Migration: Zelinsky’s Model/Gravity Model

Unit 2b
Zelinsky’s Migration Transition

- **Wilbur Zelinsky**, geographer (1921-2013)
  - Introduced a migration model that consists of changes in patterns of human mobility/migration.
  - Closely resembles **DTM** – connects population growth with population migration.

- **Social + economic changes** (moving from Stage 2-5) will affect mobility/migration patterns.
Zelinsky’s Migration Transition **Stage 1:**

- Very little migration. **Some nomadism**, but mostly daily **mobility** in search of food or to work fields. Less frequent journeys from village to village to sell farm produce.
- 1\textsuperscript{st} wave of **imperialism**.
Zelinsky’s Migration Transition Stage 2:

- Migration to other countries + cities becomes important
  - High NIR/overpopulation; Leave for better economic opportunities
    Farm mechanization reduces demand for rural workers (push), while industrialization provides work in urban areas (pull).

- Massive interregional urbanization (ex. Great Migration, squatter settlements)

- International out-migration (LDCs → MDCs) begins
Zelinsky’s Migration Transition Stage 3:

- **International out-migration** (LDCS → MDCS), but overseas emigration tends to fall from Stage 2.

- **Interregional** rural to urban (urbanization) continues, but slows.
Zelinsky’s Migration Transition Stage 4:

- **International in-migration** (urban areas grow through migration)
- **Internal rural to urban stops**
- **Intraregional migration** – **city to suburb (suburbanization)** begins.
  - **Counter-urbanization** also begins (urban to rural migration)
Zelinsky’s Migration Transition **Stage 5:**

- Discourage emigration
- Encourage immigration?
Ravenstein's Laws

• Zelinsky’s Migration Transition is supported by Ravenstein’s laws:
  • Ex.) #3 – long-range migrants usually move to urban areas (economic hubs); #9 – migration increases with economic development; #10 – most migration moves from rural to urban; #11 – migration is mostly due to economic causes (voluntary).

• Be familiar with Ravenstein’s Laws #1-11, which are based on the Gravity Model!
  • The Gravity Model: the influence of a location on another is inversely related to its distance + directly related to its size.
  • Related to Isaac Newton’s Law of Gravitation, which predicts gravitational force between 2 objects. Also connected to distance decay (further away 2 places are, the less likely it is that people will migrate between those places).
  • The Gravity Model takes 2 cities + determines the strength of interaction between them by using their populations + distances. The higher the populations, the stronger the interaction. The father away the cities are, the lower the interaction, due to the idea of distance decay.
Illustration of the Gravity Model

The shorter the distance between two objects, and the greater the mass of either (or both) objects, the greater the gravitational pull between the objects.
Demonstration of Gravity Model:

- **Cuban migration to U.S.** following Fidel Castro’s overthrow of the government in 1959.

- Most people settled in state closest to Cuba:
  - **Florida**

- Also, most settled in large cities:
  - **Miami.**

Today, more than 2/3 of Cuban-Americans in the U.S. live in Florida.