# Hands-on (Details) Obtain Data Using SPARQL

Demo. Using AAT

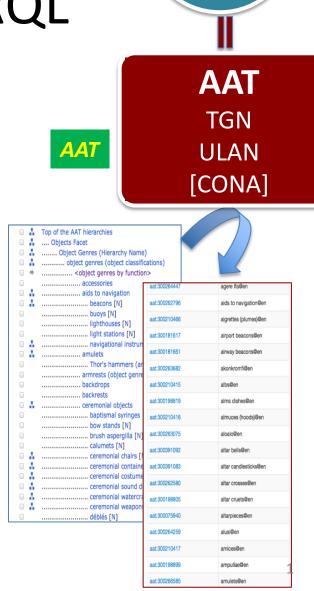
#### Task:

Construct <u>new</u> controlled vocabularies (microthesaurus or pick lists) that have permanent http URIs for each concept

from Art and Architecture
Thesaurus (AAT)

Microthesaurus = designated subset of a thesaurus that is capable of functioning as a complete thesaurus.

-- ISO25964-2:2013



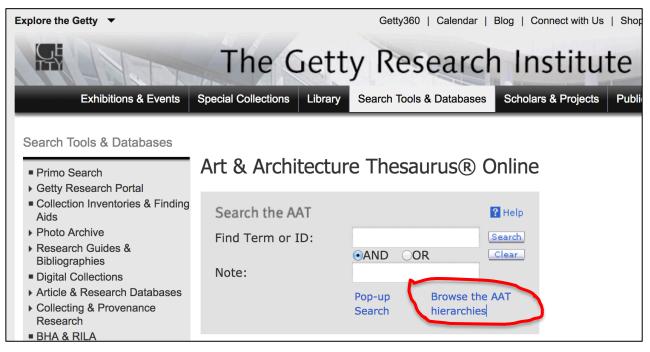
Getty

Vocabs

LOD

# Before querying, get familiar with the structure and contents of AAT

- 1. Go to AAT site<a href="http://www.getty.edu/research/tools/vocabularies/aat/">http://www.getty.edu/research/tools/vocabularies/aat/</a>
- 2. Choose Browse the AAT hierarchies



• 3. Explore one of the facets, all the way down, and see how far you could go. Did you find a sub-facet (marked as guide term, in <... ... > ) or a hierarchy lead term [marked as (hierarchy name)]? You may pick one that you want to form a picklist or microthesaurus later.

Marcia Zeng, 2018 DIS

**HOW** 

Demo. Use a <Guide Term> to obtain all concept URIs and preferred terms in the hierarchies (for a microthesaurus or a pick list)

