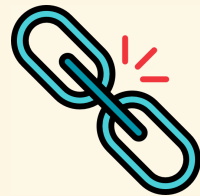


LINKED OPEN DATA - POTENTIALE UND GRENZEN

Lucas Schons



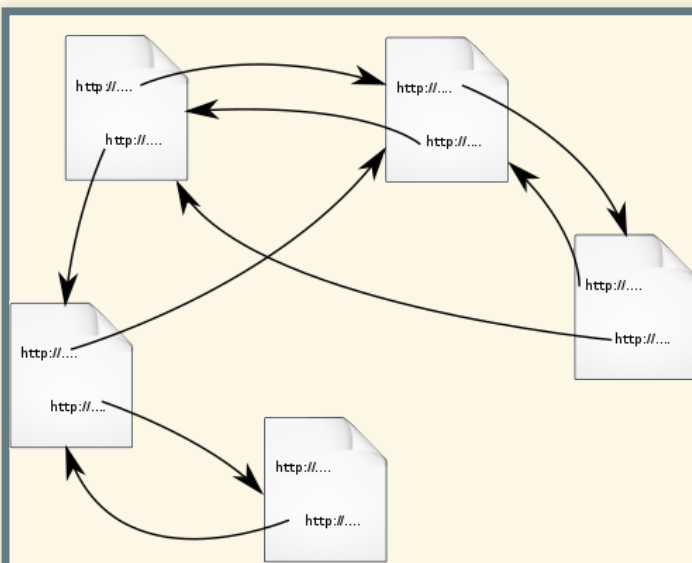
<https://github.com/Rascat>



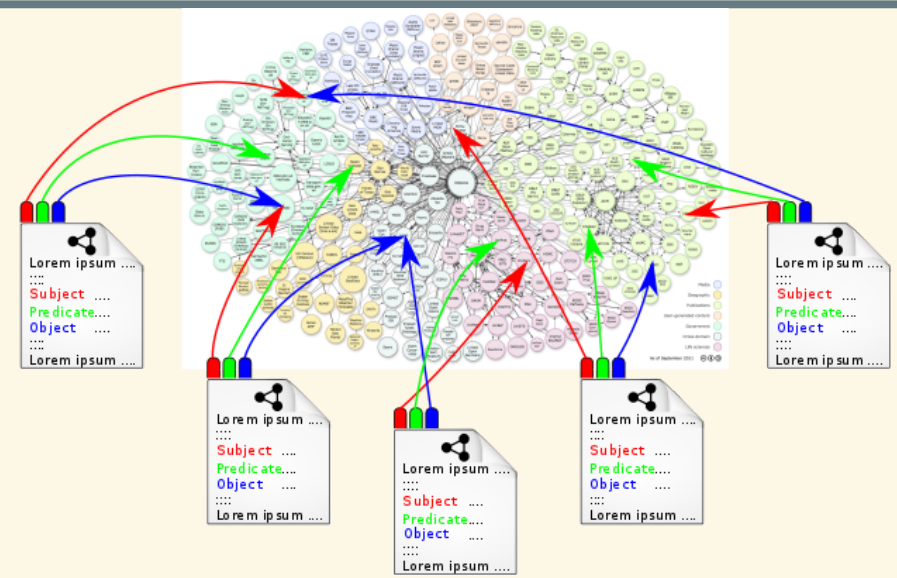
<https://ag-link.xyz>

Übersicht

- Was ist Linked Open Data?
 - Was ist Linked Data?
 - Was ist Open Data?
- Potentiale und Grenzen
- Zusammenfassung
- Fragestellung



The traditional web -



The semantic web -

"[Linked Data] builds upon standard Web technologies such as HTTP, RDF, and URIs, but rather than using them to serve web pages only for human readers, it extends them to share information in a way that can be read automatically by computers. Part of the vision of linked

