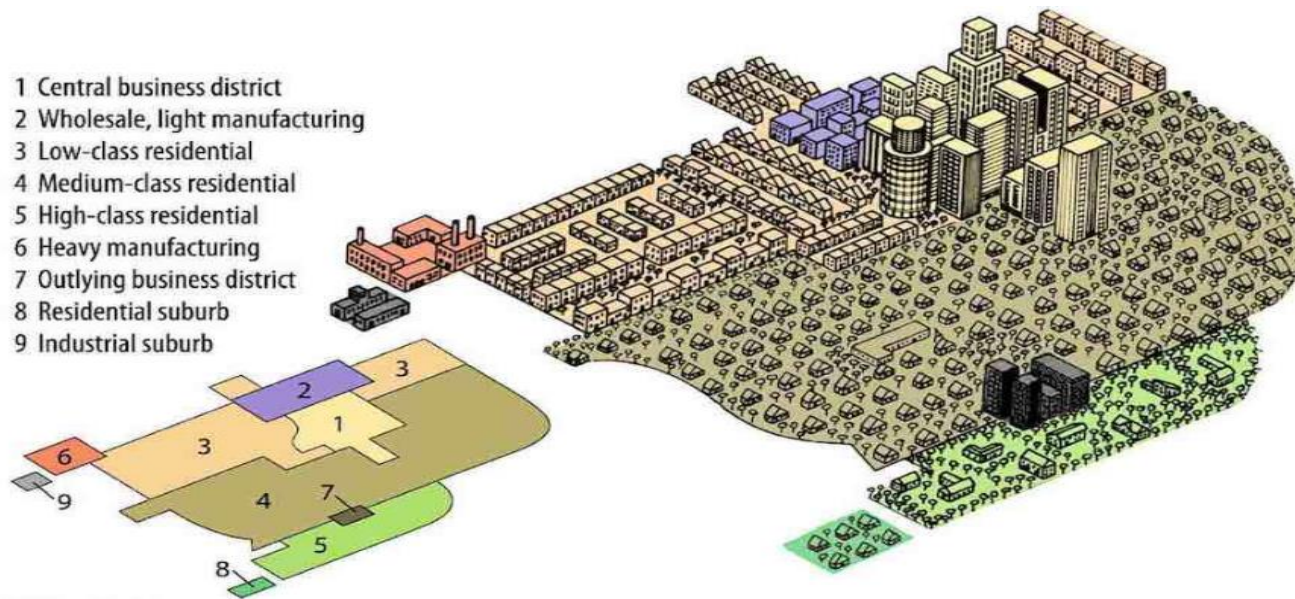




SETTLEMENT GEOGRAPHY



URBAN STRUCTURE AND PATTERNS – MODELS OF URBAN STRUCTURE



Urban structure and patterns

- Internal structure and patterns of urban settlements:
 - Land-use zones, including reasons for location and characteristics
 - Commercial
 - Residential
 - Industrial
 - Zone of decay/Transition zone
 - Green belt
 - Rural-urban fringe
 - Factors influencing the morphological structure of a city
 - Urban profiles
 - Concept of urban profile
 - Reasons for shape of urban profile
- Models of urban structure:
 - Burgess/Concentric
 - Hoyt/Sector
 - Harris and Ullman/Multiple nuclei
 - Modern American-western city
 - Third World city
 - South African city
 - Changing urban patterns and land use in South Africa



- Models of urban structure:
 - Burgess/Concentric
 - Hoyt/Sector
 - Harris and Ullman/Multiple nuclei
 - Modern American-western city
 - Third World city
 - South African city
 - Changing urban patterns and land use in South Africa