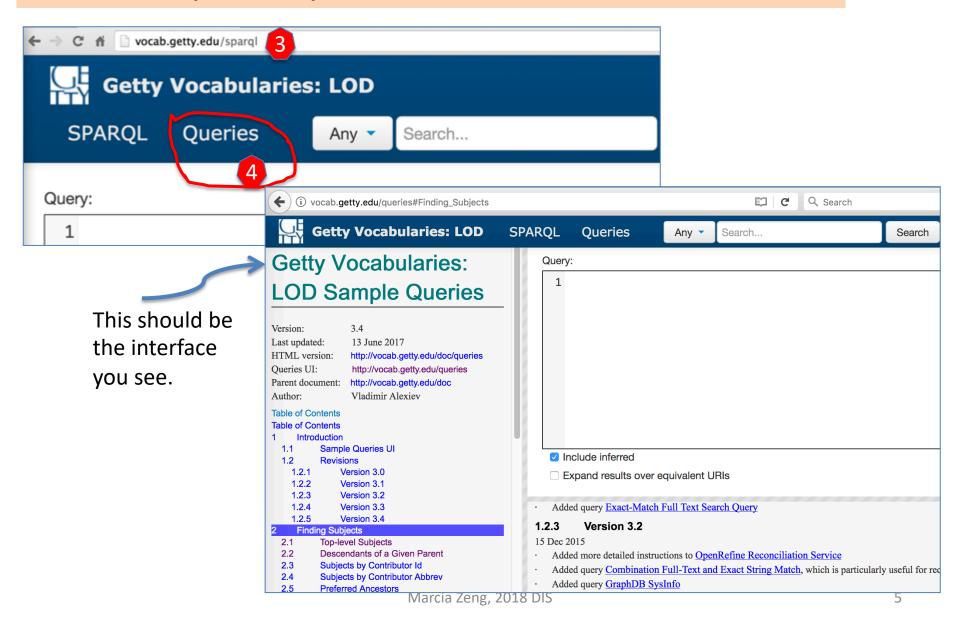
in <xyz>

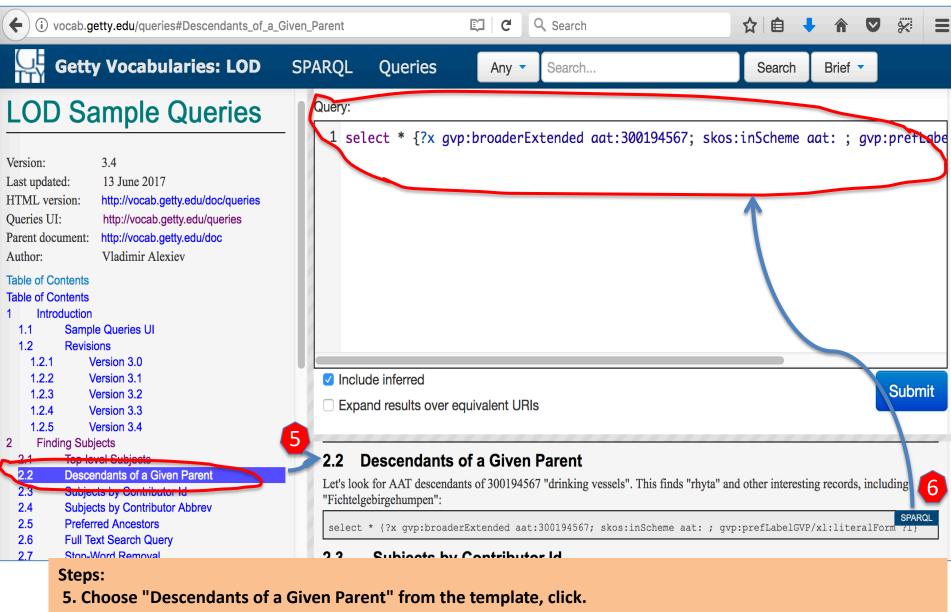
■ ♣ Top of the AAT hierarchies					
□	· ·				
<ul> <li>A Object Genres (Hierarchy Name)</li> </ul>	Object Genres (Hierarchy Name)				
<ul><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><li>description</li><l< th=""><th colspan="5"> object genres (object classifications)</th></l<></ul>	object genres (object classifications)				
	>				
accessories	aat:300264447	agere Ifa@en			
aids to navigation					
□ ၨbeacons [N]	aat:300262796	aids to navigation@en			
buoys [N]	aat:300210466	aigrettes (plumes)@en			
lighthouses [N]					
☐light stations [N] ☐ ♣navigational instrum	aat:300181617	airport beacons@en			
amulets	aat:300181651	airway beacons@en			
Thor's hammers (ar	aat:300263682	akonkromfi@en			
armrests (object genre backdrops	aat:300210415	albs@en			
□ backdrops □ backrests	ddt.300210415	albseen			
□ ♣ceremonial objects	aat:300198819	alms dishes@en			
□ baptismal syringes	aat:300210416	almuces (hoods)@en			
bow stands [N]					
brush aspergilla [N]	aat:300263075	aloalo@en			
☐	aat:300391092	altar bells@en			
□ 👗 ceremonial containe	aat:300391083	altar candlesticks@en			
ceremonial costume	aat:300262580	altar crosses@en			
ceremonial sound d	danoveceo	unu 01000000011			
☐ ♣ceremonial watercra ☐ ♣ceremonial weapons	aat:300198805	altar cruets@en			
déblés [N]	aat:300075940	altarpieces@en			
	aat:300264259	alusi@en			
	aat:300210417	amices@en			
	aat:300198899	ampullae@en			
	aat:300266585	amulets@en			

