

Cities and Urban Land-Use

AP Human Geography ■ Unit 6

AP Human Geography



What we will cover

- 1 Urbanization
- 2 World cities
- 3 Size & distribution
- 4 Internal structure
- 5 Density & infrastructure
- 6 Sustainability challenges

Urbanization

- **Urbanization** 城市化 = the rising share of people in cities.
- A city's **site** 场地 is its physical setting; its **situation** 位置 is its position to others.
- Transport, communication, and industrial jobs drive growth.



Cities concentrate people and activity

World cities and globalization

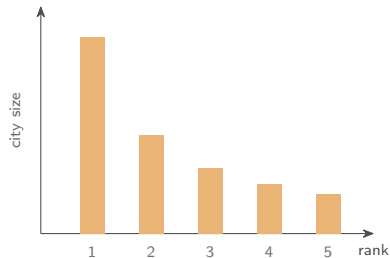
- A **megacity** 特大城市 has over 10 million people.
- A **world city** 世界城市 is a command centre of the global economy.
- World cities form an interconnected global network.



World cities command global networks

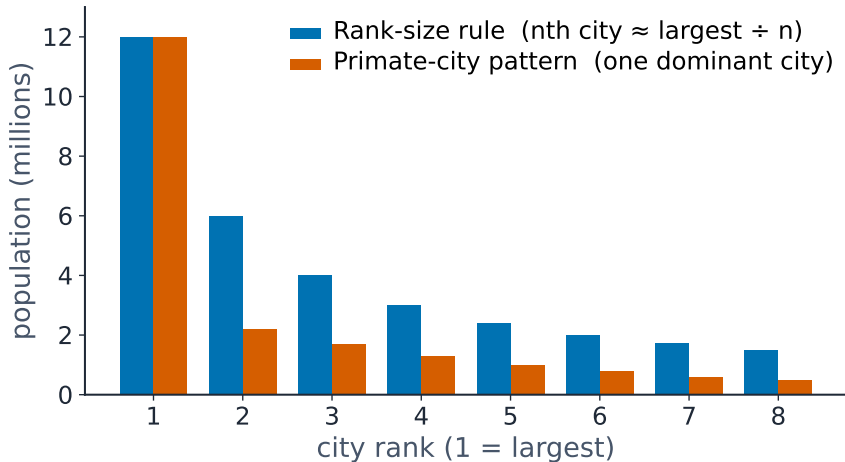
Size and distribution

- The **rank-size rule** 位序-规模法则: the n th city $\approx 1/n$ of the largest.
- A **primate city** 首位城市 is more than twice the second city.
- The **gravity model** 引力模型: interaction rises with size, falls with distance.



n th city $\approx 1/n$ of the largest

Size and distribution



Worked example – rank-size or primate?

Country A: largest 12M, 2nd 6.1M, 4th 3.0M. **Country B:** largest 12M, 2nd 2.5M. Which fits rank-size?

A: rank-size predicts $2\text{nd} = \frac{12}{2} = 6\text{M}$ and $4\text{th} = \frac{12}{4} = 3\text{M}$. Both match, so A follows rank-size.

B: $12 > 2 \times 2.5 = 5$, so B has a primate city.

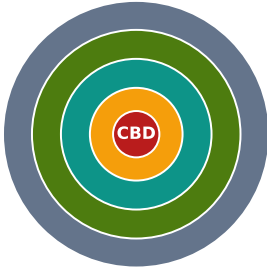
Test the second city first:
more than double $\Rightarrow$ primate,
and you can stop. Only if it
is not primate do you check
whether the whole $1/n$ ladder
holds.

Internal structure

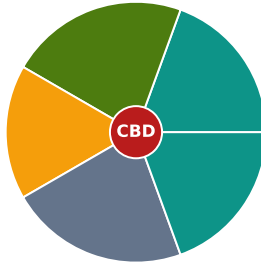
- **Concentric zone model** 同心圆模型:
rings around a CBD.
- **Sector model** 扇形模型: wedges along
transport routes.
- **Multiple nuclei model** 多核心模型:
several centres.

Internal structure

Concentric zone (Burgess)



Sector (Hoyt)



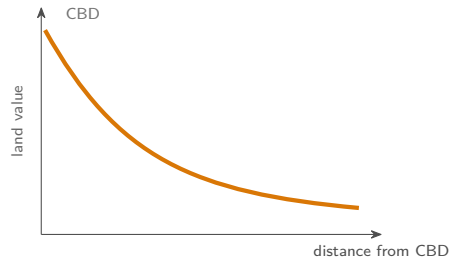
Multiple nuclei (Harris-Ullman)



■ CBD
 ■ wholesale / light mfg
 ■ low-income housing
 ■ middle-income housing
 ■ commuter / industry

Density and infrastructure

- **Land value** 地价 peaks at the CBD, pushing buildings up.
- **Zoning** 分区规划 sets what is built where.
- **Infrastructure** 基础设施 enables growth and development.



land value peaks at the CBD (bid-rent)

Change and sustainability

- **Suburbanization** 郊区化 and **urban sprawl** 城市蔓延 consume land.
- **Gentrification** 士绅化 raises values and can displace residents.
- **Smart growth** 精明增长 and **greenbelts** 绿化带 support sustainability.



Uneven growth shapes who gets housing

Key points

Site = physical; **situation** = relative position

Rank-size vs **primate**-city distributions

Three models: **concentric**, **sector**, **multiple nuclei**

Sprawl + gentrification
are key urban challenges

Worked example – the command word is the question

“Compare the concept of a metacity with the concept of a world city.” (real AP question)

“A metacity is defined by size – a continuous urban area of more than 20 million people – while a world city is defined by influence, acting as a command centre for the global economy. Tokyo can be both, but a large metacity in a poorer country may not be a world city.”

Compare needs an **explicit point of difference** (size versus influence), **not** two definitions sitting side by side.

Check yourself

- 1 Metacity or world city: defined by influence?
- 2 What does the rank-size rule predict?
- 3 What is a primate city?
- 4 Name one cost of rapid urbanization.

Answers 1. world city 2. the n th city is $1/n$ the size of the largest
larger than all the rest 3. one city far
4. informal settlements, strained infrastructure