

Urban forms, spatial patterns & new urban landscapes

3.2.3.2 Urban environments

What you need to know
Recognise the spatial patterns of land use
Recognise the spatial pattern of economic inequality and cultural diversity within an urban area
Identify the factors that impact upon urban areas

Introduction:

Urban form refers to the characteristics that make up built-up areas, including the shape, size, density and configuration of settlements. All cities have a different urban form and this is the result of a range of factors, including population growth, industrial change and investment.

The term **spatial pattern** refers to how the characteristics of an urban area vary across the city. These characteristics include the pattern of land use, pattern of wealth and how different cultures are often found in particular areas within the city.

Spatial patterns of land use

The land uses in urban areas vary in their location and extent. The six main land use types are:

1. **Residential** – any form of accommodation, including flats & apartment, terraced, semi-detached, detached and mansions. The spatial pattern of this land use type varies according to the land prices across the city. Towards the CBD the land price increases (bid rent theory) and this is reflected in the smaller, but more expensive houses generally found there. Buildings are built upwards to maximise the land space. Demand for commercial land in the CBD further increases the price of land. Larger residential properties tend to be found towards the outskirts of the city where land prices are cheaper and there is often more available land.
2. **Transportation** - this includes road networks, rail links, bus lanes, cycle land provision and tram tracks. Often transportation leads in towards the CBD in a radial pattern and in developed established cities there is an integrated transport network which interlinks different modes of transport. Often, for example, bus and rail routes interlink to provide a combined public transport service for city dwellers who prefer to travel in this way. Issues associated with transport, particularly congestion and air pollution in the CBD, often result in strategies to modify transportation. This includes the pedestrianisation of CBD areas, provision of park and ride services to prevent car use in the CBD and the construction of orbital ring roads around urban areas to reduce traffic passing through the city.
3. **Commercial** – this relates to offices and retail land use. Most offices and retail properties are located in the CBD. The reason for this is that the CBD is at the

Urban forms, spatial patterns & new urban landscapes

3.2.3.2 Urban environments

centre of the transport hub and therefore users can reach them easily. Initial developments of either offices or shops will then lead to the **multiplier effect**, whereby other companies will want to be nearby to take advantage of the same target market. In many developed countries, the urban areas have seen a decline in the CBD, particularly with reference to retail land use. This is due to the growth of out-of-town shopping centres which were built there due to an availability of land and proximity to suburban residential customers. Urban planners have redeveloped many established CBDs and the transport routes to make the CBD appear more attractive again and to draw back customers.

4. **Industrial** – historically, factories were often built in – what is today, the inner city area, but which – when they were first built – the edge of the built-up area. The factories of the 19th century also built rows of terraced houses for their workers adjacent to their premises. This area was also on many transport routes which allowed for easy trade and access for workers and business acquaintances who may need to get to the factories. Since the 1970s specialised industrial estates have been located on the edge of the built-up area on greenfield sites.
5. **Institutional** – includes properties such as hospitals, libraries, colleges and schools. This land use is much more dispersed than the industrial, commercial and residential land use as this land use is dependent upon demand. Where people live, whether that be in larger more affluent housing on the outer suburbs or in cheaper, more basic housing in the inner city area, there is still a demand for services and many of these will be provided by local councils where there are densities of residential premises. The quality of them however, can vary.
6. **Recreational** – this includes playing fields, sports fields, golf courses and parkland. Again, as with institutional land use, this is dispersed as it is related to the demand from people and the provision of green spaces when the city was growing. Large space users, such as golf courses, are often on the periphery of the built-up area.

It should be recognised however that these typical locations for many land uses are only found in more established cities in the developed world and that in rapidly urbanising countries the urban form is less regulated and the land use doesn't follow the same pattern. An example of this is by looking at industrial land use. Whereas factories tend to locate in a specific zone within a developed nation's urban area, in poorer countries, newer cities are often informal workshops areas spread out; following transportation routes, such as roads or rail networks where land is easily occupied and built upon.

Equally important to recognise is that as urban areas continue to grow and their functions change, many can end up having several CBDs, often with a very specific function, so the spatial distribution of land use changes significantly from the city's initial beginnings. Some urban areas can also merge with others to form a megalopolis.