			Top of the AAT hierarchies	
		$\wedge$	Objects Facet	
		<b>*</b>	Object Genres (Hierarchy Name)	
		$\wedge$	object genres (object classifications)	
	1	<b>*</b>	<object by="" function="" genres=""></object>	
			accessories	
ID: 300117143 2		$\wedge$	aids to navigation	
<object by="" function="" genres=""> (object genres (object)</object>		<b>*</b>	beacons [N]	
Name))			buoys [N]	
			lighthouses [N]	
Terms:			light stations [N]	
object genres by function (preferred,C,U,English-lobjectgenres naar functie (C,U,Dutch-P,D,U,U)		<b>*</b>	navigational instruments [N]	
categorías de objetos por función (C,U,Spanish-P,		$\wedge$	amulets	
Facet / Uiovavehy Codo: V/ DE			Thor's hammers (amulets) [N]	
Facet/Hierarchy Code: V.PE			armrests (object genre)	
Hierarchical Position:			backdrops	
Objects Facet			backrests	
Object Genres (Hierarchy Name) (G) bigs object genres (object classifications) (G)			ceremonial objects	
Steps:			baptismal syringes	
•	ΛT		bow stands [N]	
1. Choose a facet or a hierarchy from AAT			brush aspergilla [N]	
2. Get the ID of it.			calumets [N]	
(I chose <object by="" function<="" genres="" th=""><th>n&gt;,</th><th><math>\wedge</math></th><th> ceremonial chairs [N]</th></object>	n>,	$\wedge$	ceremonial chairs [N]	
Click to open this entry's page,		$\wedge$	ceremonial containers [N]	
· · · · · · · · · · · · · · · · · · ·	G. 1 G.	$\wedge$	ceremonial costume [N]	
Got its ID 300117143)		<b>*</b>	ceremonial sound devices [N]	
3. Go to the SPARQL Endpoint.		<b>*</b>	ceremonial watercraft [N]	
		$\wedge$	ceremonial weapons [N]	
The state of the s	vlarcia Ze	eng, 20	018.DIS déblés [N] 4	

#### **Steps:**

- 3. Go to Getty Vocab SPARQL Endpoint: <a href="http://vocab.getty.edu/sparql">http://vocab.getty.edu/sparql</a>
- 4. Choose from 'queries' template:



