

Measuring Political Elite Networks with Wikidata

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Substantive Problem

Political elites: people who can substantially and regularly influence political outcomes in a country [1].

- ▶ the groups that constitute elites differ substantially across countries
- ▶ can be members of parliament, military personnel, business people, clergy and so on
- ▶ most scholars study only a country/region (e.g. China, West Africa), a certain institution (e.g. the parliament), or specific types of regimes (e.g. presidential systems, single party regimes, etc.)

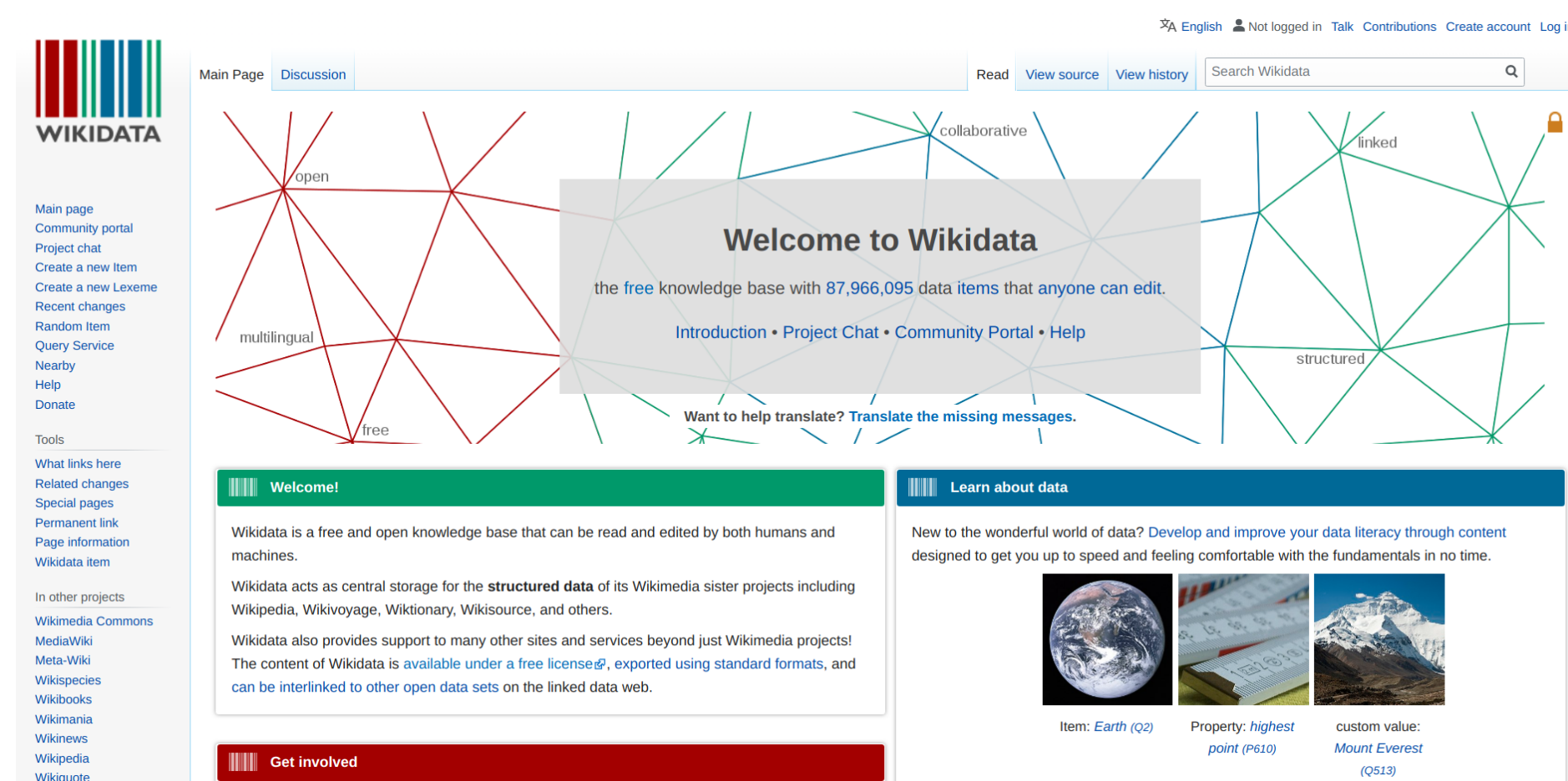
Data & Method Problem

Often, relationships of interest also differ across countries.

- ▶ kinship ties are more important in some countries than others
- ▶ attendance at an elite school
- ▶ ethnic ties, shared religion.
- ▶ any combination of these

We don't know what to look for before studying these. Questions come along through study.

