Data Engineering and Semantics
هندسة البيانات و دلالاتها

REPRESENTING COVID-19 INFORMATION IN COLLABORATIVE KNOWLEDGE GRAPHS: THE CASE OF WIKIDATA

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INTRODUCTION

COVID-19

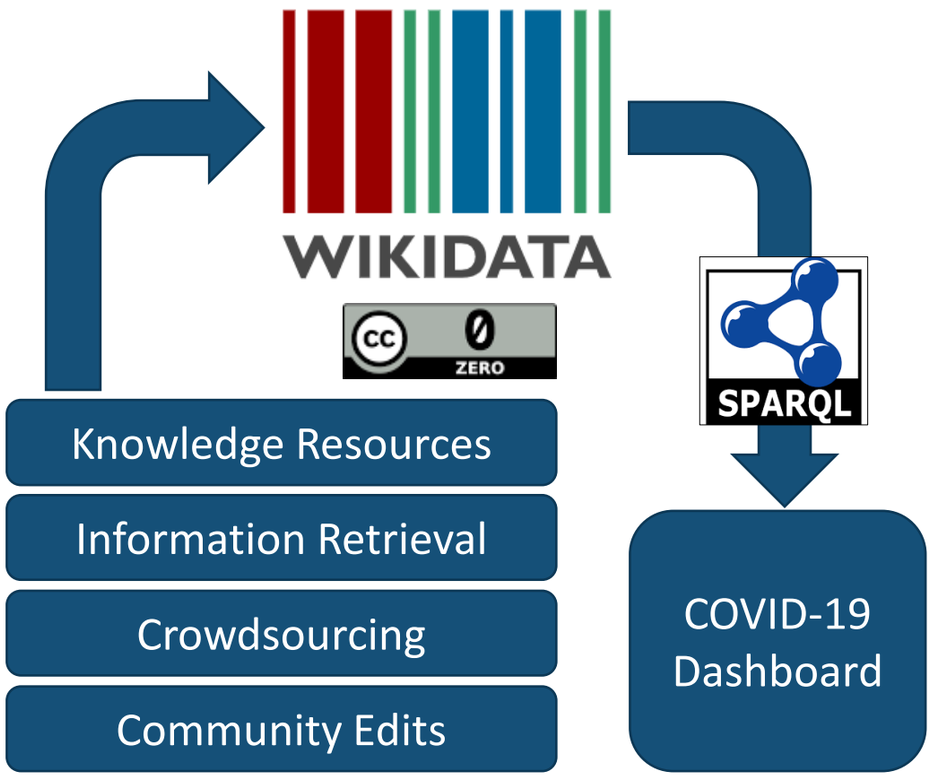
- An evolving pandemic
- Evidence is ever-changing
- Need for a prompt decision making

« We need a knowledge-driven dashboard to support clinical decisions related to COVID-19 »

Open Knowledge Graphs can be useful

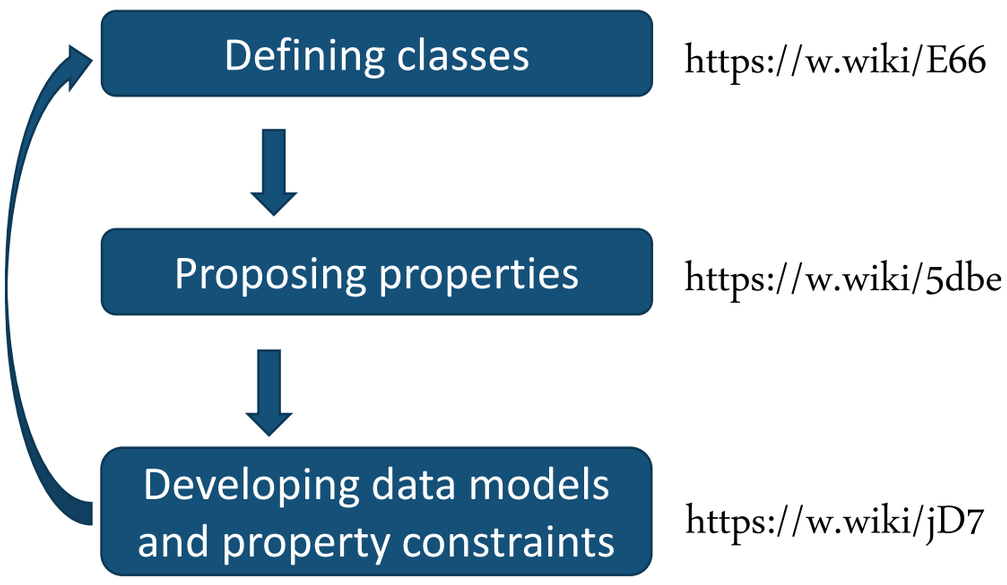
WIKIDATA · yago select knowledge · DBpedia

