Talk

Towards a knowledge graph for the House of Commons Library

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London 2025

CHALLENGES OF CHANGE

WORLD IA DAY 2025
LOCAL CONNECTIONS. GLOBAL IMPACT.

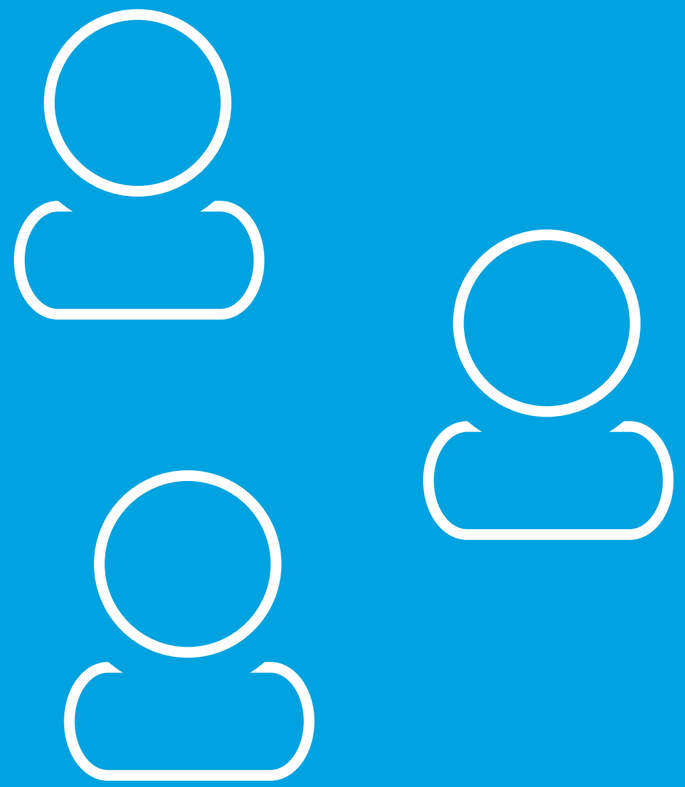
Towards a knowledge graph for the House of Commons Library