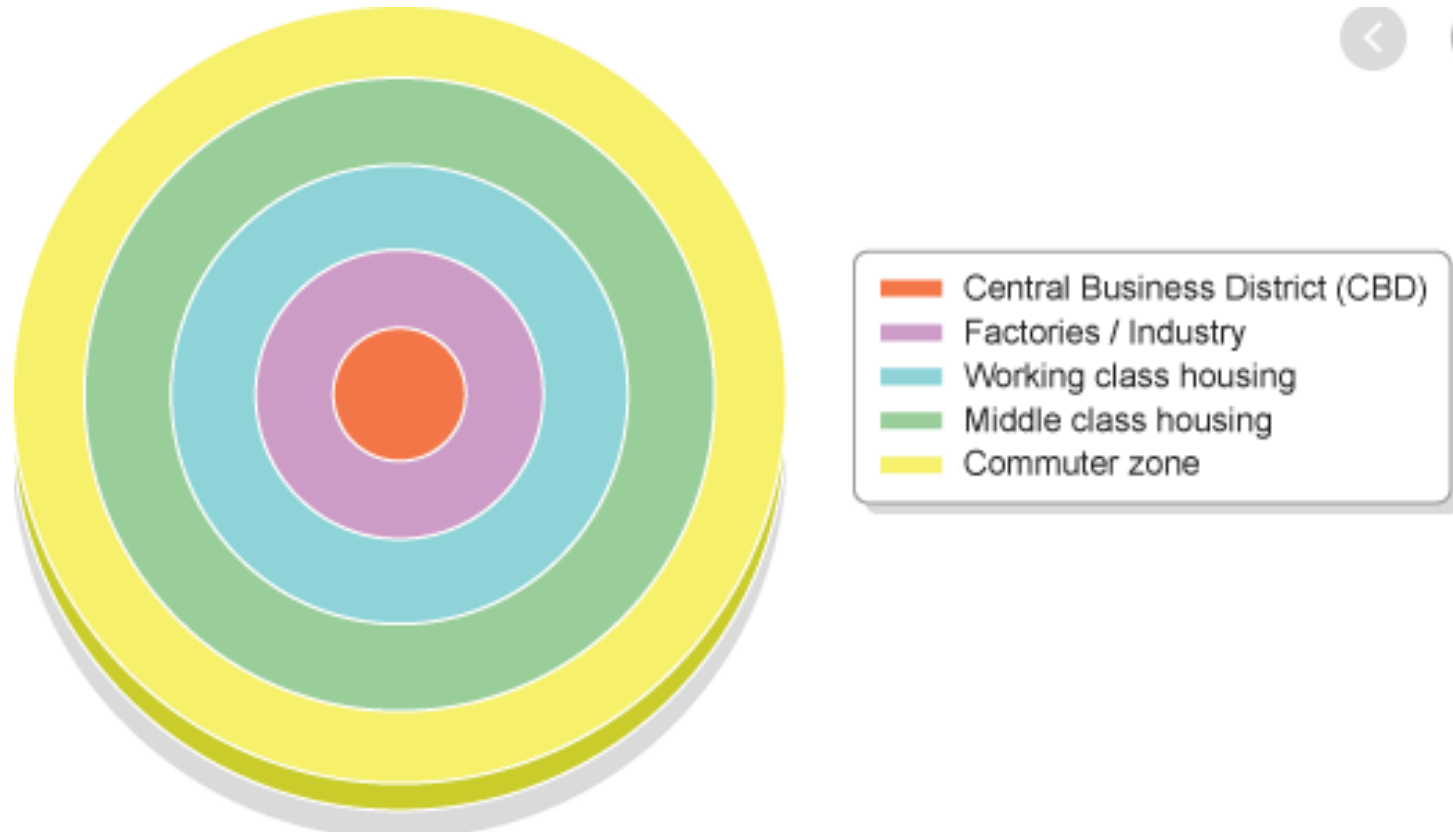
Urban structure is the arrangement of land use in urban areas, in other words, how the land use of a city is set out.

Urban pattern. Is the pattern of the city is the way how different functions and elements of the settlement form are distributed and mixed together spatially.

Urban settlements are generally nucleated



Burgess/Concentric Zone Model





Burgess/Concentric Zone Model

Land use zones develop in concentric circles/zones around the CBD.
CBD is in the centre.

Transition zone around CBD.