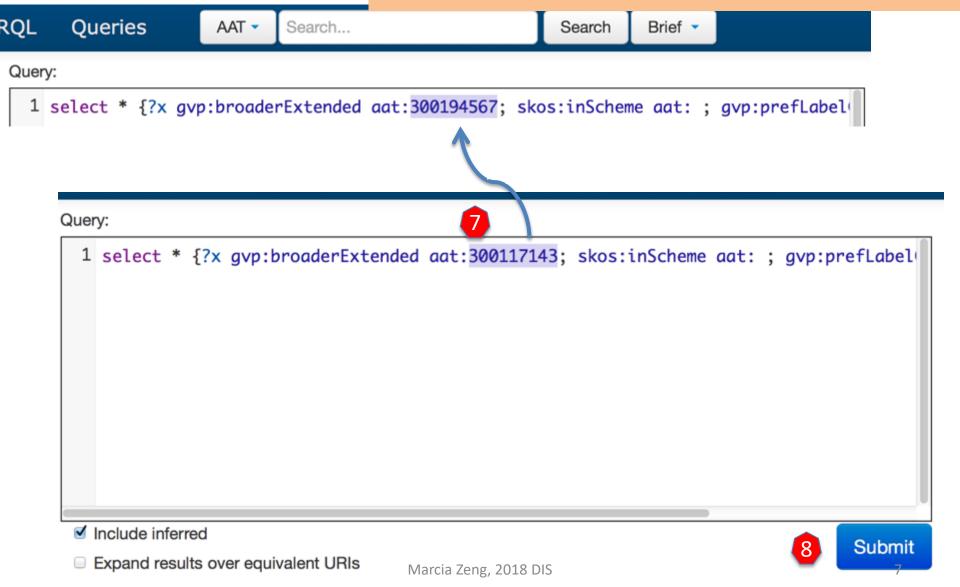


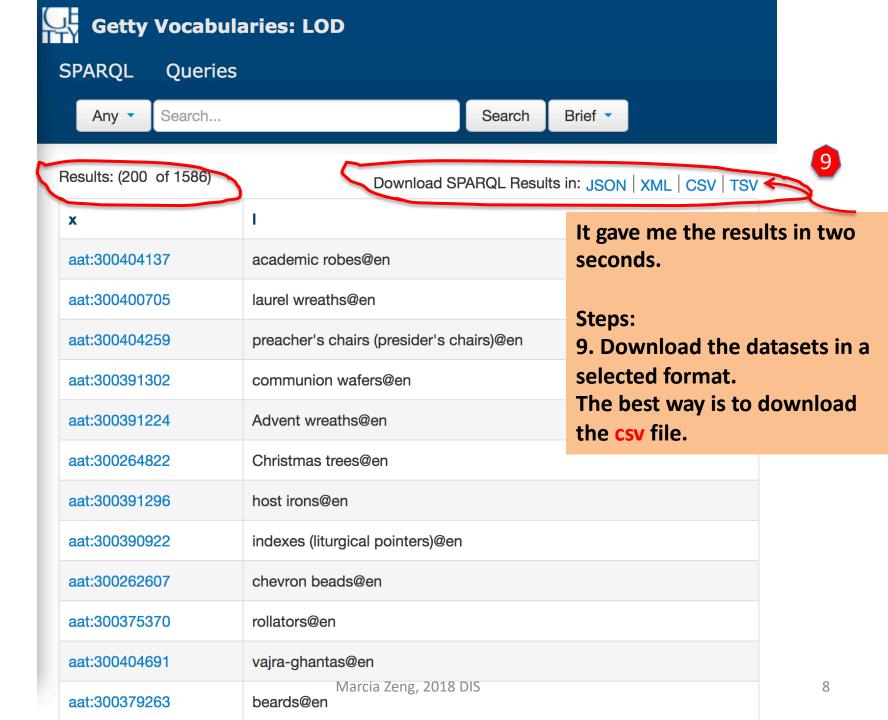
- → The template's text will show on the right.
- 6. Move mouse over, you will see the 'SPARQL" button showing up. Click the blue 'SPARQL' button, the query will fill into that box above.

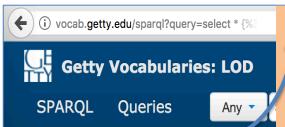
  Marcia Zeng, 2018 DIS

#### Steps

- 7. Replace the ID in that template with your selected ID (e.g., 300117143).
- 8. "Submit".







10. Click on any ID to see the full data about this concept, (Choose Inference "Implicit only") or also the management record of this concept ("Explicit and Implicit"). This is just to see what there is for more data to download. Try to go through.

stocking caps

	Results: (200 of 1686) Query: Pescendants_of_a_Given		
	х	1	
(	sat:300213460	stocking caps@en	
	aat:300217242	bands (collars)@en	
	aat:300411983	astels@en	
	aat:300410869	fajas trenzadas@en	
	aat:300411515	grafbords@en	

Source:http://vocab.getty.edu/aat/300213460 Subject (105) **Predicate** Object Download in: JSON | JSONLD | RDF | N3/Turtle | N-Triples Website Hierarchy Implicit only Inference Statements in which the resource exists as a subject. **Predicate Object** gvp:Subject, skos:Concept rdf:type rdfs:label caps, stocking@en, gorro de punto@es, gorros de punto@es, ijsmuts@nl, ijsmutsen@nl, jung hsien mao@zh-latn-wadegile, rong xian mao@zh-latn-pinyinx-notone, róng xiàn mào@zh-latn-pinyin-x-hanyu, stocking cap@en, stocking caps@en, 絨線帽@zh-hant, 襪形帽@zh-hant gvp:broader aat:300411704 gvp:broaderGenericExtended aat:300411704 gvp:broaderPartitiveExtende... aat:300046094, aat:300117143, aat:300178802, aat:300185711, aat:300185712, aat:300209261, aat:300209273, aat:300209274, aat:300209285, aat:300211601, aat:300213421, aat:300251645, aat:300264092, aat:300264551, aat:300404589 gvp:broaderExtended aat:300046094, aat:300117143, aat:300178802, aat:300185711, aat:300185712, aat:300209261, aat:300209273, aat:300209274, aat:300209285, aat:300211601, aat:300213421, aat:300251645, aat:300264092, aat:300264551, aat:300404589, aat:300411704 gvp:broader Preserved Externel e 201 & 190046094, aat:300178802, aat:300209261, aat:300209273, aat:3002099274,