House of Commons Library

Data Language

The House of Commons Library

Not (entirely) this kind of library



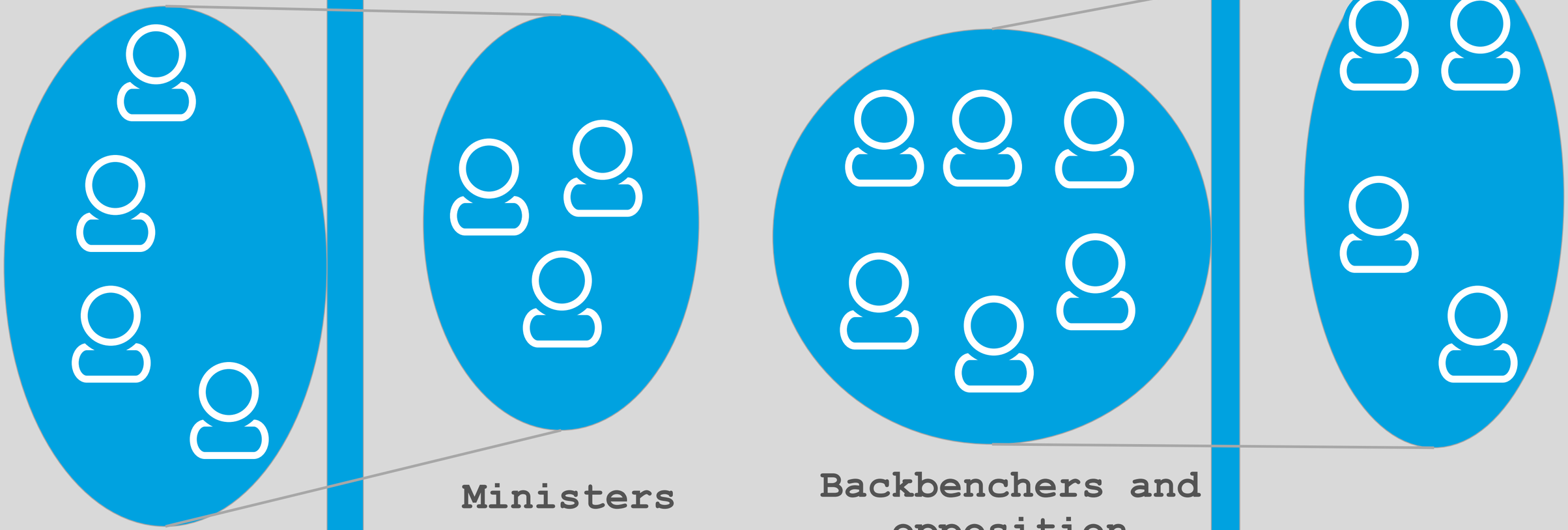
Librarians

Researchers

Civil Service

House of Commons

Library



Ministers

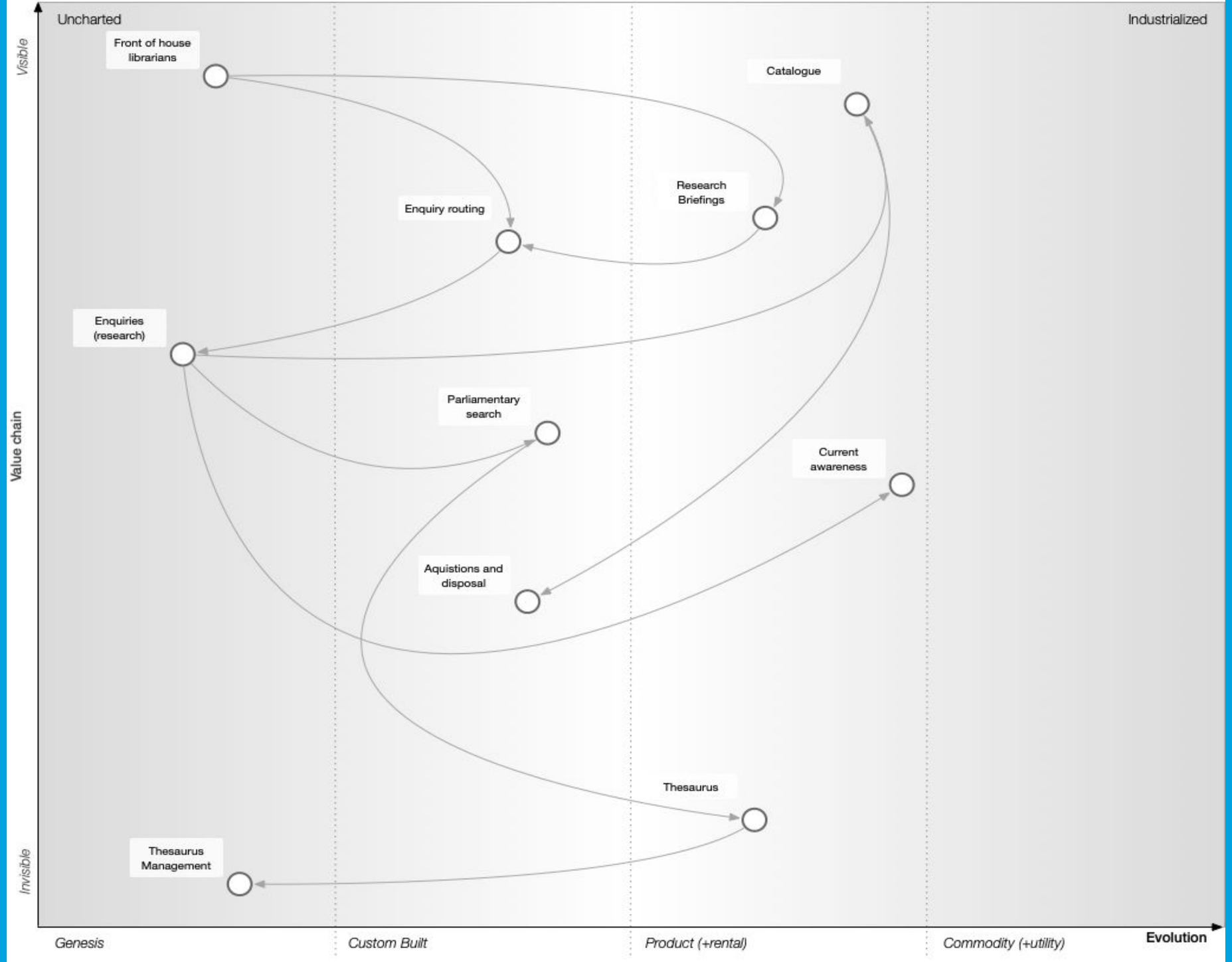
Backbenchers and opposition

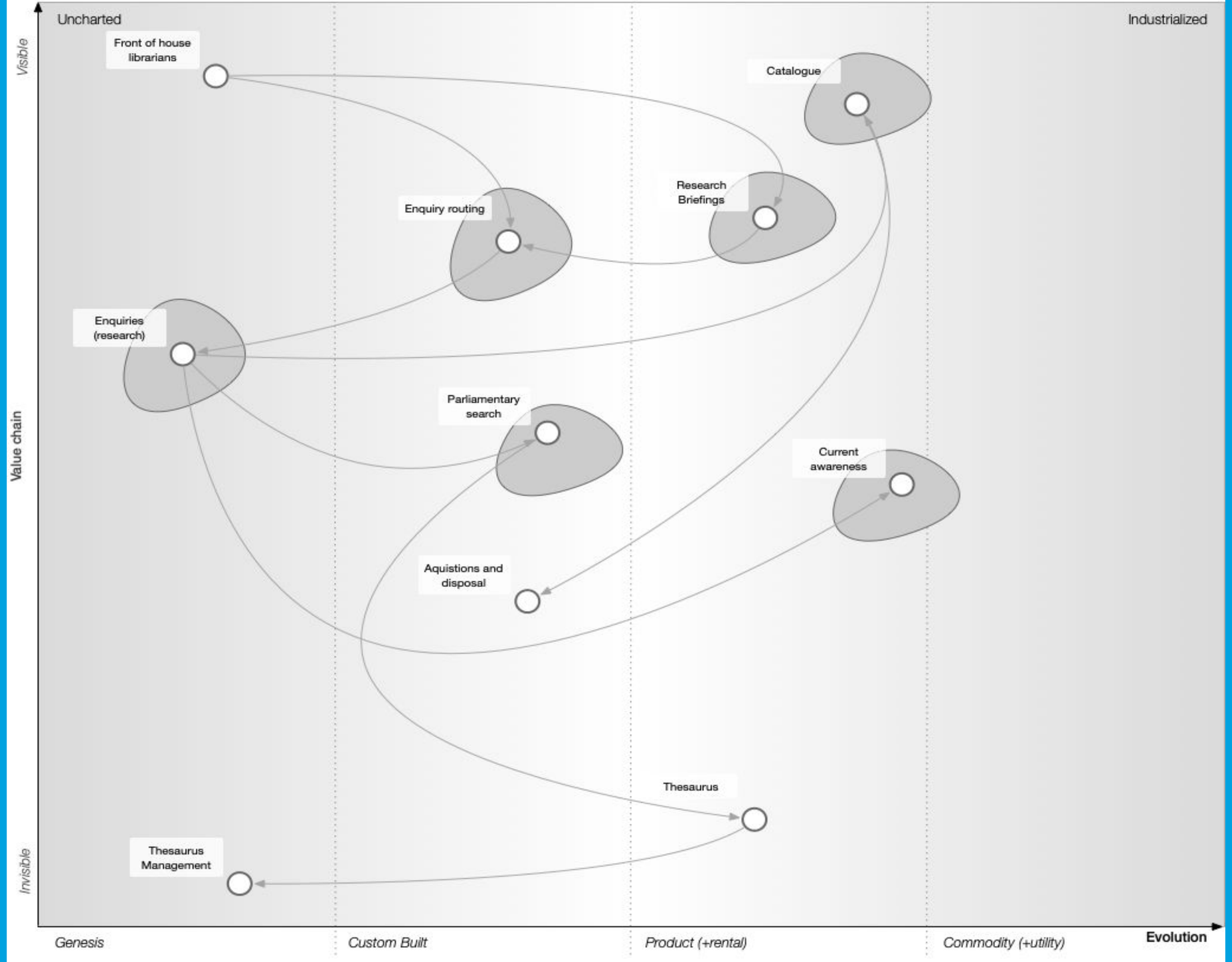
The nature of requests

- Data on free school meals in my constituency.
- Likely impact of a tax policy?
- Housing vacancy in England and Wales?

The House of Commons Library

(a Wardley map)


Uncharted
Industrialized
Visible
Invisible
Value chain
Front of house librarians
Catalogue
Research Briefings
Enquiry routing
Enquiries (research)
Parliamentary search
Current awareness
Aquistions and disposal
Thesaurus
Thesaurus Management
Genesis
Custom Built
Product (+rental)
Commodity (+utility)
Evolution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What is "the Thesaurus"?

Why the Thesaurus?

1. Stable identifiers
2. Synonyms
3. Hierarchy and transitivity
4. Responding to change

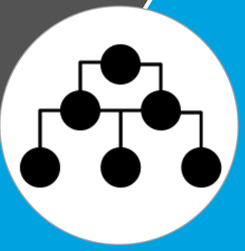
5. Librarians!

