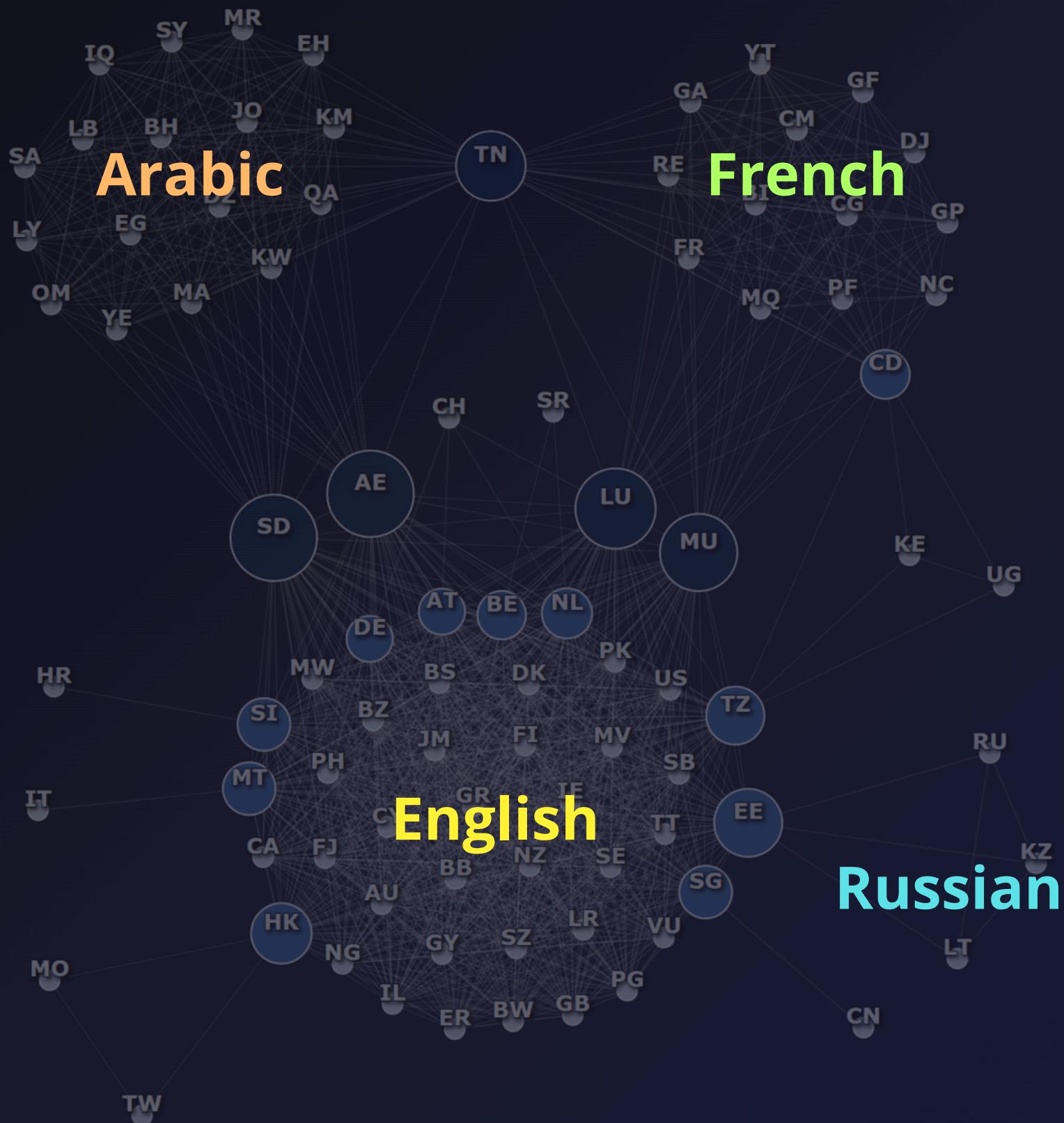


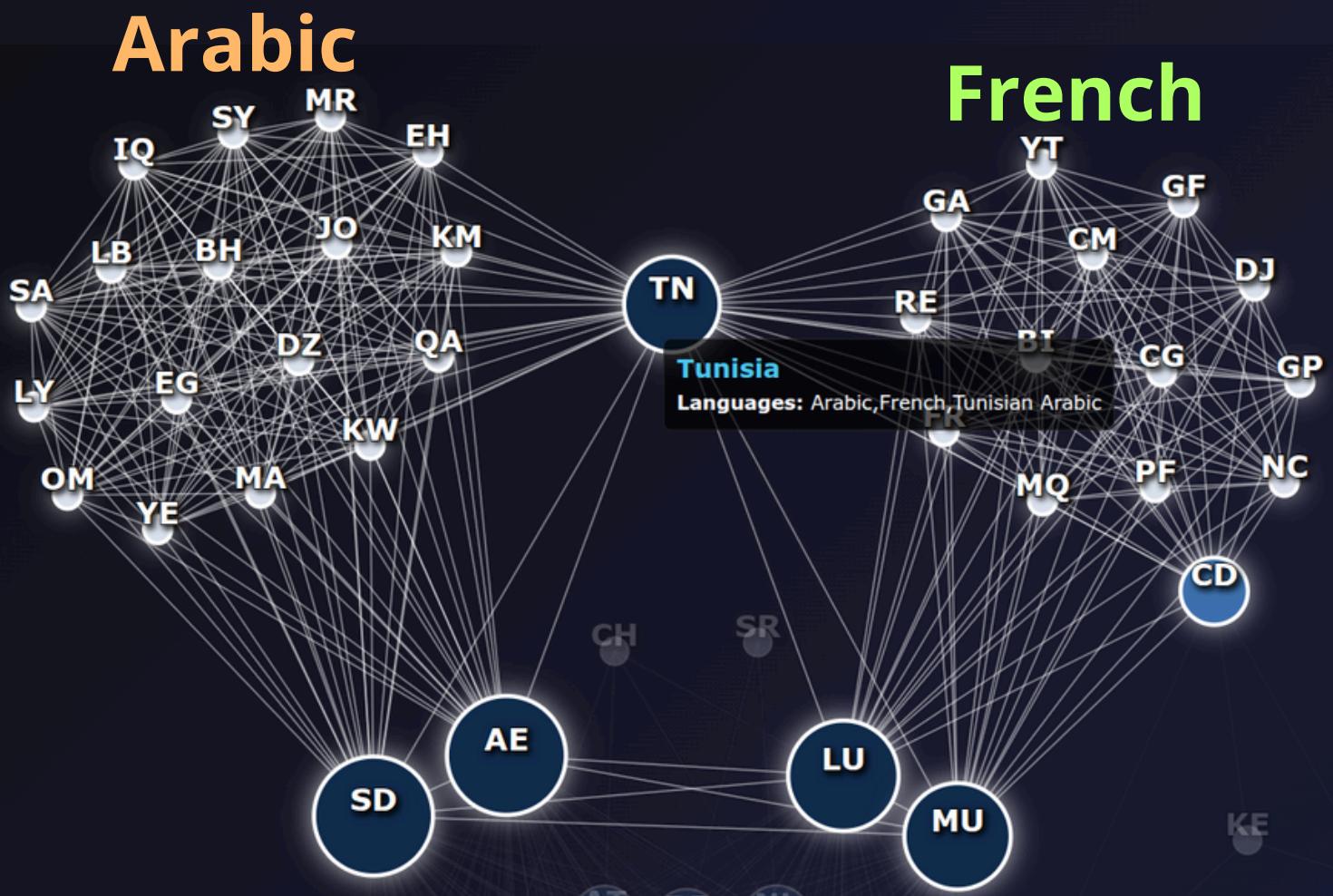
# Where Languages Meet Worlds

How Unicode reveals the hubs and bridges  
that shape global linguistic connectivity



- Unicode was created to standardize the world's writing systems. 
- But it also provides language-population data, showing what share of people in each country speak each language.
- I built a country-to-country network: nodes are countries (pop.  $\geq 200k$ ), edges connect when share a language ( $\geq 50\%$ ).