Factories in area around CBD

Distance from factories – low income closest and high income furthest.

Criticisms

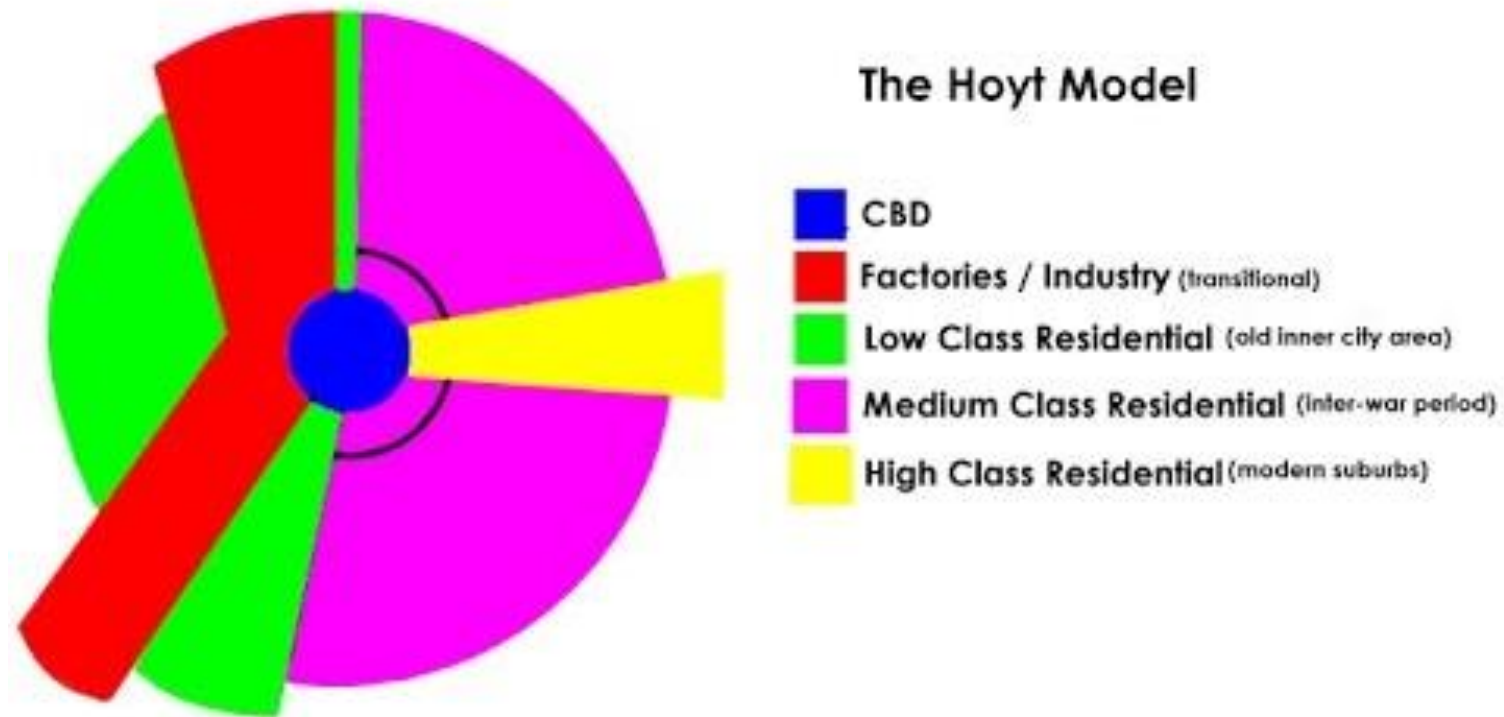
CBD is in most accessible area and not always in centre

All industrial and commercial activity is not in a specific area

Did not consider transport routes and its effect on spread of activities
e.g. commercial



