

S.S. 11: COUNTERPOINTS

CH. 15: URBANIZATION – NOTES

INTRODUCTION

1. 1871 – 4 years after Confederation:
 - For most men, life revolved around their jobs on farms, in lumber mills, at quarries, or in fishing boats.
 - Lives of young women centred on households, with chores such as preparing and preserving food, looking after children, and maintaining homes; some worked in their own houses, but many others worked as servants.
 - Majority of Canadians were rural dwellers, living in small communities or on isolated farms.
 - Only 18.3% of Canadians lived in towns and cities.
2. By 1971, most Canadians – 76.1% - lived in towns and cities.
3. **urbanization** = movement of people to cities
4. Most developed countries became urbanized during the 19th and 20th centuries; this shift is mostly complete; the process of urbanization has now shifted to the developing countries of Africa, Asia, and Latin America.

GLOBAL URBANIZATION

1. In 1900, less than 14% of the world's people were urban dwellers.
2. Movement of people to cities was caused by these developments:
 - **Mechanization** – machinery displaced workers in mining, fishing, logging, and especially farming
 - **Industrialization** – encouraged the concentration of manufacturing sites that had the right combination of raw materials, power, and transportation facilities
 - **Technological change in fuel sources** – from firewood to coal and then petroleum – meant that energy supplies could be hauled long distances to cities, to be consumed by the factories and workers housed there

3. The first countries to industrialize were the first to urbanize. The two trends worked together to transform societies.
4. The rate at which urban areas are growing is 1.5 times faster than world population growth! While cities are experiencing population growth through births, they are also experiencing population growth through **in-migration**, or people moving into cities.
5. Globally, urban areas are growing at an average rate of 2.5% every year – about 3.5% in developing countries and about 1% in developed countries.
See Figure 15-3 p. 368

Millionaire Cities

1. In 1850, when only a small part of the world was urbanized, just London, Paris, and Beijing had populations over 1 million.
2. In 2000, 400 cities had over a million residents.
3. With the exception of Australia, cities with over 5 million people can now be found on every continent.
4. By 2015, population experts predict that 27 cities will have populations greater than 10 million.
See Figure 15-4 p. 369 and Figure 15-5 p. 369.

Dealing with Rapid Urban Growth

1. **shanty towns** – makeshift communities that have grown up around rapidly growing urban centres in developing countries, and built by *squatters* on land they do not own from whatever building materials they can find.
E.g. – Peru – called *pueblos jovenos*
- Brazil – called *favelas*
- Argentina – called *villa miserias*
- India – called *bustees*
- Indonesia – called *kampong*

2. Demands of exploding populations put strains on water supplies, sewage facilities, mass transit, power grids, health and social services, policing, and fire protection.
 E.g. – Roadways are so crowded in Bangkok, Thailand, that the average Driver spends the equivalent of 44 days per year sitting in traffic jams.
 - In India's capital city of New Delhi, the electricity is often turned off in some areas for up to 6 hours a day to reduce the load on the system.

The Plight of Street Children

1. An estimated 100 million children live on the street worldwide.
2. In Sao Paulo, Brazil, they make up 10% of the city's population.
3. Abandoned by families struggling with poverty, or fleeing abusive homes, lacking job skills, they turn to begging, shining shoes, stealing, or prostitution. Often they become victims of street violence, sexual predators, or substance abuse. In some cities, the police have murdered street children whom they see as a nuisance.

FUNCTION AND FORM IN CITIES

1. **push factors** – encourage people to leave their rural homes and go to cities. E.g. they might find rural areas lacking in adequate food supplies, jobs, education, and health care.
2. **pull factors** – attract people to cities. Most migrants think that they will be better able to meet their needs in urban areas.
3. **urban functions** – the activities and services that are provided by towns, such as cultural activities and financial services.
 Urban functions change over time. E.g. – in the past, walled cities provided a protective function.
 - Montreal's early function was to act as the central location for the fur trade in North America; now it has become a cultural centre.

Site and Situation

1. **Site** = the physical characteristics of the land on which the city is built, including landforms, drainage, and natural vegetation cover.

E.g. Vancouver – Fraser River and its delta, natural harbours at Burrard Inlet and False Creek, mountains and valleys to the north and east, and the Strait of Georgia.

2. **Situation** = the relationship between the city and its wider surroundings, information about the population and economic patterns.
E.g. Vancouver – access to the interior of the province via the river Valley, the proximity to the Canada-U.S. border, transportation connections to the Pacific region. See Figure 15-11 and 15-12 p. 374.
3. If the site and situation of a location accommodate the kinds of activities that people want to engage in, a community may be established.
If the site and situation remain favourable, the community will grow and prosper.
4. Vancouver has a **locational advantage** over Victoria because it is closer to raw materials, has a large harbour and land-based transportation systems, and is directly linked to large cities in the U.S. and to other cities in Canada.
5. Some communities decline and even cease to exist because their sites and situations cannot sustain them. E.g. the chief natural resource runs out, or the location is far from transportation routes.