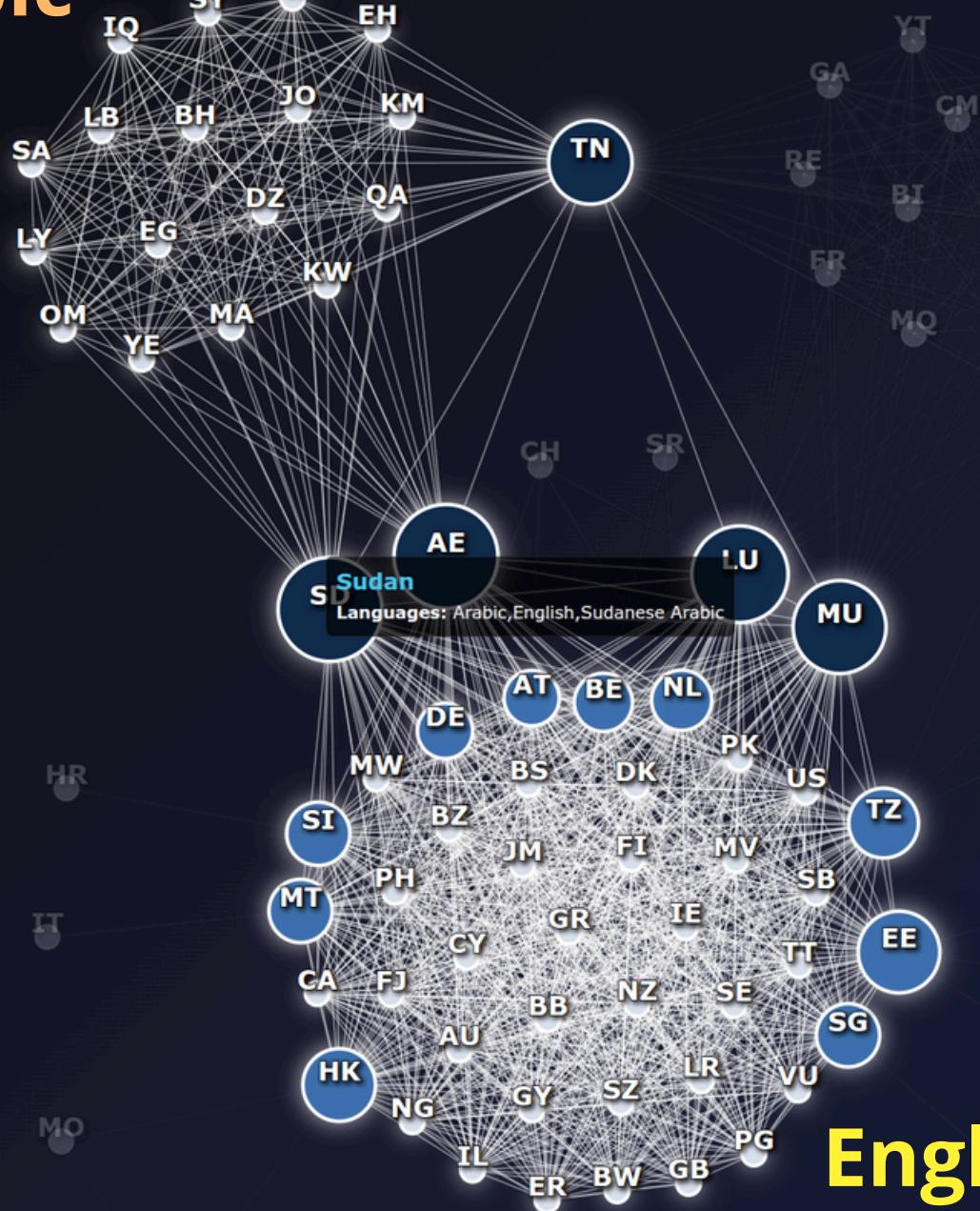
# Tunisia: Arabic & French



Tunisia (90% Arabic, 53% French) is perhaps the most important node in this network, serving as the sole bridge between the Arabic cluster and the Francophone cluster.