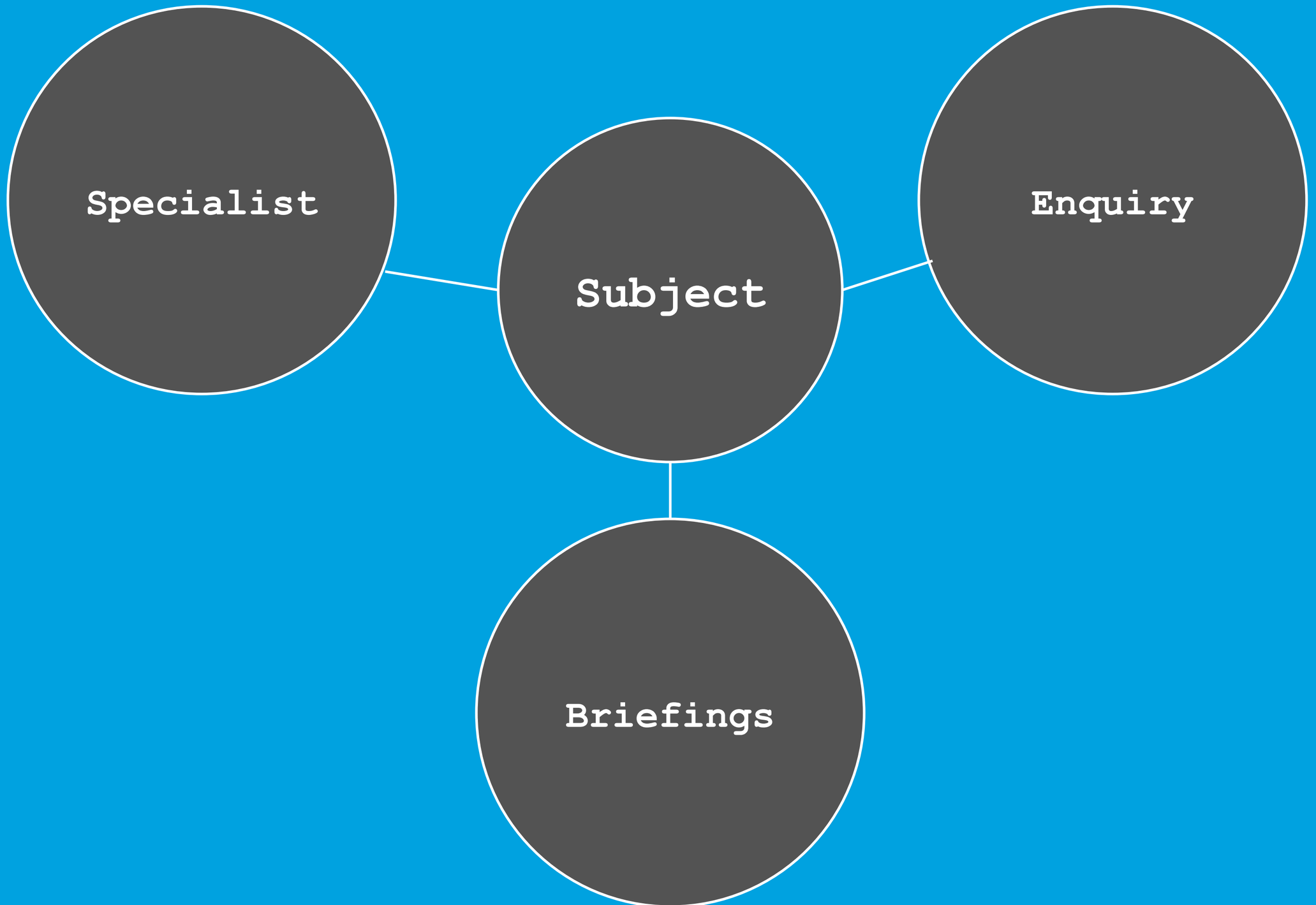
A single subject view of the Library

Specialist

Briefings

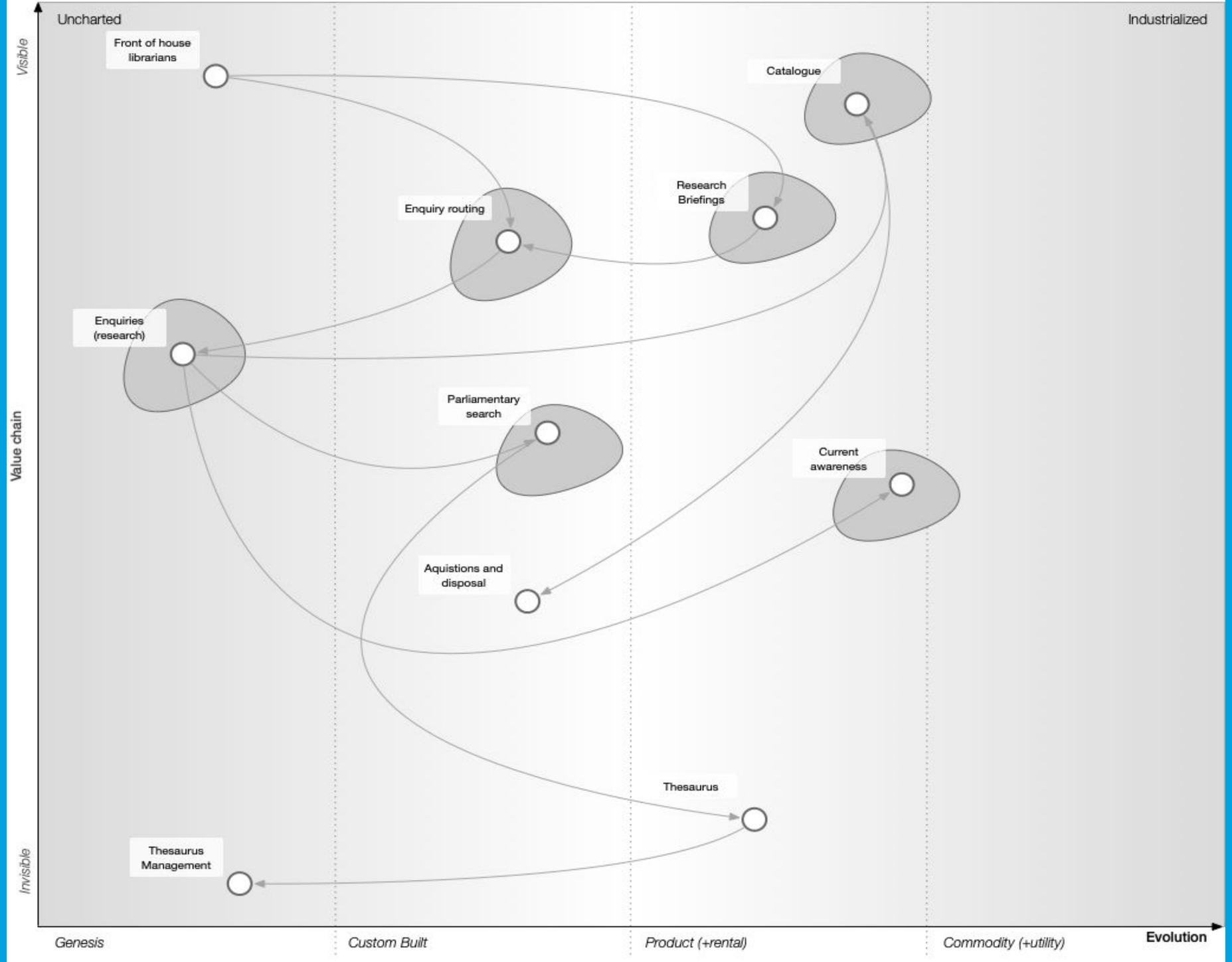
Enquiry




Specialist
Subject
Enquiry
Briefings

The approach