Hoyt's Sector Model





Hoyt's Sector Model

Land use zones develop in sectors around the CBD

Emphasis on high income area

Distance from factories – low income closest and high income furthest

CBD is in the centre

Development occurs along transport routes

Criticisms

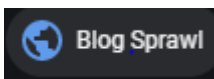
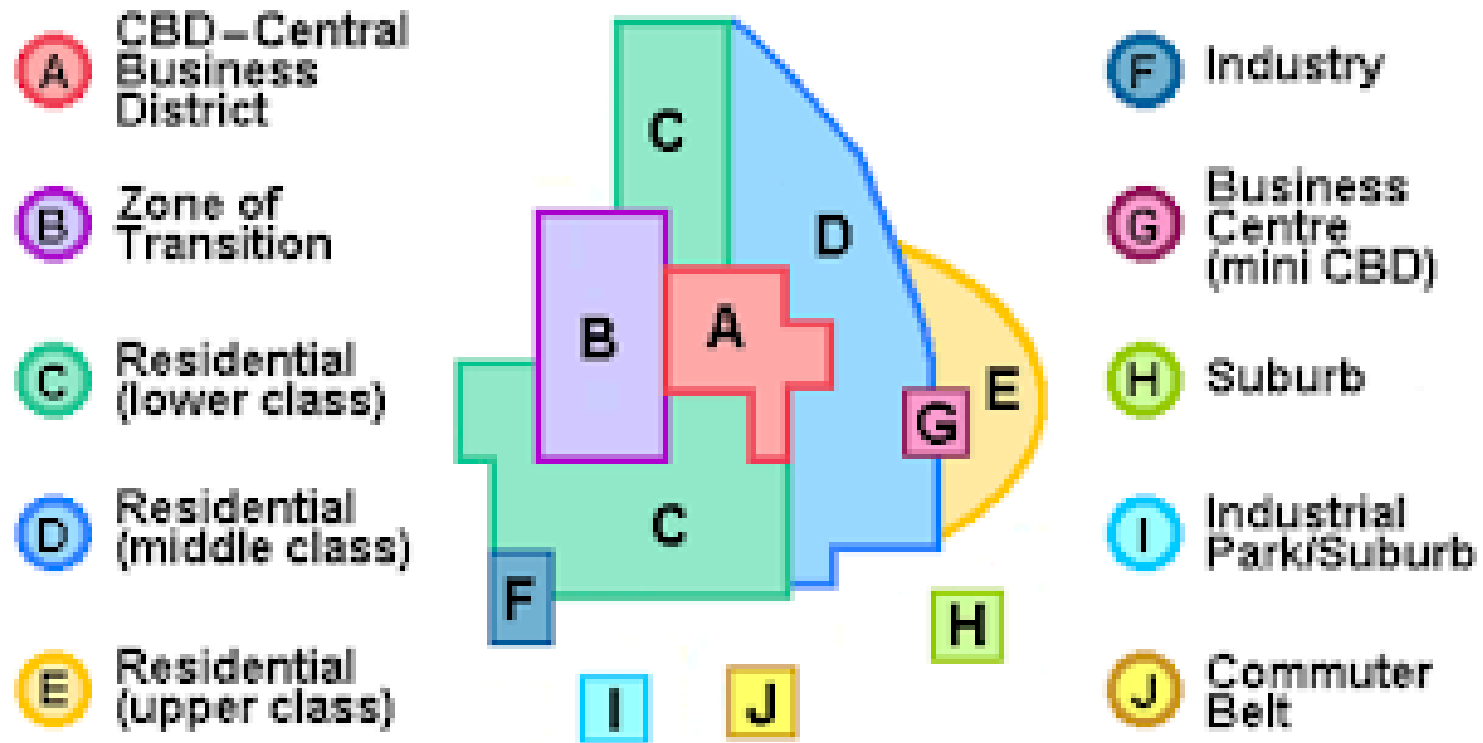
CBD is in most accessible area and not always in centre

All industrial and commercial activity is not in a specific area.

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Harris and Ullman's Multiple Nuclei Model





Harris and Ullman's Multiple Nuclei Model

Land use develop around different nuclei, depending on the needs of that land use e.g.

