SCIENTIFIC AUDIOVISUAL MATERIALS AND LINKED OPEN DATA: THE TIB PERSPECTIVE
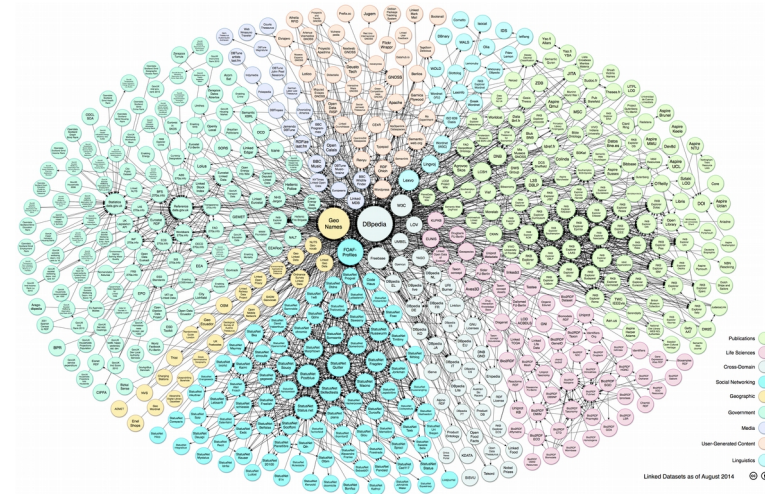
Paloma Marín Arraiza
17th International Conference on Grey Literature
1st and 2nd December 2015, Amsterdam (Netherlands)

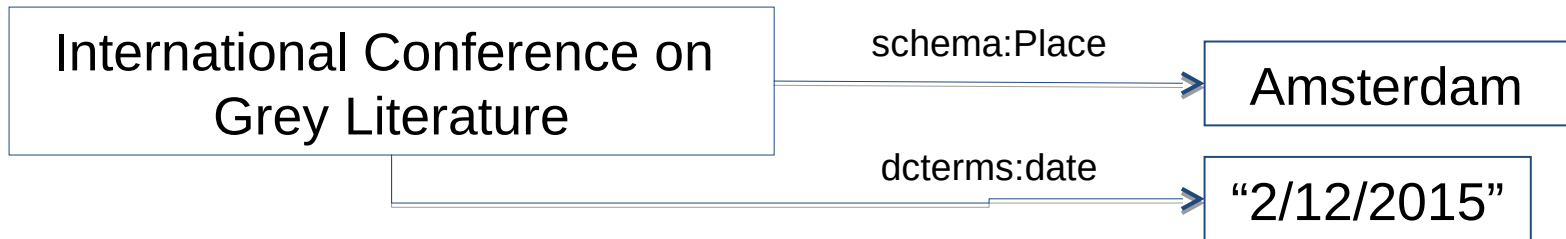# What is Linked Open Data?

Linked Data Principles

- Use URIs as names for things

- Use HTTP URIs so that people can look up those names

- When someone looks up a URI, provide useful information, using the standards (RDF*, SPARQL)

- Include links to other URIs. so that they can discover more things

Linked Data Principles + a public domain license = Linked Open Data (LOD)

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RDF structure: subject + predicate + object

International Conference on Grey Literature

schema:Place

Amsterdam

dcterms:date

"2/12/2015"

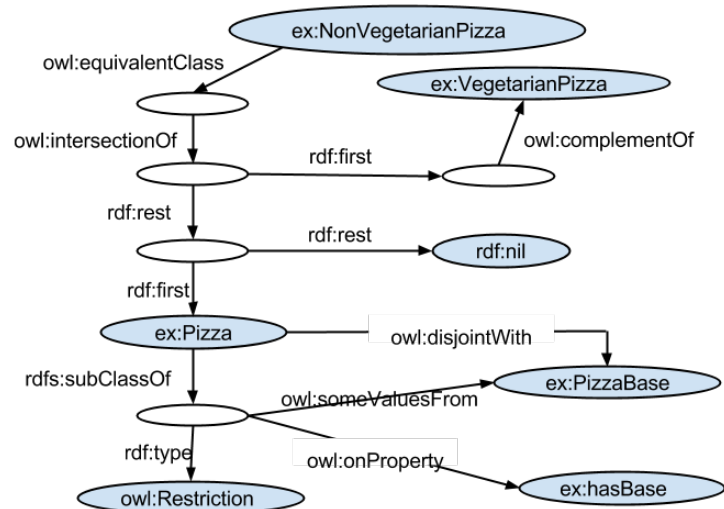**How to cope with complexity? → Ontologies**

Figure: Pizza Ontology (Source: Obitko)

Standards

There is no standardised way to publish Linked Open Data (Zuiderwijk et al., 2012).