Domain-driven design + information management = Knowledge graph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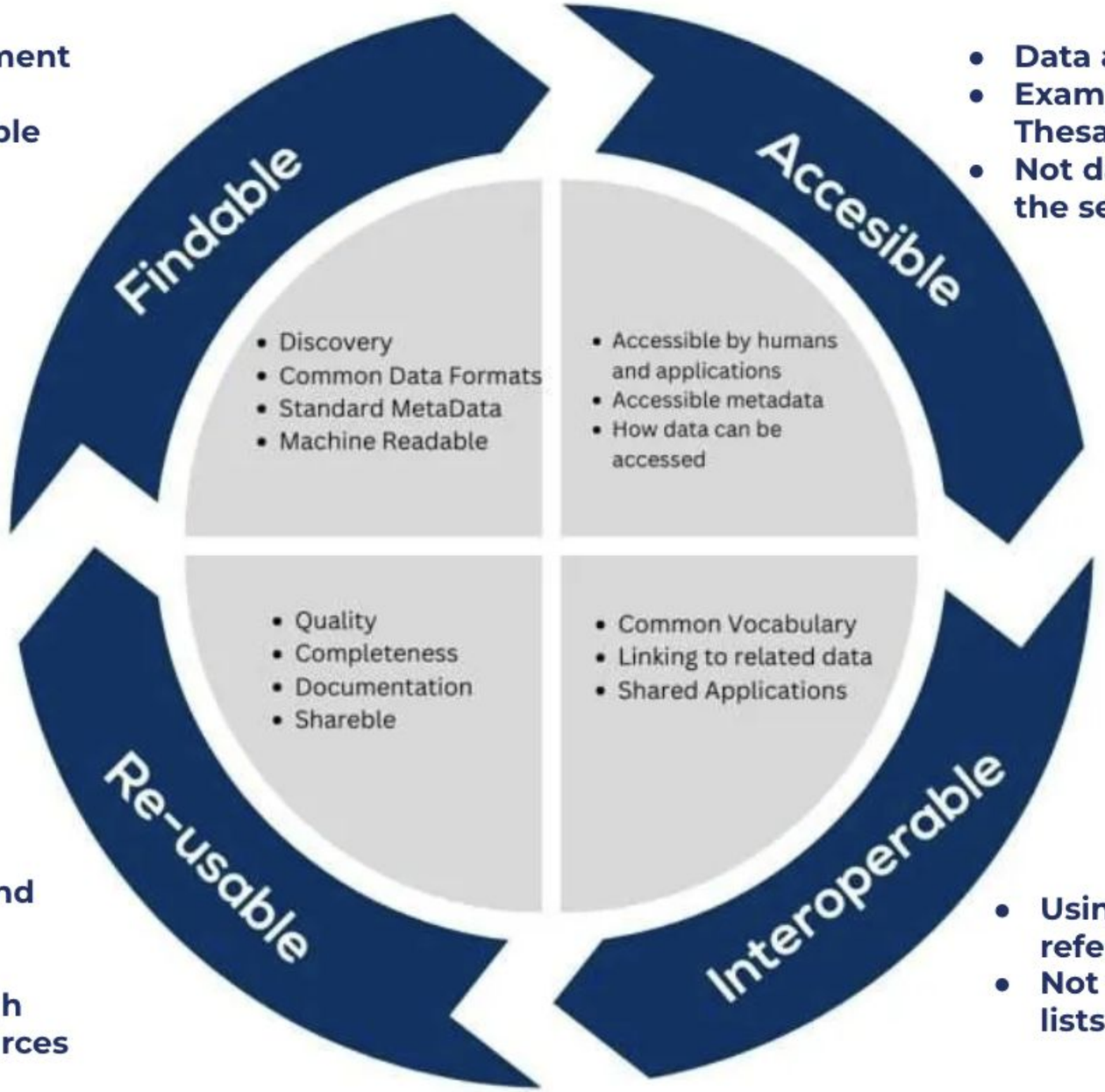
- Common models (Parliament and public domain)
- Aspire to machine readable views of information