If you click on

Website | Hierarchy |,
open the link in a
new tap, you can see
the normal HTML
views.



Charts

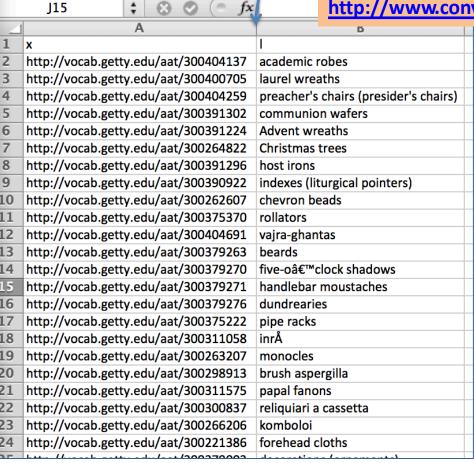
Font

**▼** 12

11a. Open the csv file as a spreadsheet. Save it as the testing dataset.

11b. If you do not have the Microsoft Excel to open it, use a tool online to get it.

http://www.convertcsv.com/csv-viewer-editor.htm



♠ Home

Paste

Edit

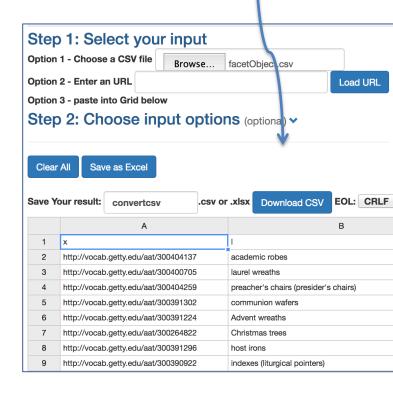
Fill

Clear ▼

Layout

**Tables** 

Calibri (Body)

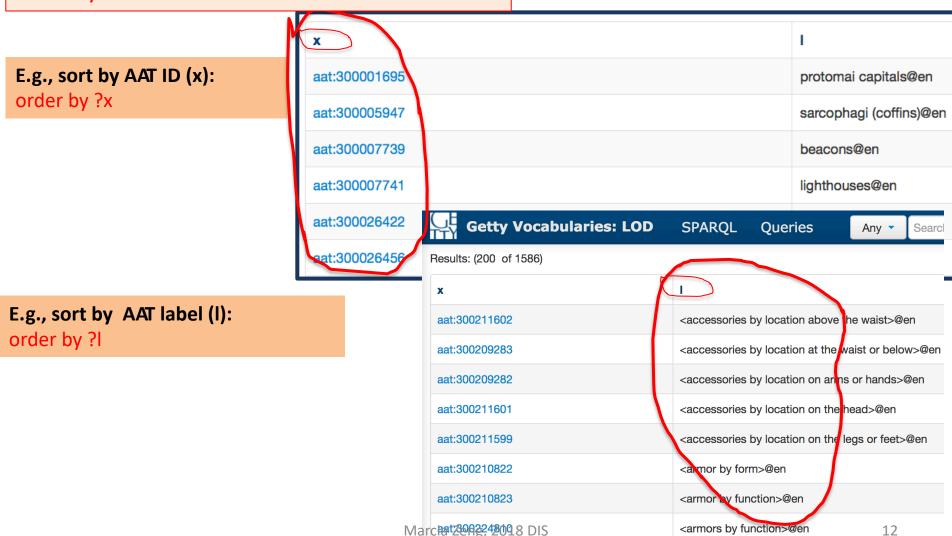


### Advanced

The following steps are for different outcomes, requiring some modifications of your queries.

