policy -- United States -- States.
Search tips for CGP
Cross-cultural studies

Title: Through the lens of cultural awareness: a primer for US Armed Forces deploying to Arab and Middle Eastern countries.
LCSH: Military art and science—Cross-cultural studies.

Title: An international comparison of teacher education.
LCSH: Teachers—Training of—Cross-cultural studies.

Search tips for CGP

Comic books, strips, etc.
Graphic novels
Anticipating catalogs / discovery tools of the future

What can we expect in a post-MARC environment?

and

What are we doing about it?

Questions? Suggestions?

AskGPO

http://www.gpo.gov/askgpo/