Linked Data: Design Principles

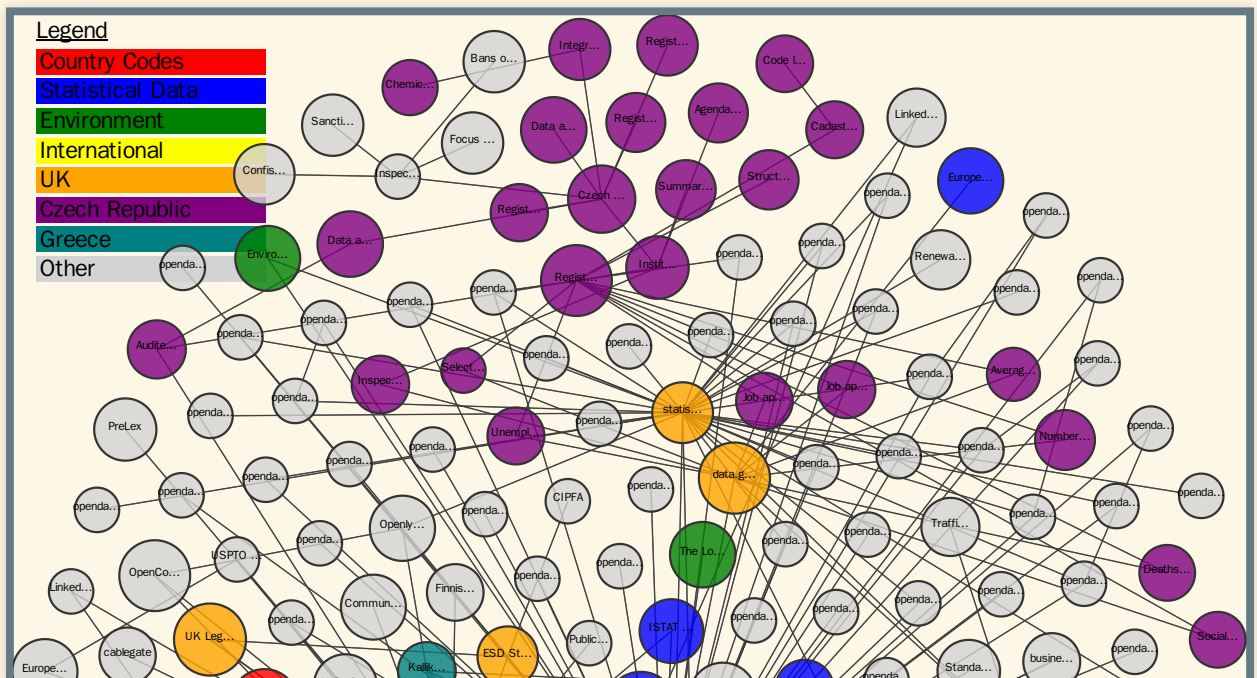
1. Use URIs as names for things
2. Use HTTP URIs so that people can look up those names.
3. When someone looks up a URI, provide useful information, using the standards (RDF*, SPARQL)
4. Include links to other URIs. so that they can discover more things

“Open data and content can be freely used, modified, and shared by anyone for any purpose”

<https://opendefinition.org/>

OPEN DATA KONFORME LIZENZEN





UK Legislation [\(Edit\)](#)

About this dataset

API access to UK primary and secondary legislation. The API provides access to legislation from the UK Statute Law Database and the OPSI website in HTML, XML and RDF formats. The data is not available for download as an entire set. See the documentation in the developer zone for further details.

License: <http://reference.data.gov.uk/id/open-government-licence>

Total size	1,900,000,000 triples
Namespace	http://www.legislation.gov.uk/
Links to dbpedia	33 triples
Links to ordnance-survey-linked-data	16,000,000 triples

★ Available on the web (whatever format) *but with an open licence, to be Open Data*

★★ Available as machine-readable structured data (e.g. excel instead of image scan of a table)

★★★ as (2) plus non-proprietary format (e.g. CSV instead of excel)

★★★★ All the above plus, Use open standards from W3C (RDF and SPARQL) to identify things, so that people can point at your stuff

PROBLEMFELDER LOD NACH NOSHEEN ET AL.

