Analyzing large-scale bibliometric data shows that internal scholarly migration in Mexico is experiencing a “mobility transition” in which migration between urban centers increases, especially to and from a single metropolitan region.

Scholarly migration within Mexico: To what extent can we use bibliometric data to study internal migration of scholars?

Materials
Scopus publications over 1996-2019: 1.3 million authorship records each linking a Mexico-based researcher to a publication

Method
1) Extracting states from data: A neural network is developed which accurately predicts the states from affiliations (accuracy=98.4%).

2) Migration rates: The net migration rate \( (NMR) \) of state \( s \) between years \( t \) and \( t - h \) is given by the difference between the immigrating \( (IM) \) and emigrating \( (EM) \) scholars:

\[
NMR_{st} = \frac{IM_{s,t-r-h} - EM_{s,t-r-h}}{Population_{st}}
\]

3) Constructing networks: Each change of affiliation from state \( i \) to state \( j \) at year \( y \) is recorded as a directed edge \((i,j)\) with timestamp \( y \).

- Proof-of-concept for repurposing bibliometric data
- Heterogeneity in migration rates and patterns
- Many mobile authors move to or through Mexico City during their academic life course
- The exchange between states along the Gulf and the Pacific Coast has particularly increased
- Emergence of a core-periphery structure in the migration network

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