Figure 1: Wikidata.org



Solution: Wikidata

Wikidata is a central storage for the structured data of Wikimedia projects including Wikipedia.

- ▶ machine readable
- ▶ collaborative: editable by humans and machines
- ▶ multilingual language independent
- ▶ graph database
- ▶ information stored in item–property–value triplets

Figure 2: Data Storage in Wikidata

Item	Property	Value
Q76	P19	Q6366688
Barack Obama	place of birth	Kapiolani Medical Center
Q6366688	P138	Q3322857
Kapiolani Medical Center	named after	Queen Kapiolani
Q3322857	P21	Q6581072
Queen Kapiolani	sex or gender	female

- ▶ items are linked to other items
- ▶ makes possible weird, specific queries that we wouldn't have thought before collecting the data
- ▶ Which countries' capital cities have a mayor younger than forty?
- ▶ Who are the US presidents born in hospitals named after women?

Application: Dynastic Politics

One type of relationship that can be queried with Wikidata is kinship ties.

- ▶ These relationships are instances of the item "Wikidata property for human relationships" (Q22964231), and include "father," "mother," "spouse," "child," "sibling," "relative,"

For each country:

- ▶ query instances of humans, who
- ▶ are citizens of the country in question
- ▶ were born after Jan 1, 1900
- ▶ have held a "position,"
- ▶ where the position is in the same country