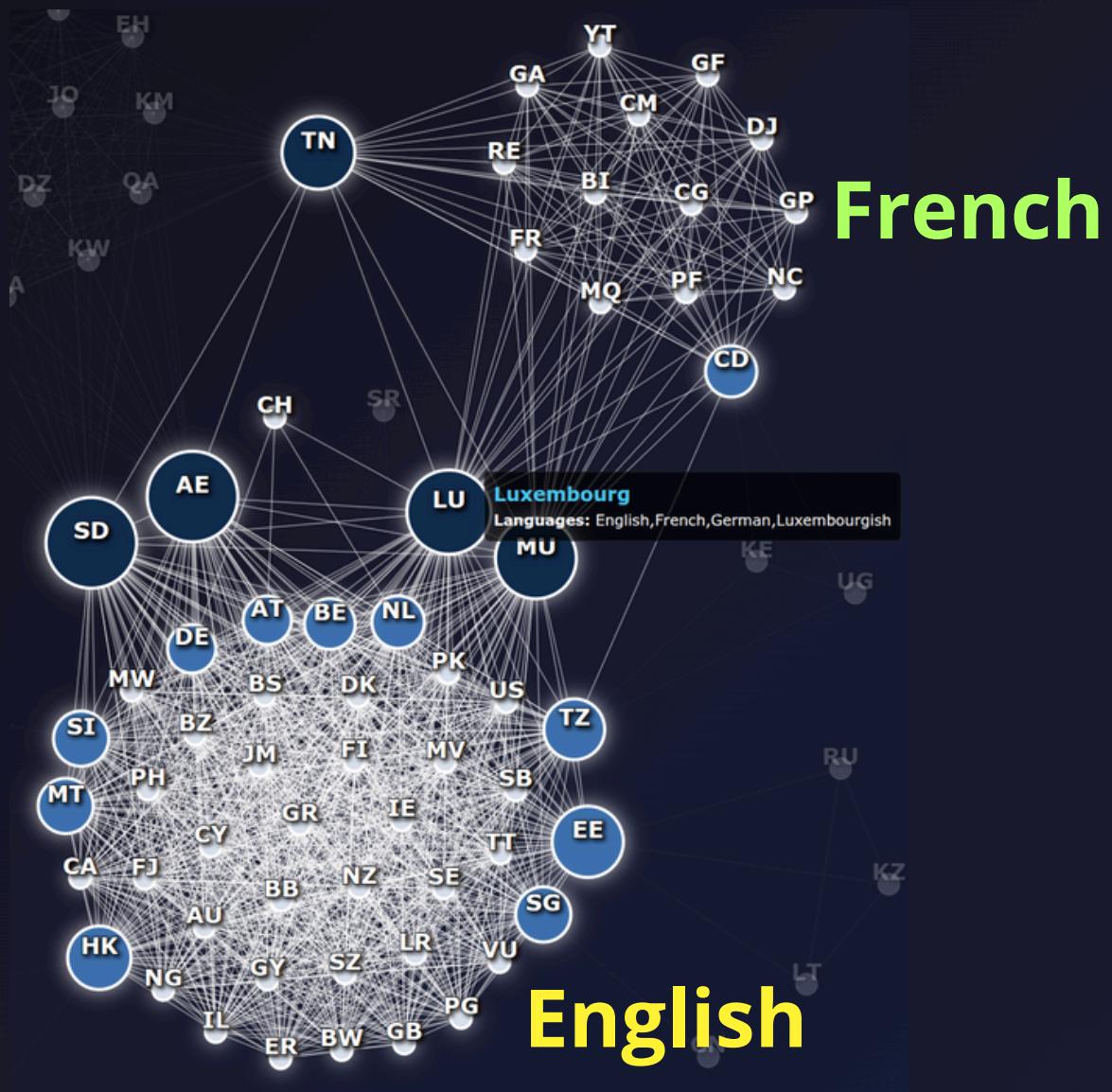
# Sudan and United Arab Emirates: Arabic & English