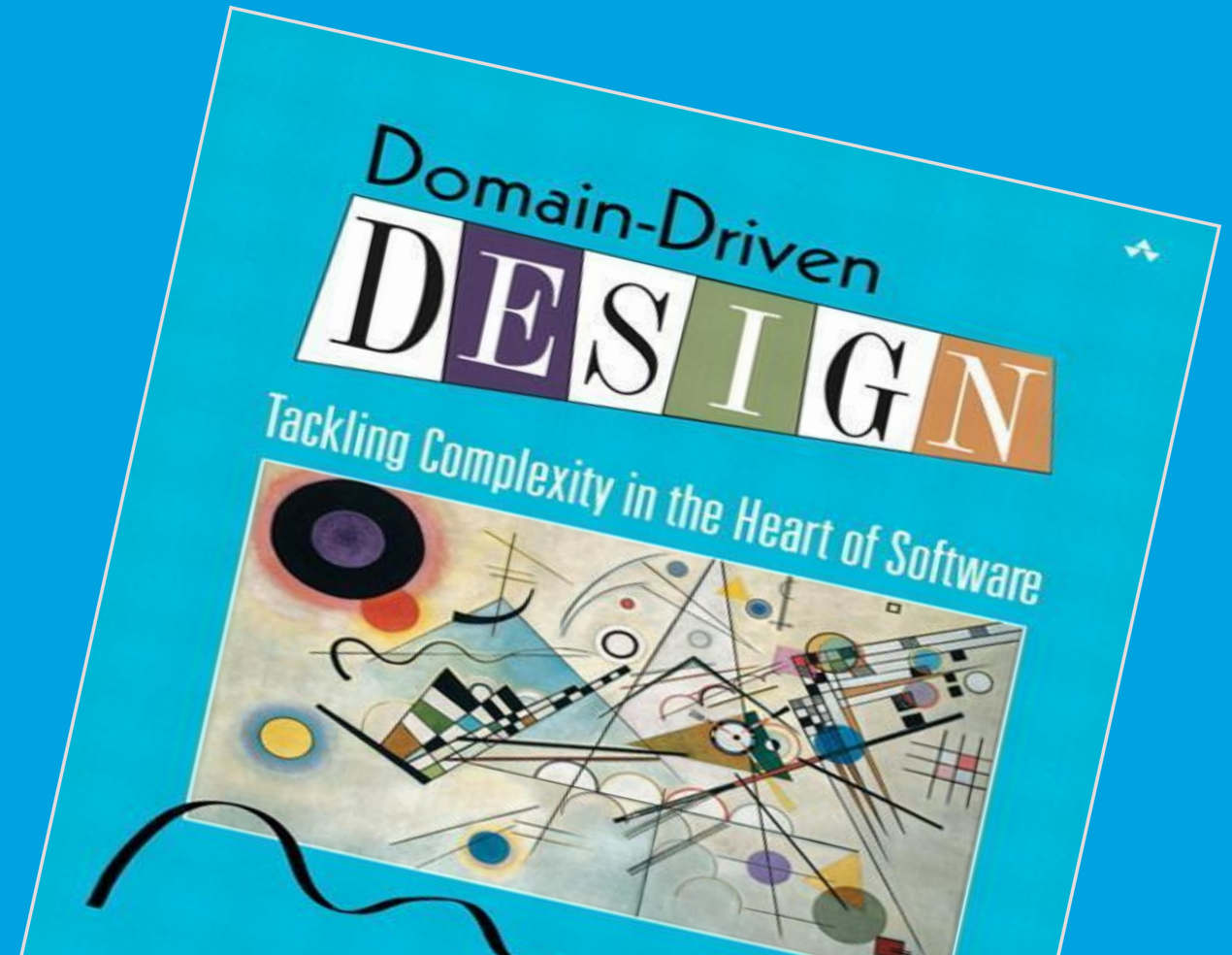
- Data available in easy to access API's
- Example of the Parliament Thesaurus
- Not data constrained to use within the service

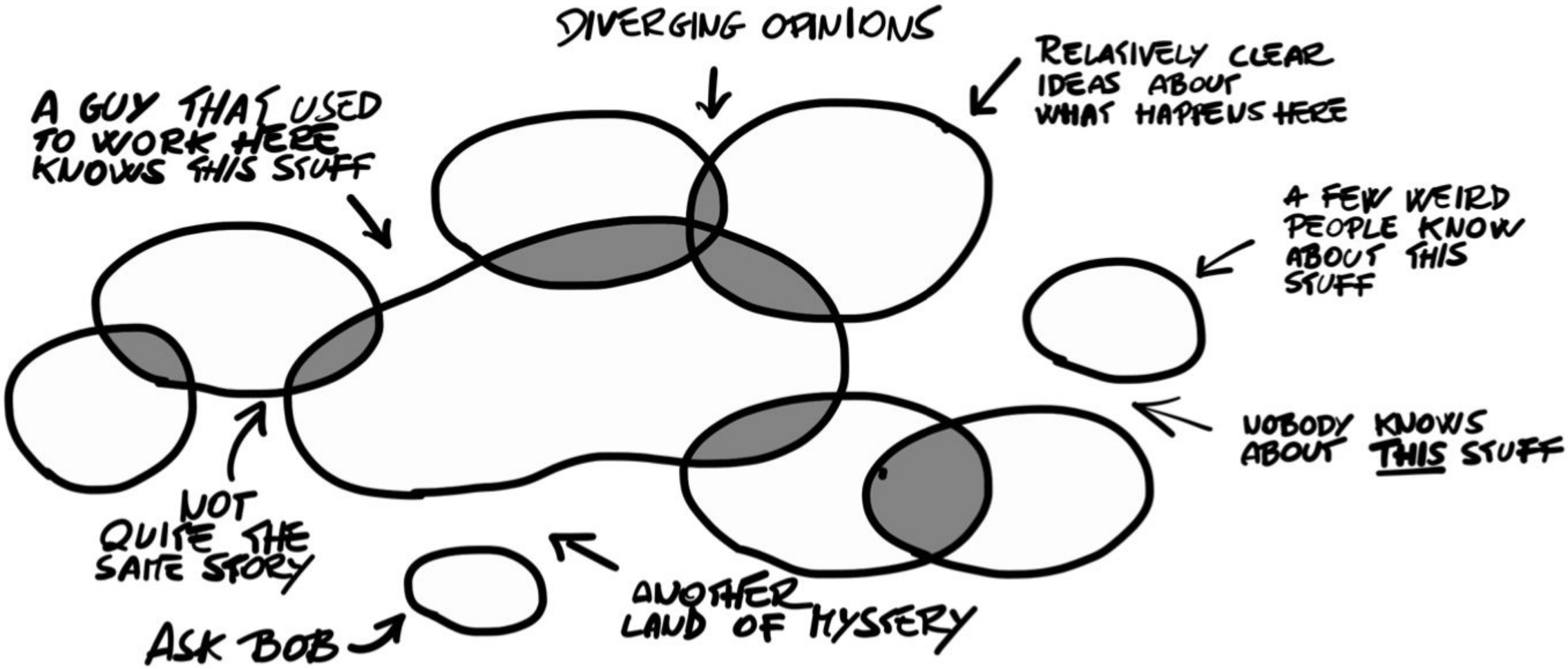
- Model documentation and shared language for understanding data
- Data governance through having authoritative sources for data
- Fixing data in one place