Figure 3: Kennedy Family

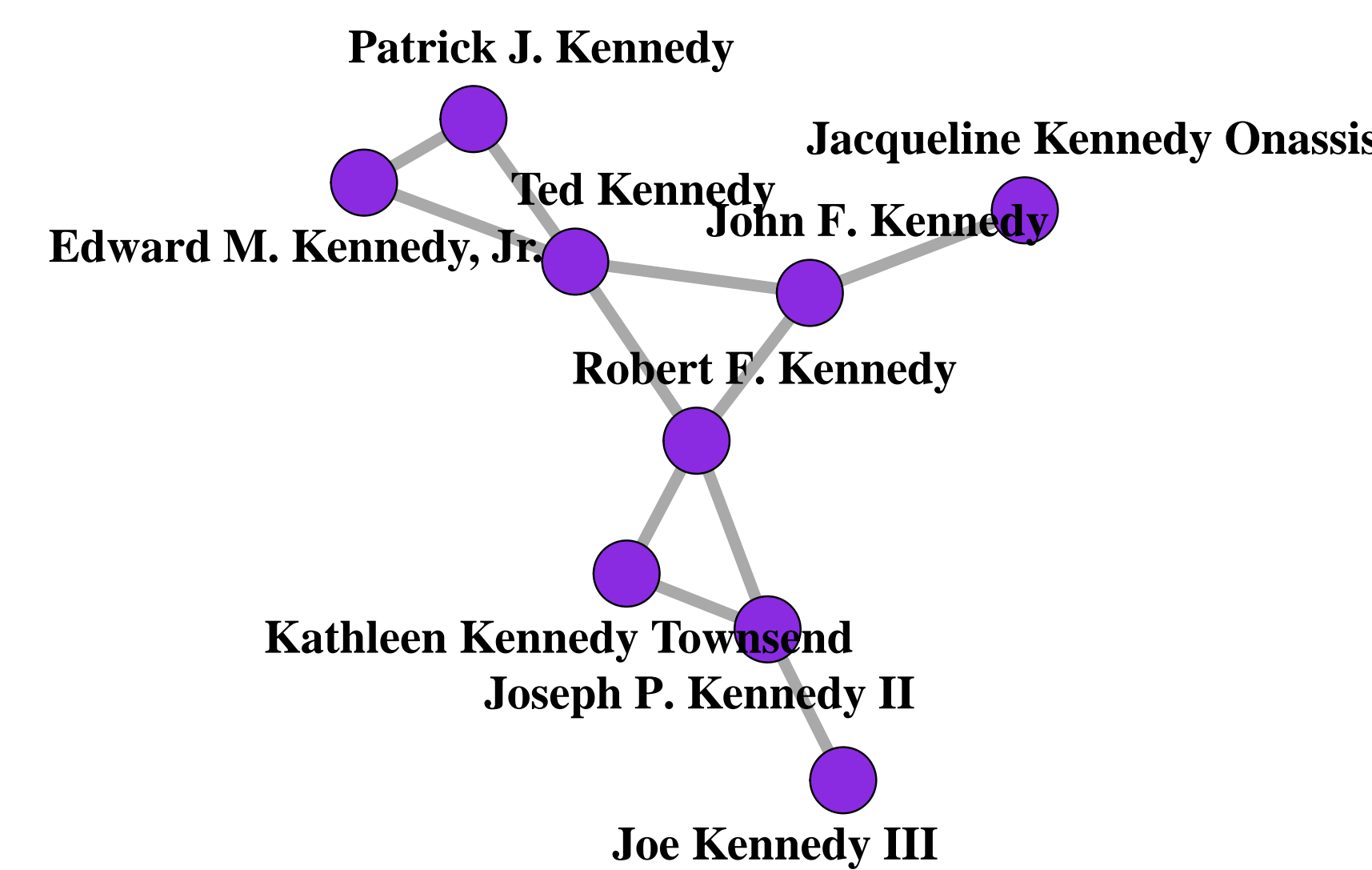
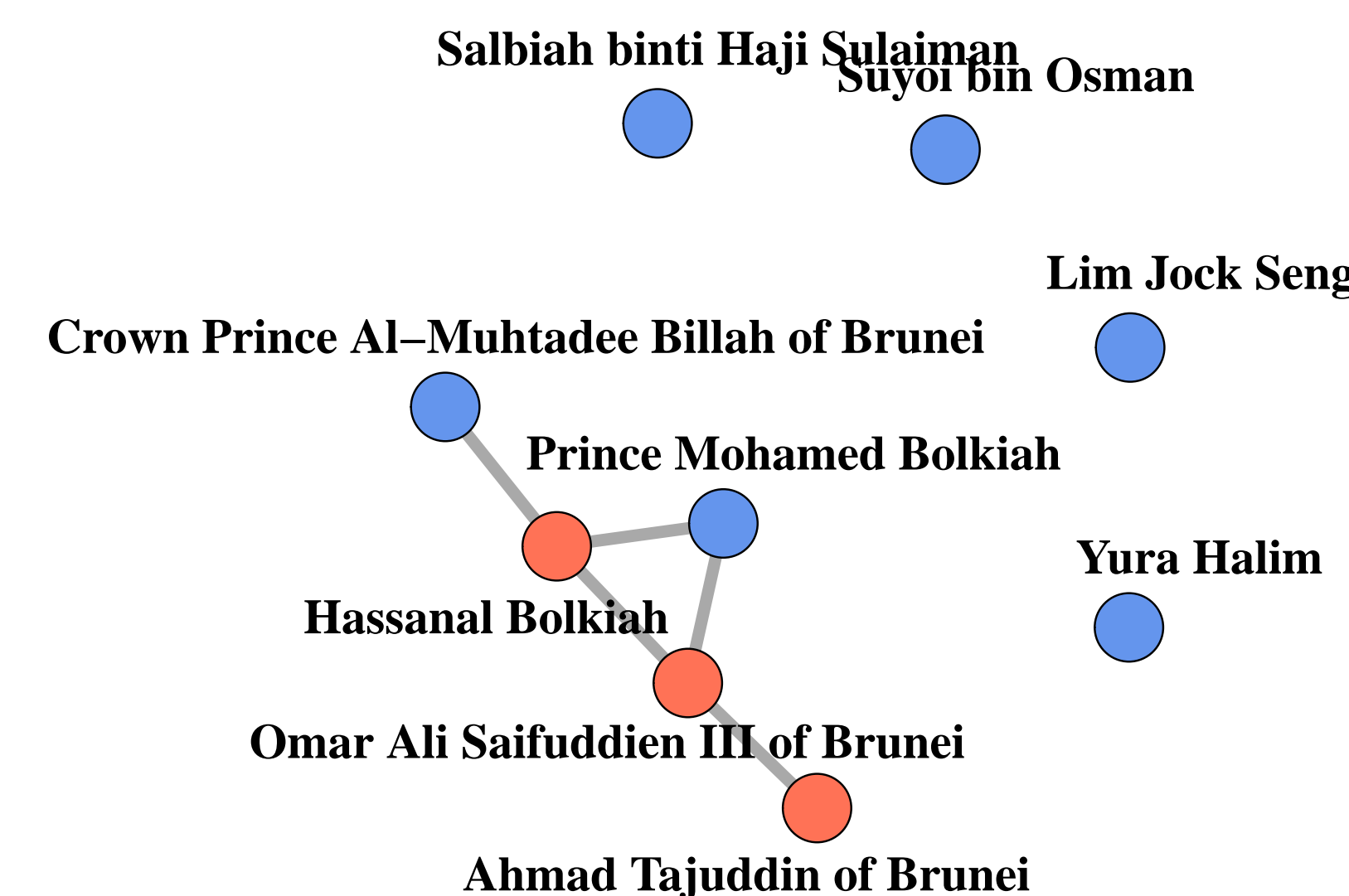