PROPOSED APPROACH



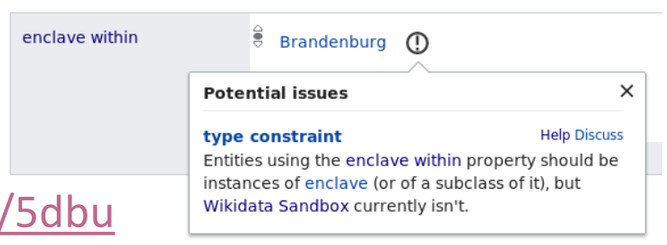
- RDF dumps are regularly updated so that SPARQL queries reflect the latest edition of Wikidata
- SPARQL queries are embedded to the COVID-19 dashboard

DATA MODELLING



ShEx

https://w.wiki/5dbr
https://w.wiki/5dbt

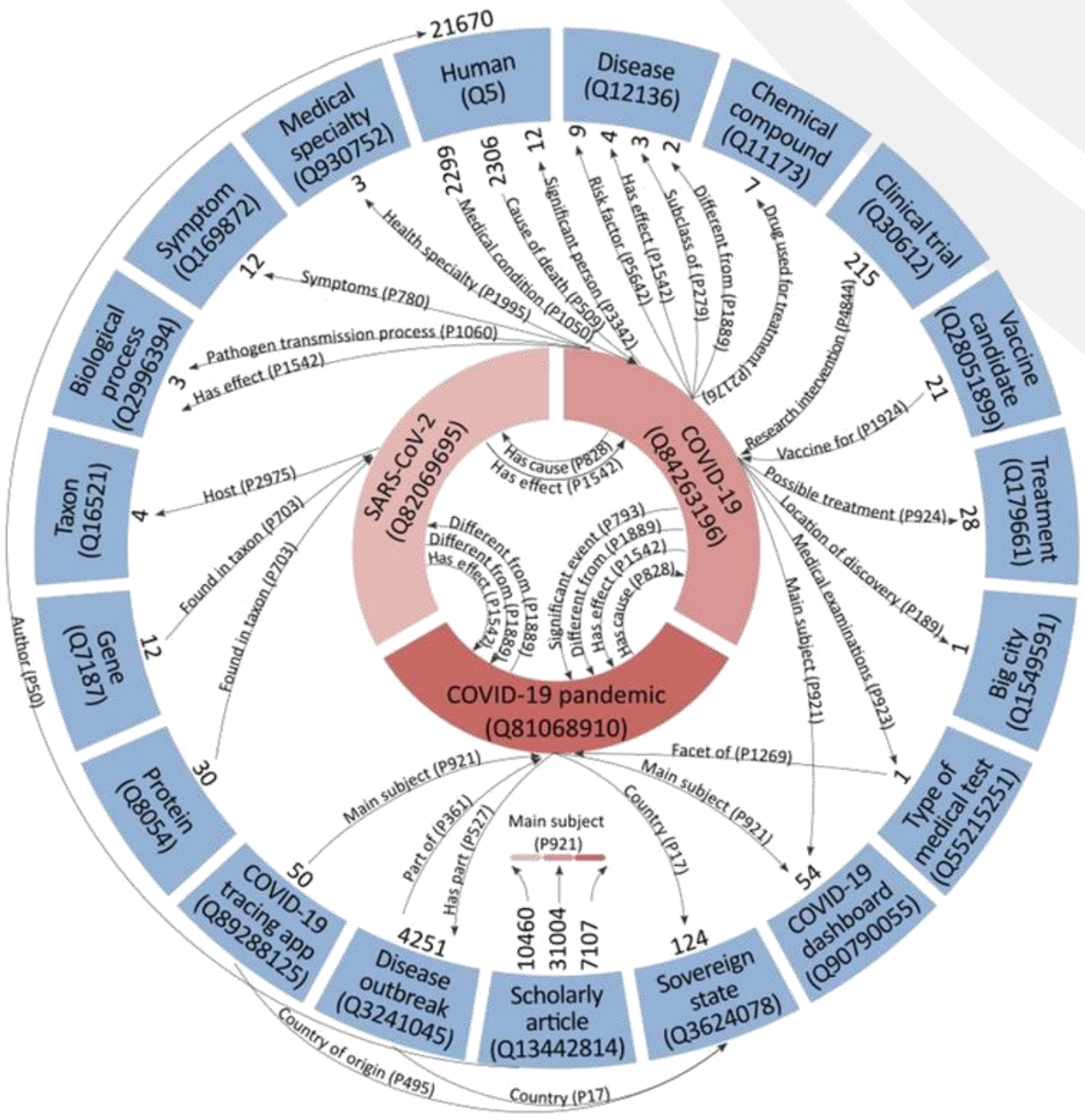


https://w.wiki/5dbu

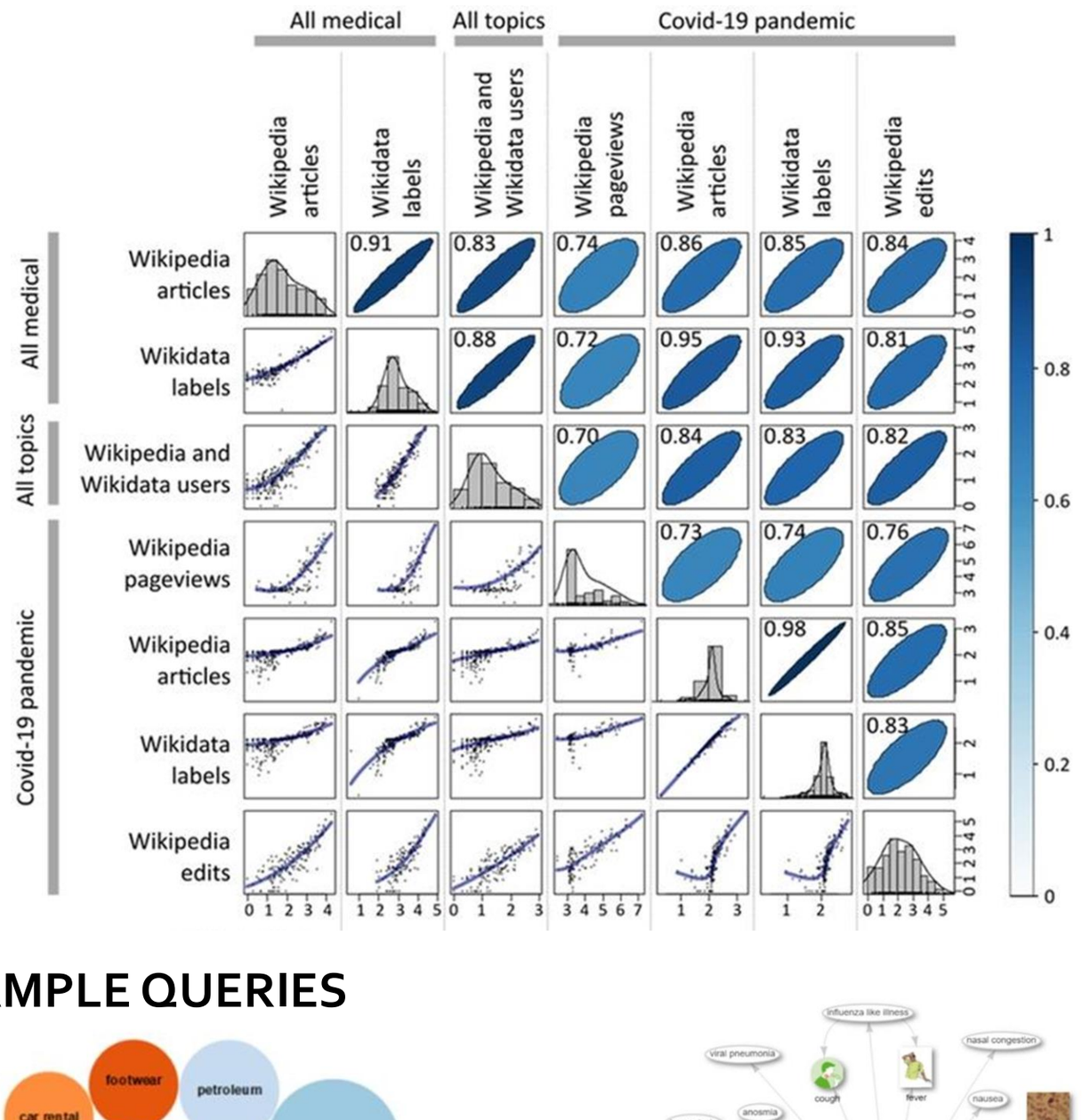
COVID-19 KNOWLEDGE IN WIKIDATA

As of August 20, 2020