- Heavy industry near bulk transport
- CBD most accessible area
- High income aesthetic appeal
- Low income near place of employment
- No set structure regarding model. It will change from one urban area to the next.



Modern American-western city



Movement of people into urban area e.g. rural-urban migration

Movement of people out of urban area e.g. commercial decentralization/urban-rural migration.



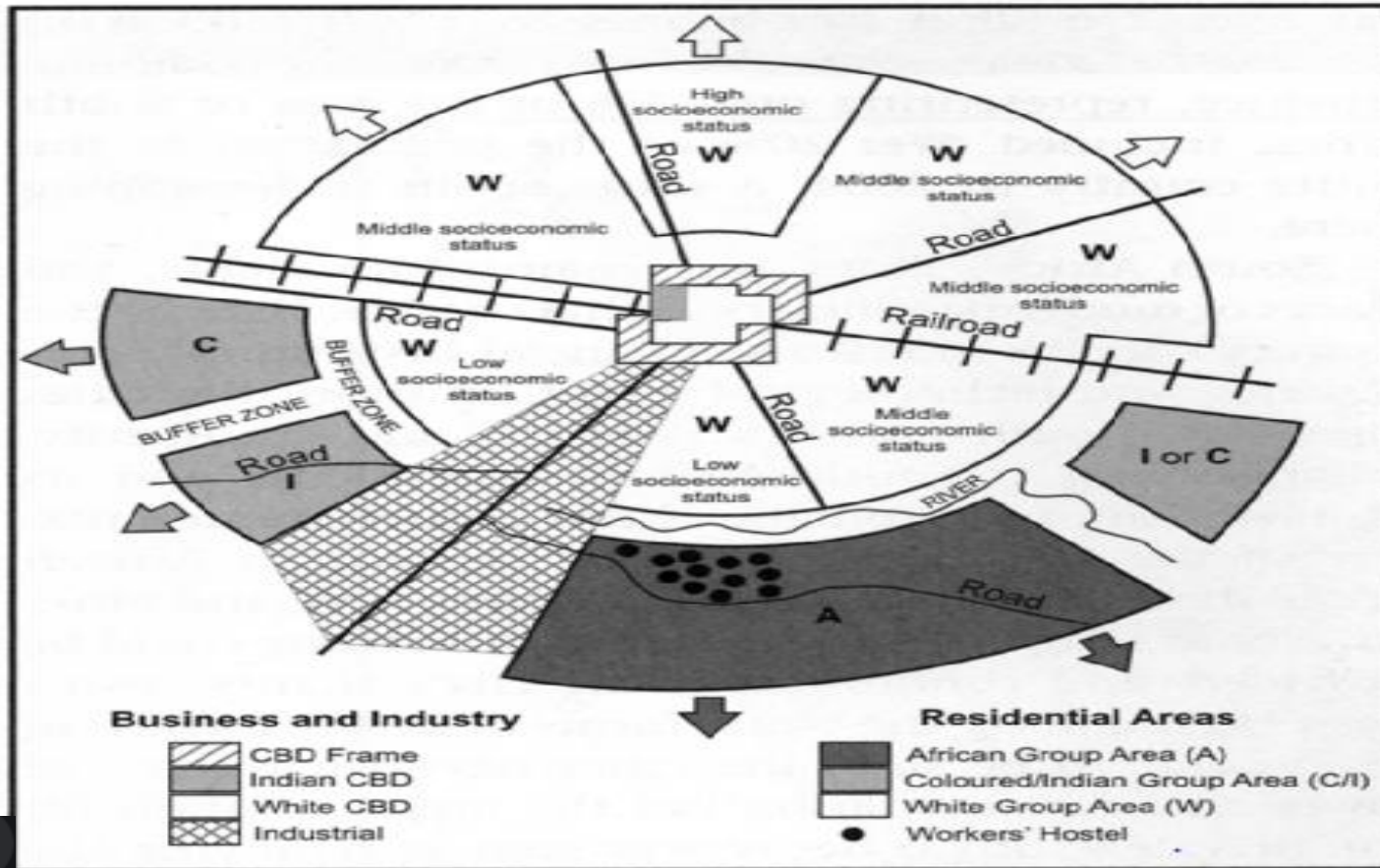
Third World city




- Large scale rural urban migration due to opportunities in the urban areas
- Natural increase
- Formal and large scale informal settlements