Common best practices:

- a local RDF store,
- an ontology/vocabularies that relates data items (internally and externally),
- data reuse.

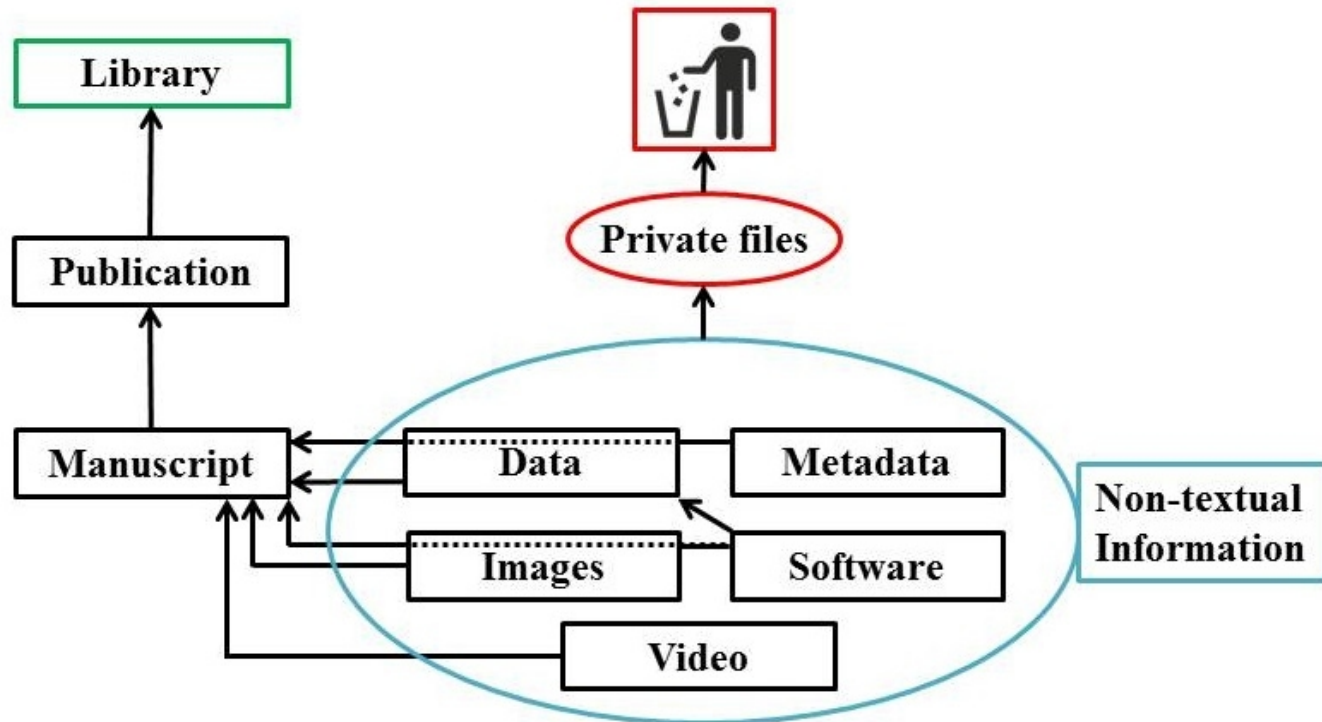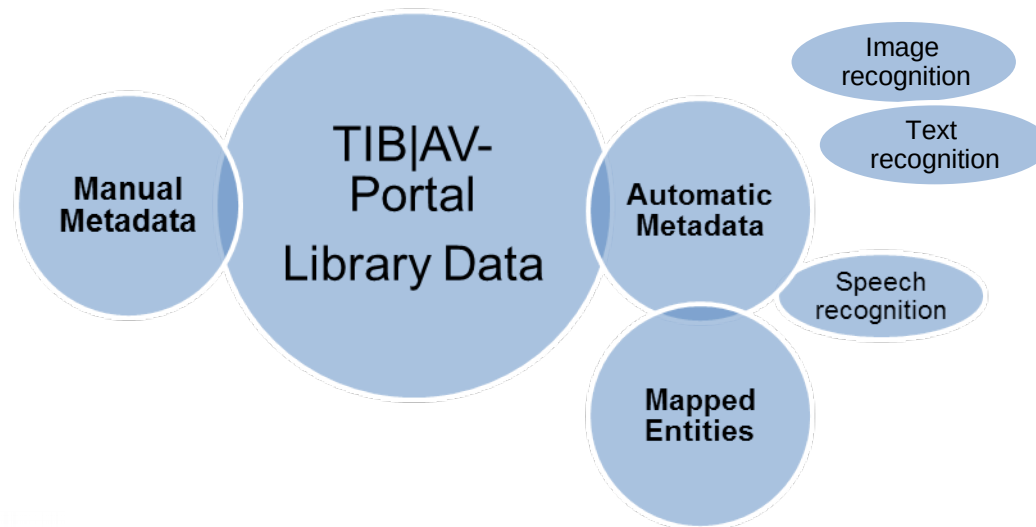# New types of scientific information = grey scientific information