You can always ask specific query questions at the Getty Vocab LOD user group's forum and get help for your queries or questions:

https://groups.google.com/forum/#!for um/gettyvocablod select \* {?x gvp:broaderExtended aat:300117143; skos:inScheme aat: ; gvp:prefLabelGVP/xl:literalForm ?l} order by ?l



## Step 12. Another round, with revised query [Get the terms + the English scope notes.]

#### Demo (advanced)

[Note: Template provided as:]

Instructions are available on a website.

select \* {?x gvp:broaderExtended aat:300194567; skos:inScheme aat: ; gvp:prefLabelGVP/xl:literalForm ?I}

[Note: To add the definitions/notes. Now the red l becomes the text as shown below:]

select \* {?x gvp:broaderExtended aat:300194567;
skos:inScheme aat: ; gvp:prefLabelGVP/xl:literalForm ?
label; skos:scopeNote [dct:language gvp\_lang:en; rdf:value ?note]
}

Download SPARQL Results in: JSON XML CSV TSV			
x	I		
aat:300417997	chih pei@en		
aat:300418000	cold drink cups@en		
aat:300311263	porongos@en		
aat:300410765	achawall metahues@en		
aat:300395558	maigeleins@en		
aat:300200347	Pechkrüge@en		
aat:300265252	Amen glasses@en		
aat:300264998	segment cups@en		
aat:300265003	Corinthian type skyphoi@en		
aat:300265233	Fichtelgebirgehumpen@en		

Download SPARQL Results in: JSON   XML   CSV   TS		
x	label	note
aat:300417997	chih pei@en	Paper cups that were first used in ancient China; for serving of tea, often colorful and decorated.@en
aat:300418000	cold drink cups@en	Cups, usually disposable, designed for cold liquids.@en
aat:300311263	porongos@en	Mates, which are vessels for liquids, of a particular type, either open like a cup or having a long, narrow neck and often used for fermenting or consuming liquids such as chicha.@en
aat:300410765	achawall metahues@en	Mapuche regional or indigenous Latin American drinking vessel of the cantir type, in the form of a chicken.@en
aat:300395558	maigeleins@en	Shallow drinking cups or bowls, with curved sides and flattened bases, typically made from forest glass. Often decorated with ribs or moderately high bosses or prunts.@en
aat:300200347	Pechkrüge@en	Distinctive German stave tankards mounted with pewter.@en
aat:300265252	Amen glasses@en	A type of Jacobite glass produced to commemorate the rising of 1715. Amen glasses are decorated with diamond point engraved prayers ending with "Amen," thus their name. They also feature the elaborately scrolled letters "I.R." with a concealed figure of eight and a crown.@en

#### [cont.] 12. Another round, with revised query [Get the terms + the English scope note]

```
Tip: always refresh the webpage
by clicking on "Queries" or restart <a href="http://vocab.getty.edu/sparql">http://vocab.getty.edu/sparql</a>
```

```
select * {
  ?x gvp:broaderExtended aat:300212133;
skos:inScheme aat: :
     gvp:prefLabelGVP/xl:literalForm ?label;
     skos:scopeNote [dct:language gvp lang:en;
rdf:value ?note]
```

Copy-paste these text ← see left site, starting with select and ending with a } to the Query window.

#### **Getty Vocabularies: LOD Sample Queries**

Version: 3.4

13 June 2017 Last updated:

HTML version: http://vocab.getty.edu/doc/queries **Queries UI:** http://vocab.getty.edu/gueries Parent document: http://vocab.getty.edu/doc Vladimir Alexiev Author:

**Table of Contents Table of Contents** Introduction

1.1 Sample Queries UI

1.2 Revisions

1.2.1 Version 3.0 1.2.2 Version 3.1 Query: 1 select \* { 2 ?x gvp:broaderExtended aat:300212133; skos:inScheme aat: ; 3 qvp:prefLabelGVP/xl:literalForm ?label; skos:scopeNote [dct:language gvp\_lang:en; rdf:value ?note] 5 Include inferred Submit Expand results over equivalent URIs

**Note:** This is for getting a microthesaurus for 300212133 (<costume by function>). The **difference** from the previous query is to add the last row to get the English scope notes.