Apartheid City



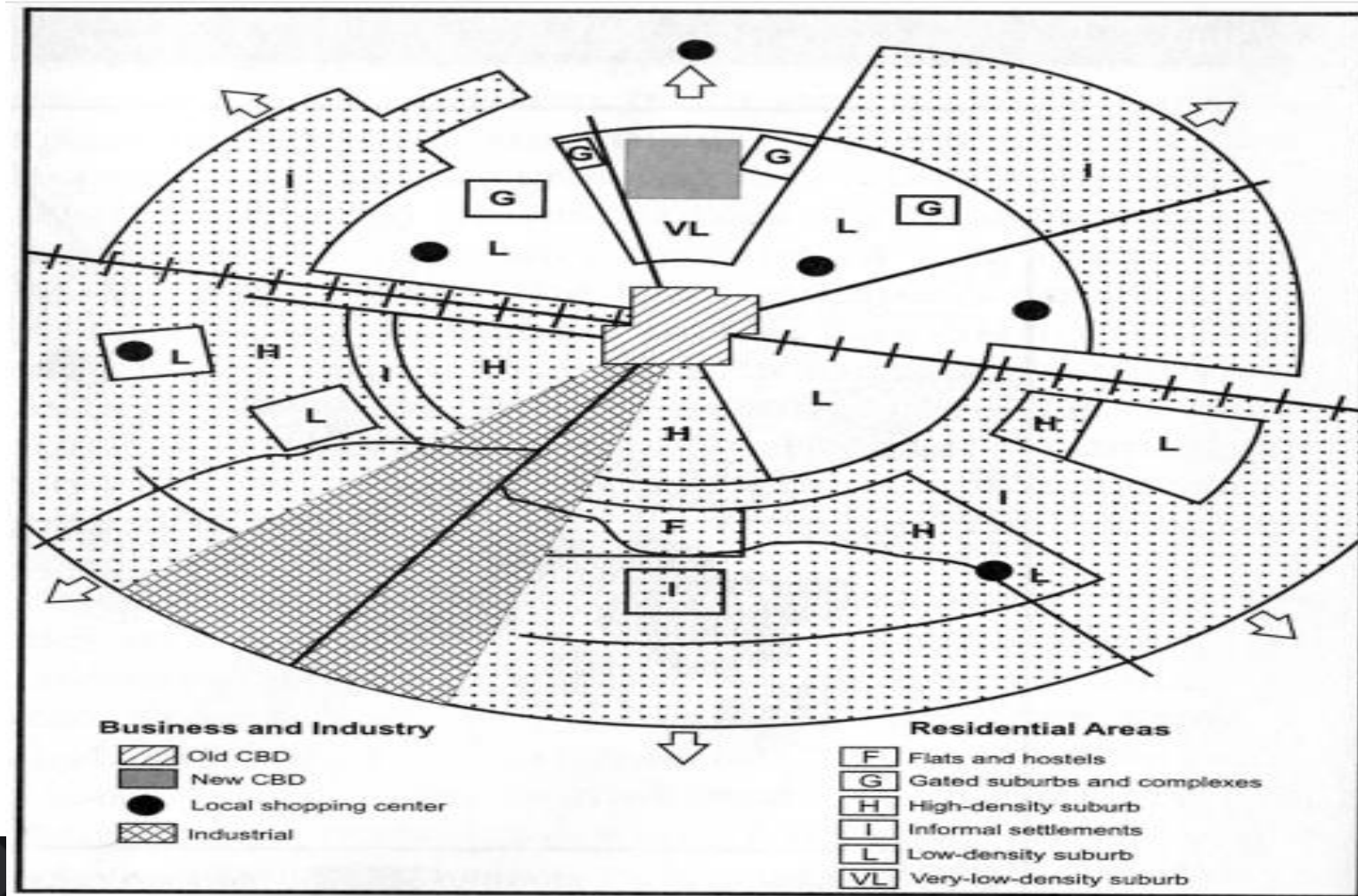
 people.uwec.edu

South African city
Influenced by the apartheid policy in the past e.g. Group areas act.
South Africa is undergoing transition due to Democracy