# Arabic



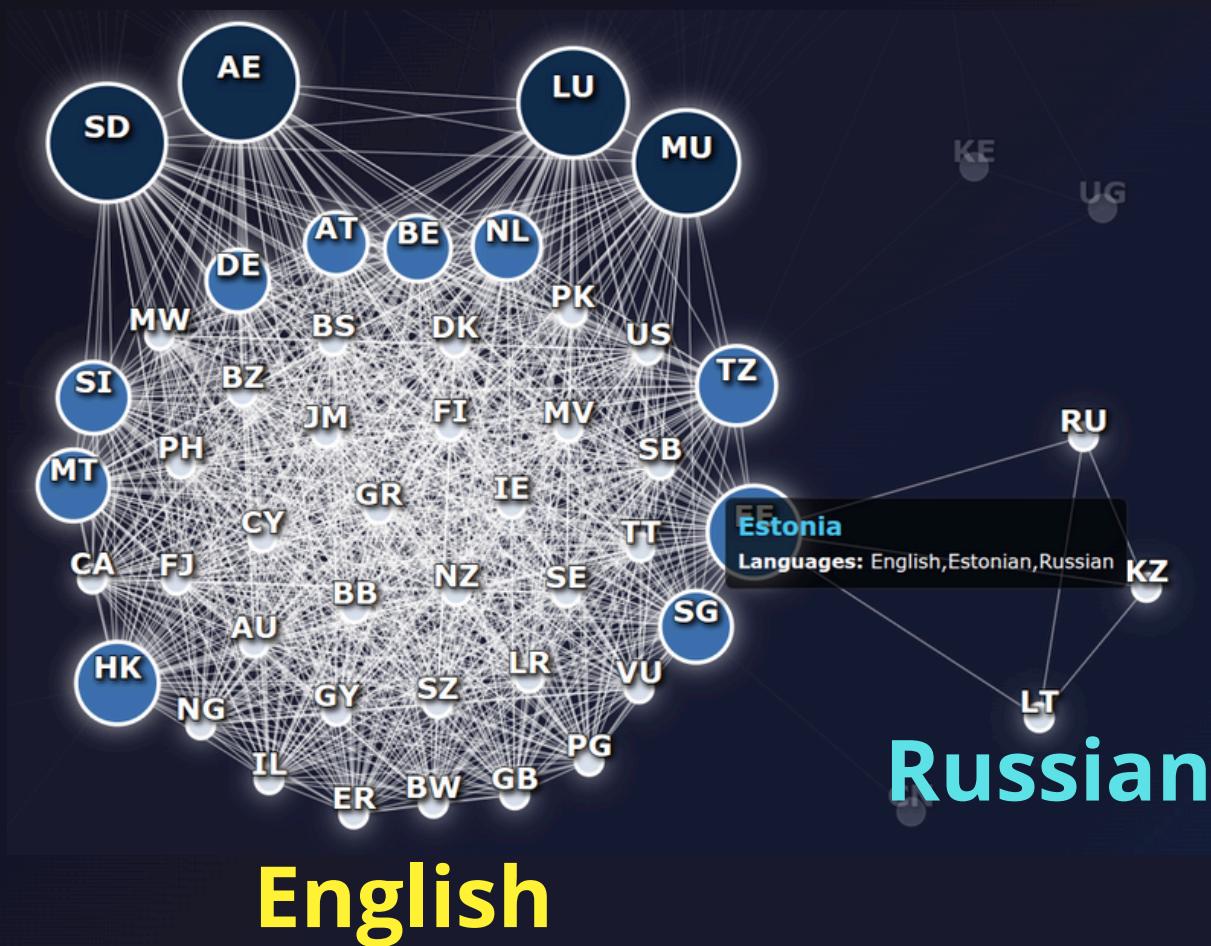
In Sudan (61% Arabic, 61% English) and the UAE (78% Arabic, 50% English), bilingualism creates strong internal bridges, placing them at the crossroads of Arabic and Anglophone clusters.

# Luxembourg & Mauritius: English & French



Luxembourg (92% French, 56% English, 63% German) and Mauritius (73% French, 72% English) embody multilingual overlap, tying the French and English clusters together while Luxembourg adds a German link within Europe.

# Estonia: English & Russia



Estonia (56% Russian, 50% English) links the global Anglophone core with the Russian-speaking cluster of Russia, Latvia, and Kazakhstan.