- Publishing and Managing Huge Datasets
- Linking Datasets on Linked Open Data
- Consuming Linked Open Data

ONTOLOGY HIJACKING

"WSMO-Lite Ontology" (wl)

[<http://www.wsmo.org/ns/wsmo-lite#>] uses

[<http://www.w3.org/2000/01/rdf-schema#Property>]

that is not defined in the rdf namespace

(<http://www.w3.org/2000/01/rdf-schema#>) instead of

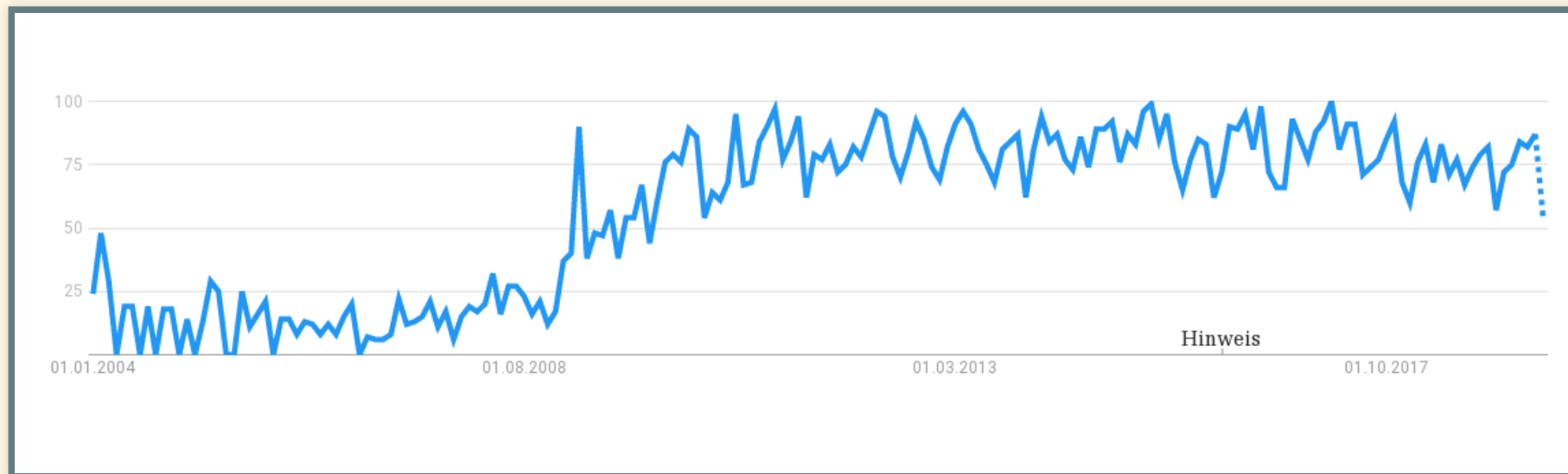
using [[http://www.w3.org/1999/02/22-rdf-syntax-](http://www.w3.org/1999/02/22-rdf-syntax-ns#Property)

[ns#Property](http://www.w3.org/1999/02/22-rdf-syntax-ns#Property)], that is actually defined in the rdfs

namespace ([\[syntax-ns#\]\(http://www.w3.org/1999/02/22-rdf-syntax-ns#\)\)](http://www.w3.org/1999/02/22-rdf-</p></div><div data-bbox=)

<https://wikipulse.herokuapp.com/>

LINKED DATA: INTERESSE IM ZEITLICHEN VERLAUF



QUELLEN

- <https://lod-cloud.net/dataset/uk-legislation-api>
- <https://lod-cloud.net/dataset/dbpedia>
- <https://lod-cloud.net/dataset/wikidata>

QUELLEN

- <https://opendefinition.org/od/2.1/en/>
- G. Wichmann, Entwurf Semantic Web: Entwicklung, Werkzeuge, Sprachen. VDM Verl. Dr. Müller, 2007.
- T. Pellegrini and A. Blumauer, Eds., Semantic Web: Wege zur vernetzten Wissensgesellschaft; mit 4 Tabellen. Berlin: Springer, 2006.

QUELLEN

- M. Poveda-Villalón, B. Vatant, and M. C. Suárez-Figueroa, “Detecting Good Practices and Pitfalls when Publishing Vocabularies on the Web,” p. 13.
- “Linked Data - Design Issues.” [Online]. Available: <https://www.w3.org/DesignIssues/LinkedData.html>. [Accessed: 02-Jun-2019].
- “Open Definition 2.1 - Open Definition - Defining Open in Open Data, Open Content and Open Knowledge.” [Online]. Available: <https://opendefinition.org/od/2.1/en/>. [Accessed: 31-May-2019].
- G. Goos et al. “Lecture Notes in Computer Science”

**VIELEN DANK FÜR EURE
AUFMERKSAMKEIT**