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Post Apartheid City





Changing urban patterns and land use and the South African city



- **Urban renewal** refers to renovating of the urban area
- Facadism keeping the external front of the building but modifying the rest of the building
- Gentrification- upgrade run down areas in the inner city
- Invasion and succession-one inappropriate land use replaced by another more appropriate land use e.g. residential to commercial.

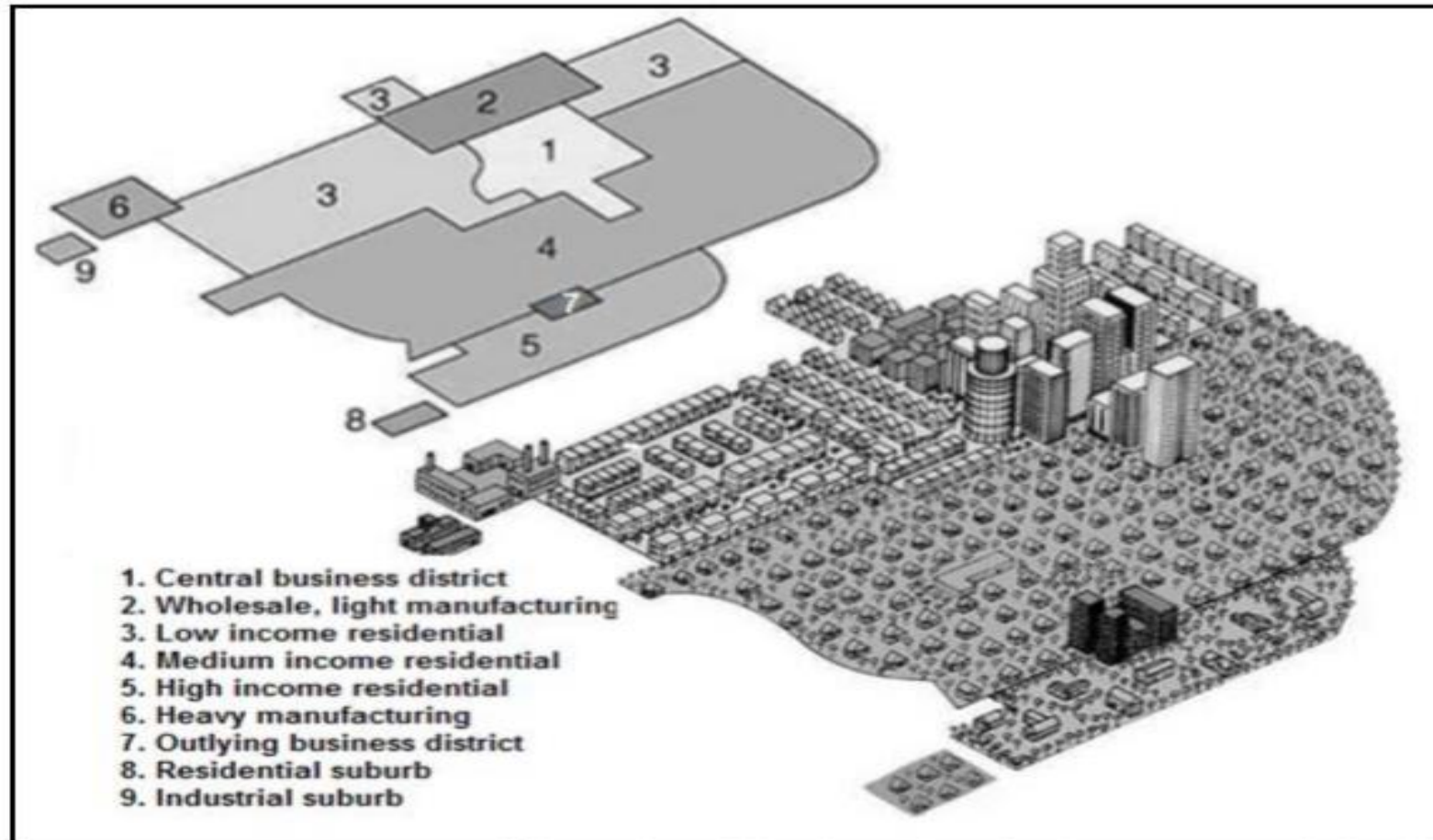
Decentralisation of functions

- Commercial functions moving to the residential area
- Convenience of having different functions in one area.



.DBE PAST PAPER

FIGURE 3.4: A MODEL OF URBAN STRUCTURE



[Source: <https://planningtank.com/settlement-geography/model>]



3.4 Refer to FIGURE 3.4 showing a model of urban structure.

3.4.1 Identify the model of urban structure.

(1 x 1) (1)

3.4.1 Multiple nuclei model/Harris and Ullman (1)

(1 x 1) (1)



- 3.4.2 Which land-use zone covers the largest area in the illustrated model of urban structure? (1 x 1) (1)
- 3.4.2 Residential (1) (1 x 1) (1)



3.4.3 Name ONE visible characteristic of the CBD. (1 x 1) (1)

3.4.3 Tall buildings/skyscrapers (1)
High building density (1)
[ANY ONE]

(1 x 1) (1)



3.4.4 Give ONE reason for the development of the outlying business district (7) on the outskirts of the city. (1 x 2) (2)

- 3.4.4
- To decentralise commercial activities (2)
 - Outlying business district is more accessible in the outskirts (2)
 - Commercial activities now closer to the residential areas (2)
 - Less traffic congestion in the outskirts (2)
 - Lower crime rate in the outskirts (2)
 - More space/room for expansion on the outskirts (2)
 - Land cheaper in the outskirts (2)
 - Less pollution in the outskirts (2)