- Using the Thesaurus as common reference data
- Not forking it and inventing new lists

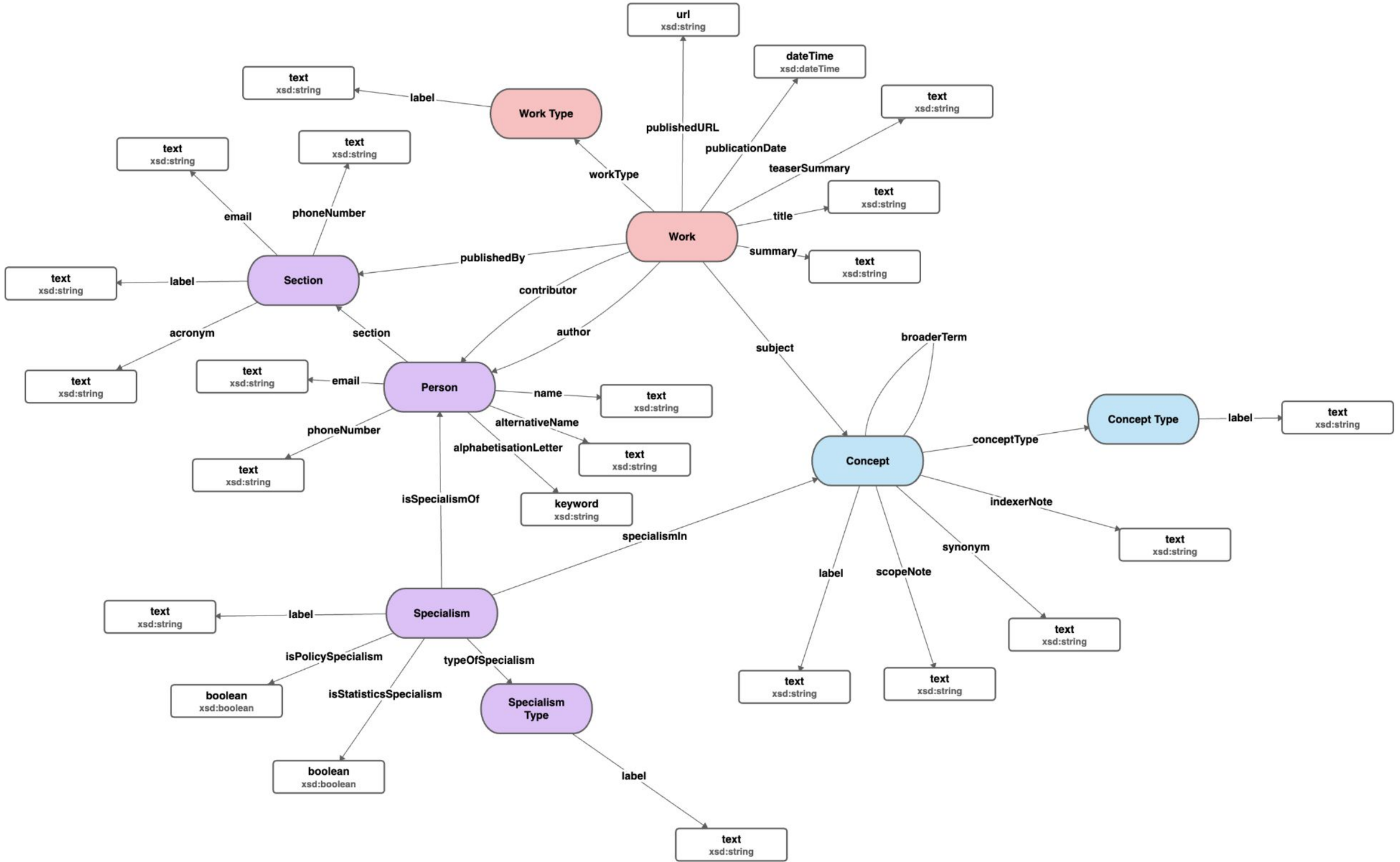
https://www.nature.com/articles/sdata201618