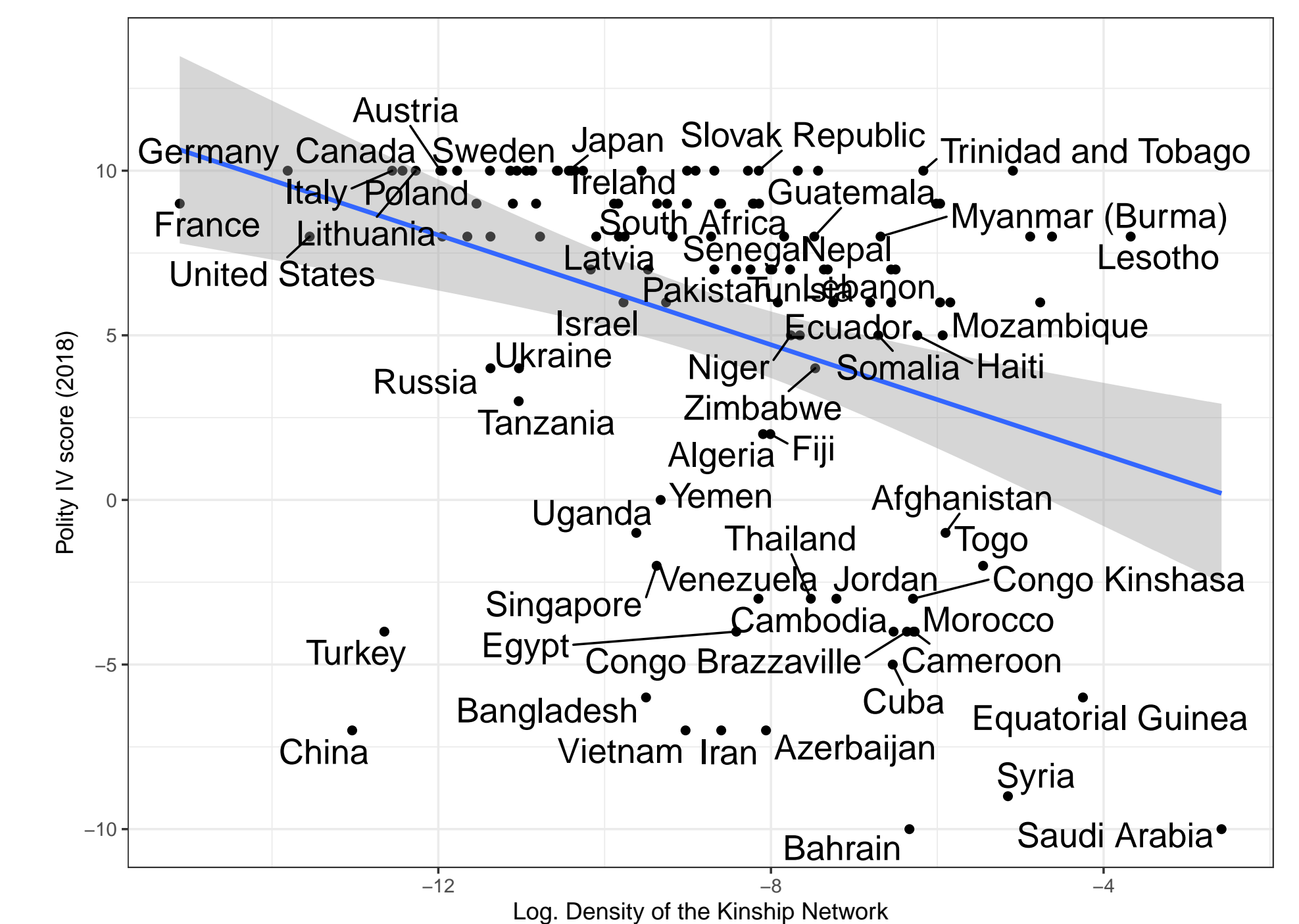
Figure 4: Brunei



Authoritarian regimes often have a trust problem, which can lead to denser kinship connections among the country's political elites.

Figure shows Polity scores vs. (log) of density of kinship networks.

Figure 5: Polity Scores and Kinship



Challenges

- ▶ we can only know as much as Wikidata knows
- ▶ anyone can edit, so, prone to errors
- ▶ also prone to missing data

Potential Remedies

- ▶ every item's edit history is available.
- ▶ includes total number of edits, number of unique editors, the age of the item/statement etc.
- ▶ can be used as a measure of reliability of a piece of information

John Higley and Michael Burton.
Elite foundations of liberal democracy.
Rowman & Littlefield Publishers, 2006.

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