ANALYZING URBAN FUNCTIONS

1. **Basic activities** (town-forming activities)
 - Industries such as mills, factories, and mines
 - Tourism, military facilities, public administration, and transportation
 - Serve a larger population than just the community and bring wealth into the area.
2. **Non-basic activities** (town-serving activities)
 - Exist to meet the needs of the local population
 - Grocery stores, places of worship, municipal services such as parks
3. **multiplier effect** = earnings of workers in basic industries lead to expansion of the non-basic sector, i.e. as more shops and services are provided.

Unfortunately, the multiplier effect also works in reverse. Job losses in basic activities produce even greater job losses in non-basic activities within the community as stores go out of business and service workers are unnecessary.

4. The multiplier effect leads to unequal growth among different communities. Communities that have a locational advantage enjoy growth in basic activities, and the multiplier effect produces even greater employment in non-basic sectors.
 - Toronto, Vancouver, Bombay, Cairo, Jakarta have experienced rapid growth; they become the engines for the creation of wealth.
 - Seoul earns 23% of South Korea's gross national product (gnp).
 - Bangkok generates 43% of Thailand's wealth.
 - Sydney, N.S., struggles to maintain its services with the decline and closure of its principal industry, steel making.

City Forms See Figure 15-15 p. 378

1. ***Political and religious cities***

- Designed to serve important religious or political functions such as being the national capital or a holy center.
- Usually centred on a temple or place of great religious significance, or important public buildings, connected by grand boulevards arranged in a very structured way according to a model or plan.
- E.g. – Forbidden City of Beijing, Washington, D.C.

2. ***Organic cities***

- Evolved quite naturally in ways that fit the physical landscape.
- Urban functions blend together, with shops, homes, and workplaces all close together.
- Rarely grow very large; good cities to walk around in.
- E.g. – Amsterdam, Netherlands.

3. ***Planned cities***

- Designed to keep urban functions apart, with separate places for homes, shops, and industries, linked through transportation connections.
- E.g. – Vancouver and many other North American cities

4. **Transit cities**

- Made up of sub-centres linked to a city core by transportation services.
- E.g. – New York City

5. **Automobile cities**

- Expand outward in all directions from the city core.
- Roadways link the urban functions that are separated into distinct zones.
- Typically sprawl outwards for many km, adding suburbs to the original city.
- Dominant form of cities in the world today.
- E.g. – Los Angeles

The Automobile and the City

1. North Americans prefer a city form that allows people to leave the crowded, noisy city to go to homes in the **suburb** – an environment that is in some ways like the peaceful, rural countryside.
2. The suburbs, which have sprung up around practically every city on this continent, are a **low-density** approach to housing – they have few people per hectare.
3. By living in the suburbs, people avoid the **high-density** life in the inner city, where many people live close together.
4. Cars have allowed us to separate work, home, recreation, and shopping. Unfortunately, they have also resulted in long commutes, daily traffic chaos, increased stress, polluted air, and petroleum shortages.
5. The sprawling nature of suburban communities makes public transit expensive, further encouraging people to use their cars.
6. About $\frac{1}{4}$ of all the land in North American cities is used for transportation activities, with most paved over for roadways and parking lots.
7. Every km of expressway takes up about 6 hectares of land. Expressways give these cities their shape and form.

8. Water bodies are channeled and changed to make roadways efficient.
9. Salt- and oil-laden runoff from roads and parking lots washes into streams, damaging their ecosystems.
10. Cars are the largest single source of greenhouse gases that cause global warming. They also contribute to smog problems.

Should There Be Land-Use Controls Against Urban Sprawl?

The Case Against Urban Sprawl

1. The infrastructure that supports urban sprawl is expensive. E.g., it costs about \$10 million to build 1 km of 4-lane expressway. Water supplies and sewage treatment are also more expensive.
2. Sprawl breeds more sprawl. Building more roadways encourage more people to move out to the fringes of the cities.
3. Farmland is lost as suburbs expand. Through annexation of surrounding land, boundaries of large cities move outward. About 50% of Canada's population live in urban areas that have been built on the best 5% of the nation's farmland.
4. Urban sprawl can be devastating to the social and economic health of a city. Sometimes the older core of the city decays because tax dollars and resources are used to develop the expanding fringe.
5. The suburbs do not have the sense of place that characterizes small, vibrant, thriving communities. Land uses are segregated, with strip malls, recreational services, homes, and industries all in distinct zones.