Marcia Zeng, 2018 DIS

# [cont.] 12. Another round, with revised query

300212133 (<costume by function>)

notes) **Getty Vocabularies: LOD SPARQL Queries** Any • Search... Search Brief \* Results: (200 of 474) Query: Finding Subjects Download SPARQL Results in: JSON | XML | CSV | TSV X label note doll's clothing@en Miniature versions of clothing meant to be worn by figural toys. en aat:300411751 Again, download and save. livery (uniforms)@en Distinctive uniforms worn by serv aat:300224239 Make sure you keep a note of aat:300412126 comic masks@en Masks used by actors in Ancient the term and ID that you used standard variations, representing for searching. Add them to Formal or ceremonial robes of var the sheet or name the file aat:300404137 academic robes@en an academic context. These have with the ID. for scholars and clerics.@en Headgear comprising circular or l Finished! aat:300400705 laurel wreaths@en branches of the laurel tree. An exa during the triumphal procession a aat:300209945 bathrobes@en Loose-fitting knee-length or ankle-length garments, often tied with a belt, usually of a warm absorbent material, worn before and after bathing or informally around the house.@en monastic clothing@en Distinctive clothing worn by members of monastic religious orders, by which aat:300390928 their membership is typically identified.@en Marcia Zeng, 2018 DIS http://vocab.getty.edu/sparql

You should be get a result like this (included

# [cont.] 12. Another round, with revised query, also **sorting**

```
select * {
   ?x gvp:broaderExtended aat:300212133;
skos:inScheme aat: ;
    gvp:prefLabelGVP/xl:literalForm ?label;
    skos:scopeNote [dct:language gvp_lang:en;
rdf:value ?note]
}
order by ?label
```

Try to sort the result by AAT labels

-added at the last row a sorting request order by ?label

Results: sorted A-Z (capitalized); then a-z →



SPARQL Queries

Any

Results: (200 of 474) Query: Get\_Subjects\_in\_Order

	11630113. (200 01 -	+74) Query: Get_Subjects_in	
•	x	label	note
	aat:300213522	Attic helmets@en	Helmets used in Greece from about the mic They were often highly decorated and surm
	aat:300216950	Balmorals (petticoats)@en	Very full, ankle-length petticoats of gray or v
	aat:300262593	Bifwebe@en	Carved wooden masks of the Songye peop burial rituals and the consecration of new cl by prominent facial features, often including
	aat:300213531	Corinthian helmets@en	Helmets consisting of a single plate of bron: Greece, it had spread to Italy by the beginni
	aat:300213534	Illyrian helmets@en	Open-faced helmets with cheekpieces and early 7th century BCE.@en
	aat:300224862	Poldermittons@en	Large, heavy pieces of plate armor shaped armpit.@en
	aat:300224863	Rennhüte Again,	download and save.
	aat:300210834	Rennzeug Spangent Finishe	
	aat:300224865		d!
	aat:300395594	Stahlhelms@en	Steel helmets of a distinctive style develope during World War I. Stahlhelms comprised a
	aat:300210833	Stechzeuge@en	Armors designed for the Gestech, a form of
	aat:300265060	academic costume@en	Refers to the various costumes worn by uni occasions. The most common element of a mortarboard, are other common elements o
	aat:300404137	academic robes@en	Formal or ceremonial robes of varying color scholars and clerics.@en
	aat:300298733	adargas@en	Hard leather shields used by light calvary ar shape, then generally created in the shape of America when Cortez entered Mexico in the
	aat:300224228	afternoon dress@en	Dress for daytime social functions.@en
201	aat:300226822 8 DIS	aketons@en	Plain quilted or padded coats of textile or le the early 15th century.@en 16

# Try yours

If you are interested in making your microthesaurus, e.g., drinking vessels, get the ID of it 300194567 from AAT (you can search AAT), then repeat the same steps.