Urban forms, spatial patterns & new urban landscapes

3.2.3.2 Urban environments

The spatial patterns of economic inequality and social diversity

Economic inequality:

Within an urban area, personal wealth varies considerably. Historically, in an established urban area, personal wealth of family groups increases as you move away from the centre to the outskirts of the city. In the CBD, land prices are high so there is limited residential property and much more commercial property as they afford high land rents. The small amount of residential property is often luxury apartments which can only be afforded by the most affluent. As you move away from here however, you reach the inner city area and land prices are lower, houses are smaller and generally of poorer quality so personal wealth tends to be low here. As you then move further outwards personal wealth increases again as house prices increase due to the increasing size of properties.

In developing world cities, there are often pockets of wealth closer to the CBD and commercial hub, with **gated communities** where security barriers deter contact with adjacent much poorer neighbourhoods. The same feature is becoming more frequently encountered in developed countries' city centres as **re-urbanisation** encourages the wealthy back to central city living. In developing cities, the poor are often found in self-built residential pockets, with squatter settlements built on contaminated, unsafe land which is not in demand for commercial uses such as marshland, hillsides or lake-side.

Cultural diversity:

The spatial pattern of cultural diversity is much more intricate. Urban areas naturally attract a diverse population. They frequently form distinct neighbourhoods of ethnic groups throughout cities, settling in areas alongside others of the same ethnicity. Migrants into an urban area will often arrive via plane, bus or train. The original settlement location of these groups may be near to airports or main train stations, so people will settle in the first area they reach and then subsequent arrivals also settle there and the concentration grows. Ethnic diversity also has an economic basis with many migrants settling in areas where housing is cheaper and close to basic employment opportunities.

Class diversity is also evident within an urban area, with inner cities of developed cities often the home of the less affluent, low-skilled manual working population, whereas professional and higher managerial classes tend to be towards the outskirts. However, the pattern is not always clear-cut. Recent urban change, such as the construction of Canary Wharf in the London Docklands area has led to a growth in affluent young professionals settling there, living less than a kilometre from far less affluent families.

Class diversity is even less planned in developing countries as often the least affluent have to build their own informal housing as and where there is available land. In places like Mumbai for example, Dharavi - India's largest slum - is built adjacent to a major business and commercial area, showing the close proximity of the class mix in a city.

Urban forms, spatial patterns & new urban landscapes

3.2.3.2 Urban environments

Factors that impact upon an urban area and its form

There are many factors which impact upon spatial patterns of land use, economic and social diversity within a city:

- **Rapid population growth** changes the form of a city leading to urban sprawl. Land use may change from recreational to residential to meet growing pressure.
- **Transport provision** affects how extensive a city can become. Commuter settlements growing rapidly just beyond cities may lead to urban sprawl. People can live in a rural setting yet still get into work within an hour or so by road/rail.
- **Land use conflict** – whilst land use patterns of a developed world city are often laid down from historical beginnings, changes to land use do occur and therefore the spatial pattern of a city will change. Globalisation and the decline of manufacturing industries in the developed world, has led to factory closure in many cities and the land use then changes, initially into brownfield land and then usually into commercial or residential use. The increase in land prices as a result of a land use change can change the demographics of an area with house prices rising and more affluent groups moving into a previously run-down area.
- **Tourism** – with the service sector growing faster globally than any other sector, this land use type becomes more prevalent within a city. This can change the urban form greatly. An example of this is in London – Newham, a working class post-industrial area was chosen as the site for the main Olympic stadium and other sporting events for London Olympics 2012. The area was chosen due to the available **brownfield land** and the need to develop the area to make it economically viable. The change to this land use type meant that existing residents had to leave their homes and move to other communities and new housing that was built around the site fell into a higher price bracket as it was near the Olympic site. This drew in wealthier young professionals. An example in the developing world is in Lagos, Nigeria, where city authorities have been bulldozing Makoko slum which lies alongside Lagos lagoon. The concern is that tourists will be put off by the slum and it will reduce tourism revenue in the long-term. Consequently, slum dwellers are being forced to locate elsewhere.
- **Urban planning** – Similar to the redevelopment of Newham for the Olympic Games, where deindustrialisation has occurred in developed countries, many cities have large brownfield areas where the factories once were. Urban planners then build new attractive office blocks with nearby amenities or new housing to attract families back into the city. Both types of redevelopment will change the spatial pattern of land use and also economic patterns as wealthier people move back in towards the CBD.
- **Topography** – naturally, some cities will be restricted in terms of their growth by their natural landscape. Where cities lie within a valley, urban planning takes place further up the valley and sloped areas are often left, or are redeveloped into high cost housing areas.