

Deriving World Literatures from Wikidata and Other Communities of Readers

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Marco Antonio Stranisci - Università degli Studi di Torino

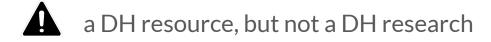
Who am I?



- PhD student in Computer Science
- member of the <u>CCC research group</u>
- Humanities teacher (on leave)
- Activist

Research motivation

Studying and **reducing** the underrepresentation of non-Western writers on Wikidata and Wikipedia



Not a critique to Wikimedia contents, but to their acritic usage in NLP

Structure of the presentation

- 1. Knowledge encoding
- 2. Building the World Literature Knowledge Graph (WL-KG)
- 3. Extracting biographical information from unstructured knowledge

1. Knowledge Encoding

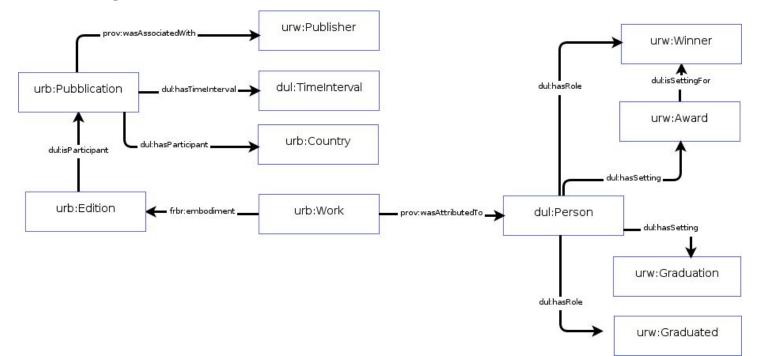
Classifying the underrepresentation

Transnational writers are:

1. People who belong to ethnic minorities in Western countries;

2. People who were born in former colonies from 1808 (Latin America) or 1917 (Africa and Asia)

Modeling writers lives and their works



2. Building the WL-KG

Data gathering

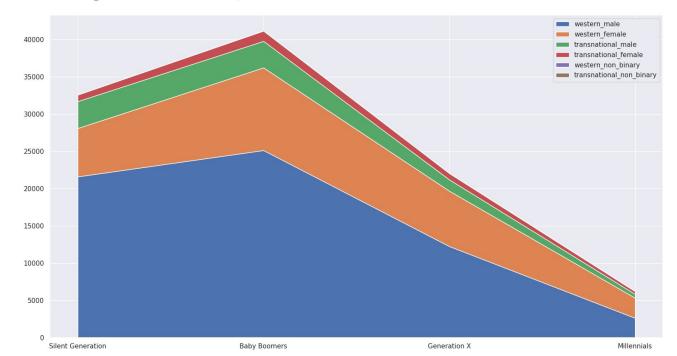
1. All people with occupation 'writer' (Q36180), 'poet' (Q49757), or 'novelist' (Q6625963)

2. Their country of birth, inferred from 'place of birth' (P19)

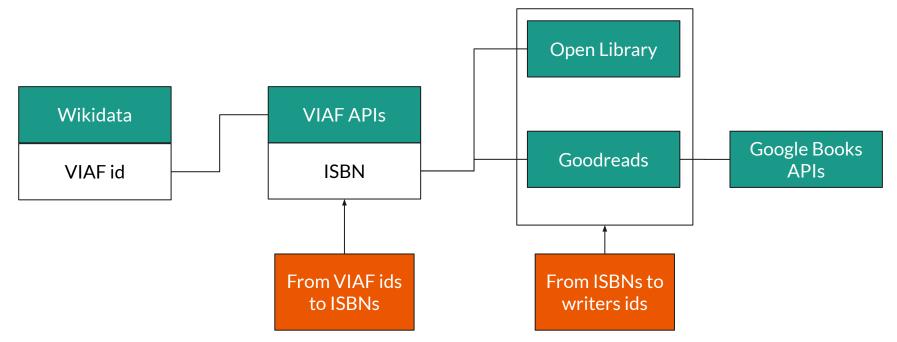
3. Their year of birth, inferred from 'date of birth' (P569)

4. Their works (P50)

Evaluating underrepresentation



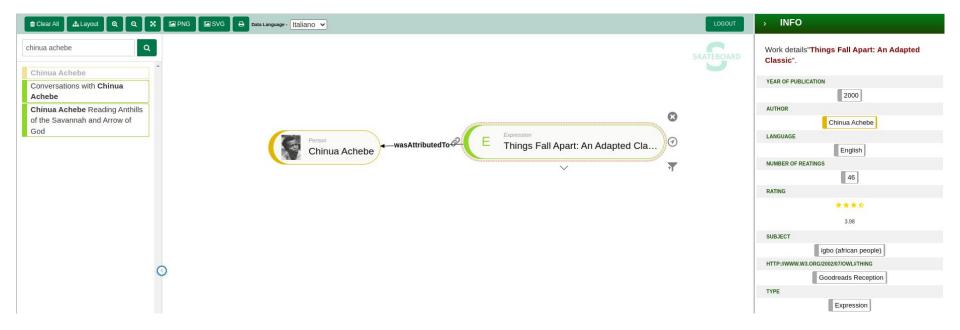
Mapping with other communities of readers



Mapping results

Source	Writers with at least 1 work (% Transnational)	N. of works
Wikidata	22,515 (8.6%)	117,798
Open Library	24,370 (12.4%)	226,108
Goodreads	60,201 (11.0%)	627, 214
Total	71,443 (10.6%)	971,120
Table 2. Number of works for each platform		

Data visualization platform



3. Extracting biographical events

Objective

Augmenting the amount of structured knowledge about Transnational writers from raw text biographies

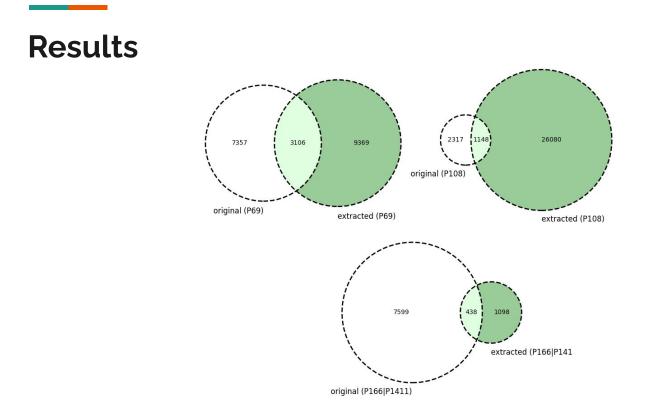
The biographical event extraction pipeline

- 1. Coreference resolution of the entity-target of the biography
- 2. Event detection
- 3. Mapping to Wikibase data scheme
- 4. Named Entity Recognition of the triple's object
- 5. Entity Linking

The pipeline, in practice

He served as the Herald's editor during the 1951–52 school year.

- He \rightarrow 'Chinua Achebe' (Q155845)
- **editor** \rightarrow 'employer' (P108)
- **Herald** \rightarrow The Herald (Q7739400)
- Q155845 P108 Q7739400



Future Work

- 1. Revise the semantic model
- 2. Enrich the KG with knowledge from other sources
- 3. Improve the visualization platform

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Thanks for your attention

mail: marcoantonio.stranisci@unito.it

twitter: @marcostranisci

linkedin: in/marcostranisci