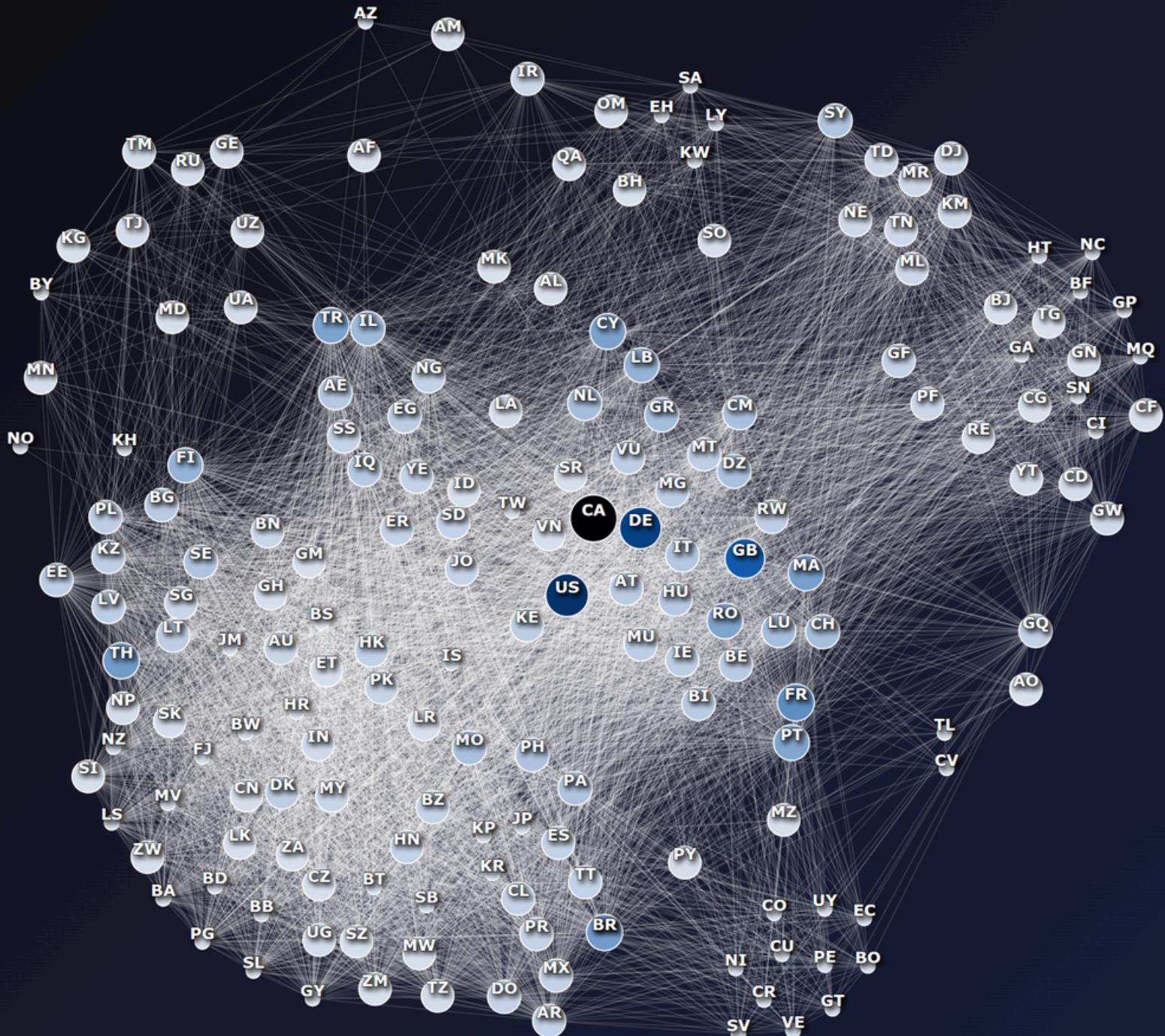
## Data sources:

- [https://www.unicode.org/cldr/charts/47/supplemental/territory\\_language\\_information.html](https://www.unicode.org/cldr/charts/47/supplemental/territory_language_information.html) (2025 updated)
- World Bank Python API (<https://pypi.org/project/wbgapi/>)
- <https://networks.skewed.de/net/unicodelang> (2015)

**Check it out more on:**

[alvarofrancomartins.com/post/language-network](http://alvarofrancomartins.com/post/language-network)

For reference, here's the network when we lower the language-speaking threshold to  $\geq 0.01\%$  of the population.



The world is much more connected than we think.