State of identifiers in Wikidata

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entity ids http://www.wikidata.org/entity/{P…, Q…, L…}

id items ISO 3166-1 alpha-3 code (Q1341492)
ISBN (Q33057)
…

id properties ISO 3166-1 alpha-3 country code (P298)
ISBN-13 (P212)
ISBN publisher prefix (P3035)
…

id values all values of statements with id properties
+ some id items, e.g. *ZIP code 10048* (Q4546087)

systems with identifiers

- GeoNames (Q830106) → GeoNames-ID (P1566)
- ISO 3166-1:2013 (Q25275) → P297, P298, P299, P300

identifiers of these systems

- ORCID iD (Q51044) → ORCID iD (P496)
- Australian Business Number (Q4823913)
  → Australian Business Number (P3548)

we don't always have/want both!

identifier items (3/4)

individual identifiers should be exceptions ($< 5,000$)

- ▶ ZIP code 10048 (Q4546087)
- ▶ .org top-level domain (Q32131)
- ▶ …

instance-of (P31) item types from last slide?

identifier items (4/4)

identifier classes are subclasses of *unique identifier* (Q6545185)

- language identifier (Q2092812)
- publication identifier (Q36646373)
- …
- Wikidata property for a unique identifier (Q19847637)

instance of (P31) item types from forelast slide?

Identifier properties

57% (2236/3911) of all properties

datatype **external id**entifier or
Wikidata **prop**erty for a **unique id**entifier (Q19847637)

.	**prop for uniq id**	.
external id	1952	192
string	84	
url	4	
item	2	
quantity	1	
monolingual text	1	

should all be classified under Q19847637?

```
Wikidata property for a unique identifier ×365
├──…authority control ×189
│   ├──…cultural heritage identification ×95
│   ├──…people ×759
│   ├──…places ×214
│   │   └──…structures ×50
│   ├──…works ×161
│   │   ├──…musical works ×36
│   │   ├──…structures ×50
│   │   ├──…films ×69
│   │   └──…book ×28
│   ├──…substances ×49
│   ├──…organisations ×164
│   │   └──…identifiers in company registers ×7
│   ├──…identification in the film industry ×57
│   │   └──…films ×69
│   ├──…with reciprocal use of Wikidata ×22
│   ├──…events ×8
│   ├──identifiers in registers of goods and services ×5
│   ├──…horses ×5
│   └──…industries and economic activities ×3
├──…a multi-source identifier ×43
└──…an international standard identifier ×7
```

Classification of identifier properties (1/2)

Wikidata property for a unique identifier (Q19847637)

Wikidata property...

- ► ... for items *about* people (Q18608871)
- ► ... for *authority control for* people (Q19595382)

needs some cleanup

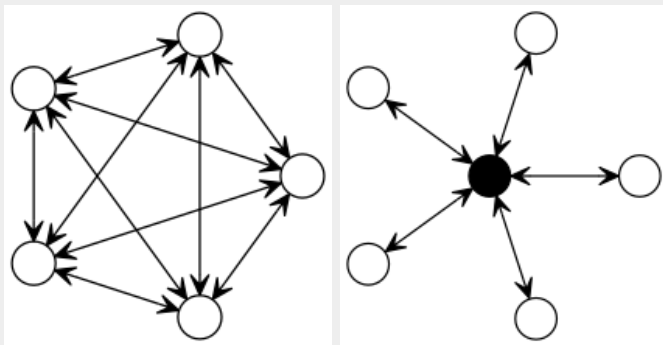# Classification of identifier properties (2/2)

Classification of corresponding systems

- identifier classes (Q6545185)
- classes of Knowledge Organization Systems:
  catalogs, registries, taxonomies… (Q6423319)

needs consensus

related to previous questions

Wikidata as linking hub

- ▶ Neubert: *Wikidata as a linking hub for knowledge organization systems* 17th European NKOS Workshop =Q41072431
- ▶ Neubert/Voß: *Wikidata as authority linking hub* ELAG 2017
- ▶ http://coli-conc.gbv.de/concordances/wikidata/

Summary

Questions

- how to handle items about identifier systems
  and/or systems that have identifiers
  and their corresponding instances?
- classify all external-id properties under Q19847637?
- n-to-m mappings & the *Bonny and Clyde Problem*

Tools

- wikidata-sdk
- wdtaxonomy
- wdmapper
- Mix'n'match

Join Wikidata:Identifiers!