Domain-driven design





Alberto Brandolini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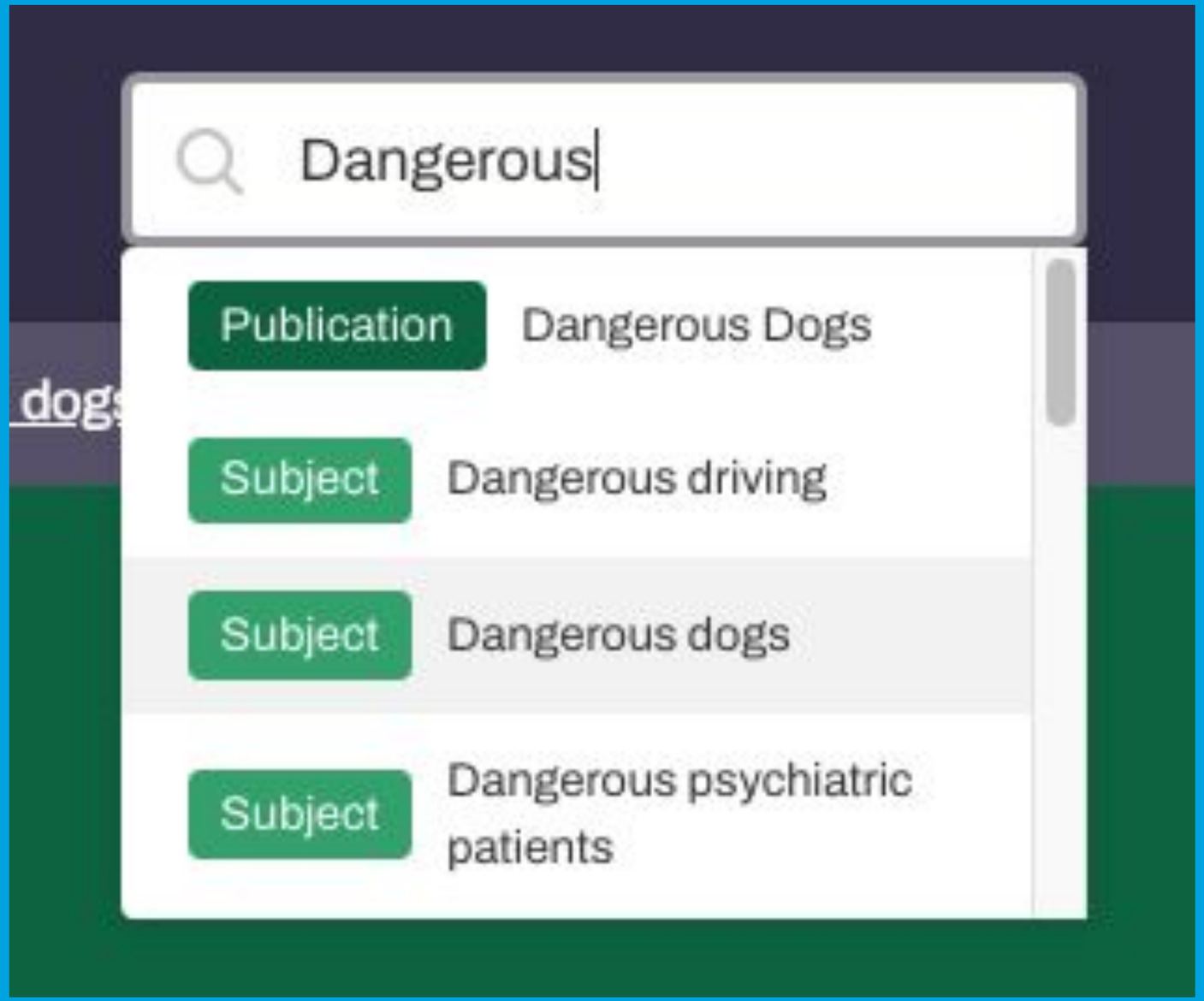
Dangerous
Publication
Dangerous Dogs
Subject
Dangerous driving
Subject
Dangerous dogs
Subject
Dangerous psychiatric patients

House of Commons Library

Dangerous dogs

Synonyms: Dogs in crime

Specialists (0) **Publications (0)** **Parents (1)** **Siblings (8)** **Children (0)**

The Library has no specialists directly assigned to Dangerous dogs. These specialists are being suggested because of their expertise in Animals:

Grahame Allen

Elena Ares

Paul Bolton

House of Commons Library

Social & General Statistics

Grahame Allen

[redacted] [redacted] Teams Call

Specialisms (96) Publications (72)

Adoption

0

Age discrimination

0

Agriculture

0

Agriculture

Alternatives to prison

Alternatives to prison

House of Commons Library

UK Parliament / House of Commons Library S

House of Commons Library / Graph AI BETA

Today

- what are the legisaltion options for dealing wi... 13:38
- how has policy changed to deal with new breeds ... 13:37
- what are the policy options for reducing the im... 13:36
- how does vacant housing increase the cost for n... 13:26
- what policy changes could be used to reduce the... 12:11
- how does vacant housing impact prices for first... 08:42
- what are the potenital policy options to deal w... 08:12

Yesterday

- what are the potenital impacts on small compani... 09:18

Last Month

Older

Ask me anything about your data

Outcome

- **Making the mess more explicit and understood**
- **Less patching data at the end of data journey**
- **More meaningful work rather than fire fighting**
- **More accountability and control in the same place**
- **Less systems forking reference data(infrastructure is fit for purpose)**
- **Less time and cost to build out features**

See Also

- **Weeknotes:**

  https://ukparliament.github.io/ontologies/meta/weeknotes/

- **Parliament models:**

  https://ukparliament.github.io/ontologies/

- **How we make websites:**

  http://www.bbc.co.uk/blogs/radiolabs/2009/01/how_we_make_websites.shtml

- **Domain driven design for information professionals:**

  https://datalanguage.com/blog