Figure. Flow of scientific information from research to publication (modified after Klump et al., Data Publication in the Open Access Iniatiative. Data Science Journal, Volume 5, 15 June, 2006, pag: 80).

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Library Data

'*Library data refers to any type of digital information produced or curated by libraries that describes resources or aids their discovery'*. (Library Data Incubator Group Final Report).

TIB|AV-PORTAL

Deutsch

TIB | GERMAN NATIONAL LIBRARY OF SCIENCE AND TECHNOLOGY

German National Library for all areas of engineering as well as architecture, chemistry, information technology, mathematics and physics.

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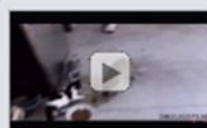Pineapple Award

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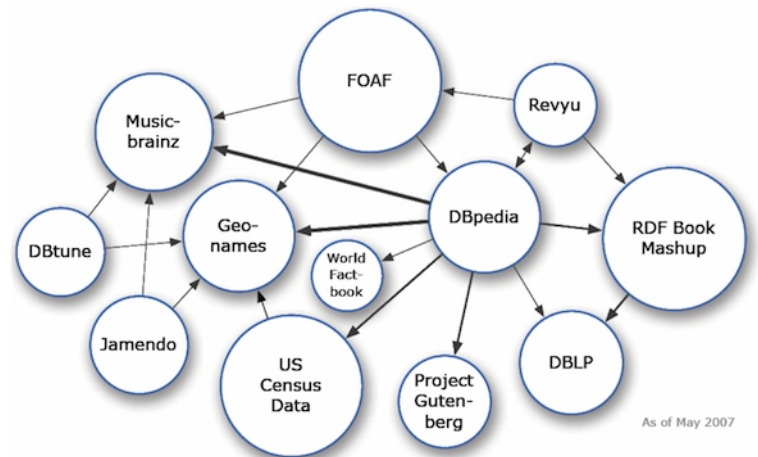Further Subjects

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Multilingual functionalities

Query in English, results in German.

Entities from the GND and DBpedia (in German and English).

GND and DBpedia offer their data as linked data sets.

Semantic applications

- Improved semantic search

- Recommendation system

- Author's information and publications

- Related topics

VOCABULARIES FOR OUR PURPOSES

- Dublin Core Types

- Dublin Core Terms

- Schema.org

- RDF Schema

- RDF Syntax

- Ontology for Media Resources

- Friend of a Friend (FOAF)

- Open Annotation Model

- Bibliographic Framework Initiative (Bibframe)

- The Bibliographic Ontology (BIBO)

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Summary

- Research libraries manage textual and non-textual digital information

- The management generates library data

- Linking library data using standards increases the interoperability of the data

- Linked Open Data promotes multilingual facilities, data reuse and semantic applications

- TIB|AV-Portal is weaving step by step into a linked data environment

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Thank you very much for your attention ☺

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