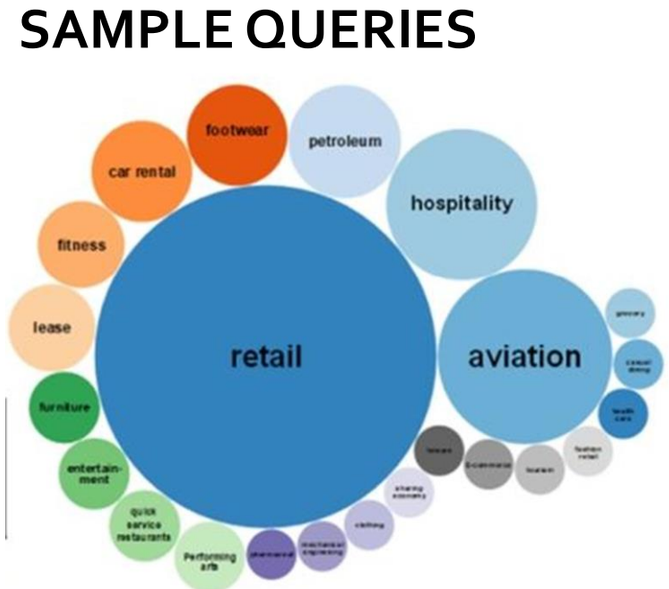
BIOMEDICAL ENTITY TYPES

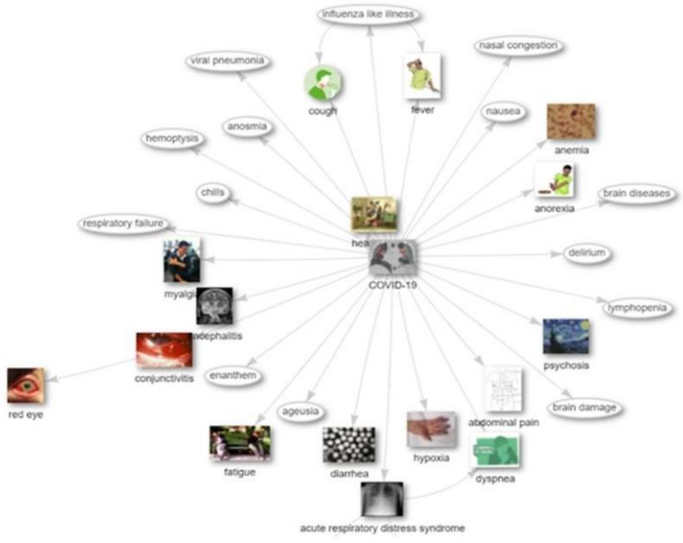


FACTORS INFLUENCING LANGUAGE REPRESENTATION



SAMPLE QUERIES





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