The Case for Not Controlling Urban Sprawl

1. Land costs are lower on the fringes of cities, so housing is more affordable and a greater number of families can afford newer, spacious dwellings.
2. The construction of main roads creates natural locations for commercial development. Commercial activities then concentrate in these areas, leaving residential streets with relatively little traffic. The

concentration of businesses in strip malls reduces overall travel, because customers do not have to drive long distances to shop.

3. Homeowners in low-density housing developments plant trees and shrubs and grow lawns that help the environment. Trees and shrubs filter pollutants out of the air, and the lawns are green spaces that help create a more enjoyable landscape.
4. Jobs are being created in the suburbs. The assumption that people living in the suburbs all drive to work in the city is not accurate.

LAND USE IN CITIES

See Figure 15-18, -19, -20 pp. 382, 383.

Analysing Land-Use Patterns

1. Site, situation, function, economics, and politics exert an influence on where land uses are established.
2. **Competition for Land**
 - Businesses need the best locations in order to be successful.
 - Competition for land is usually strongest around the most desirable intersections.
 - Land costs around these **peak-value intersections** (PVIs) are highest because users are prepared to bid more for the land to increase their chances of being successful.
 - E.g. in Vancouver, the intersection of Granville and Robson streets is a PVI.
3. **Land-Use Zoning**
 - The rapid growth of cities has led municipal and provincial governments to set up land-use controls.
 - Land that permits uses such as stores or banks is zoned commercial. Land where only homes are permitted is zoned residential.
 - Land-use controls also ensure that municipal services can be provided in the most efficient manner.
 - The city establishes an **official plan** – a broad plan for growth and development drawn up after lengthy consultation with the people of the city.

- Zoning *by-laws* (local laws or rules) are then used to ensure that people respect the land-use zones and build only what is acceptable for each location.

4. ***Interpreting Vertical Air Photographs***

- Vertical air photographs are useful tools for analyzing geographic patterns.
- Shape, size, colour or tone, texture, and patterns in the photograph reveal information about the way the land is being used.
See Figures 15-23, -24, -25 pp. 386, 387.

BUILDING SUSTAINABLE CITIES

1. As cities in developing countries continue to grow, global environmental damage will only increase.
2. Abandoning cities and moving to the countryside is not a solution because it removes the benefits of urban living. The solution is to redefine and reshape cities – to make cities more sustainable.
3. **Sustainable cities** = those in which resource decisions today do not compromise the quality of life for future generations. These include:
 - an effective transportation system that encourages public transit use and discourages automobile use
 - a mix of land uses, in which workplaces are located near residential areas, to reduce commuting
 - a variety of affordable housing types
 - an effective infrastructure, including sewage treatment plants, water, health care, waste recycling, and education
 - other civic amenities that lead to a good quality of life, such as parks, green spaces, and unpolluted waterways
 - maximum use of alternative energies, such as wind and solar power instead of total reliance on non-renewable sources of energy.

Urban Problems and Sustainable Opportunities

1. ***Energy Consumption***

- Cities account for 80% of the world's use of fossil fuels, through residential, industrial, and transportation consumption.

- In a sustainable city, conservation would reduce the amount of energy required.
- Local, renewable forms of energy would supply most needs. E.g solar-electric roof tiles.

2. **Transportation**

- In North America, up to 94% of urban dwellers commute to work by car.
- Reducing our reliance on cars in urban areas will reduce pollution, increase space for more beneficial uses, and reduce energy consumption. E.g. one transit rider uses 900 L of gasoline per year less than a commuter using an automobile.
- The key to making transportation in cities sustainable is to make cities more compact, by building up and not out – to aim for high-density cities.

3. **Food**

- Almost all food consumed in cities has to be imported, with tremendous costs measured in energy consumption, pollution from transportation, and distribution requirements.
- Cities could reduce their food needs if people modified their diets to suit local crops rather than imports.
- They could also use wasted urban spaces, such as roof tops, boulevards, and backyards, to produce food.
- More local food supplies would be available if zoning protected agricultural areas from urban growth, rather than sacrificing them for expansion.

4. **Wastes**

- North Americans are the most wasteful people on Earth. A typical person in a North American city discards up to 1.6 kg of waste per day.
- Recycling has been somewhat effective in controlling the amount of material that ends up in landfill sites.
- Small industries spring up based on recycled materials. E.g. aluminum recycling plants use discarded pop cans to create a range of new products and create employment.

5. *Density*

- Today many cities waste space. People live far apart and drive long distances to work.
- In a sustainable city, people will use less space.
- Higher density will be achieved by **infilling**, a process that increases density by rezoning and rebuilding in populated areas to allow more people to live in the same space.
- The city centre will grow upward, with population densities of 500 to 1000 persons per hectare.
- People will not need cars, and public transit will be fast and efficient.