 - Peaceful/tranquil surroundings in the outskirts (2)

OR

- CBD became less accessible than the outlying business district (2)
- Commercial activities of CBD far from residential areas (2)
- More traffic congestion in the CBD (2)
- Higher crime rate in CBD (2)
- Less space in CBD (2)
- More pollution in the CBD (2)
- High land values/rentals in the CBD (2)
- Urban blight in the CBD (2)

[ANY ONE]

(1 x 2) (2)



3.4.5 Refer to land-use zones **5** and **6**.

- (a) Comment on the location of land-use zones **5** and **6** in relation to each other. (1 x 2) (2)
- (b) Compatibility (ability to live or to exist together) determines the location of land-use zones in an urban area. Give reasons why **5** and **6** are not compatible. (2 x 2) (4)

- 3.4.5 (a) Land-use zones **5** and **6** are far apart (2)
Located on opposite sides of the city (2)
[ANY ONE] (1 x 2) (2)
- (b) Heavy manufacturing industrial land use zones cause a lot of noise pollution which does not suit high income residential zones (2)
Air pollution from industrial areas repels (push away) high-income residential zones (2)
Unpleasant odours from industrial areas is not attractive to high-income residential zones (2)
Heavy industries are not aesthetically pleasing for people in high-income residential areas (2)
Influx of traffic congestion near heavy manufacturing land-use zones does not suit high income residential zones (2)
[ANY TWO] (2 x 2) (4)



3.4.6 What are the similarities between the South African city and the model identified in FIGURE 3.4.1? (2 x 2) (4)

3.4.6 There is a clear separation between high, middle and low income residential areas (2)
Separation between suburbs and the workplace (2)
Sharply defined land-use zones (2)
Tall buildings/high building density in the CBD of both (2)
[ANY TWO] (2 x 2) (4)