

URBAN GEOGRAPHY

MASTER OF ARTS – SEMESTER - 2

PAPER - 4

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UNIT – 3

- **STUDY OF REGIONAL URBAN PATTERNS**
- **CENTRAL PLACE THEORY OF CHRISTALLER AND LOSCH**
- **GROWTH POLE THEORY OF PERROUX**
- **URBAN FUNCTION : BASIC AND NON BASIC FUNCTION**
- **METROPOLITAN CITY AND CHANGING URBAN FUNCTION**
- **RANK SIZE RULE**
- **PRIMATE CITY**

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UNIT - 3

1. STUDY OF REGIONAL URBAN PATTERNS

The settlements in which most of the people are engaged in secondary , tertiary and quaternary activities are known as ' urban places ' . In other words , URBAN relates to CITIES and TOWNS .

SIZE , DENSITY AND OCCUPATION are the crieteria frequently used in census and other definitions of urban places .

THE REGIONAL STUDY OF URBAN PLACES has been central to several social sciences , including geography because of its importance in the DISTRIBUTION of population , and in the organisation of production , distribution and exchange .

CITY - The term ' city ' is generally applied to large urban placs with no strict definitions to separate it from smaller towns. In India , an Urban place with more than one lakh population is considered as a city .

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TOWN- Town is a general name for an urban place , usually a settlement meeting a prescribed minimum population threshold.

URBANIZED AREA- A continuously built up urban landscape defined by building and population densities with no reference to the political boundaries of the city .

METROPOLITAN AREA - Metropolitan area refers to a large- scale functional entity containing several urbanized areas , discontinuously built up but nonetheless operating as a coherent and integrated whole.

PRIMATE CITY- This is found where the largest city completely dominates a country or a region . The second or third city of the region is much smaller than this city.

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2. CENTRAL PLACE THEORY OF CHRISTALLER AND LOSCH

This is the theory concerned with functional importance of places.

- Range – It is the maximum distance that people are prepared to travel in order to obtain a good or service.
- Threshold – Threshold of a good or service is the minimum number of people required to support it .
- Central Place – It is a settlement that provides goods or services. It can be small (a village) or large (primate city).
- Sphere Of Influence – It is the area around each settlement that comes under its economic , social and political control.

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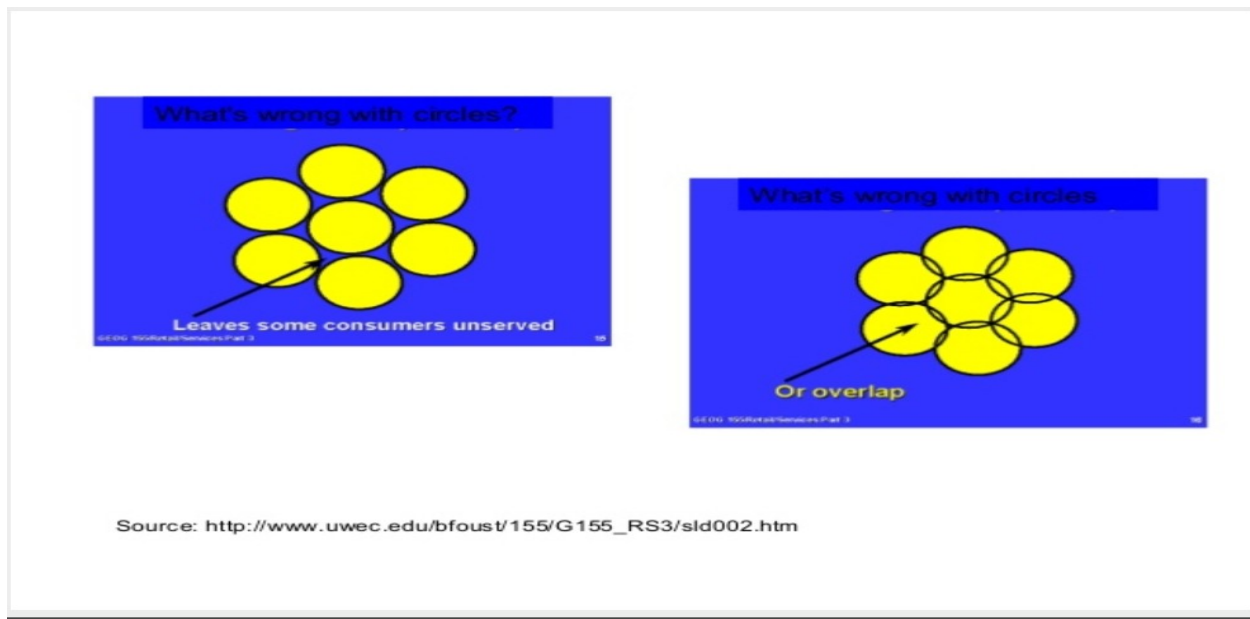
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Circles of Sphere Of Influence



Christaller states that the best shape for a sphere of Influence is a **HEXAGON** . This shape means that in urban areas , consumers still have accesdibility to the highest order central place and its trading area from all parts of hexagon.

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His key idea was that ' consumers would go to the nearest higher order central place to buy goods and services ' .

Highest order central place acts like a *magnet for consumers*.

He called this phenomenon **K=3 or Marketing Principle** .

In order to make his theory work , he made a few assumptions , which are :

Each trading area had an isotopic surface (whole area same all over).

The whole area was flat.

There was only single form of transport with costs proportional to distance.

The population was distributed evenly.

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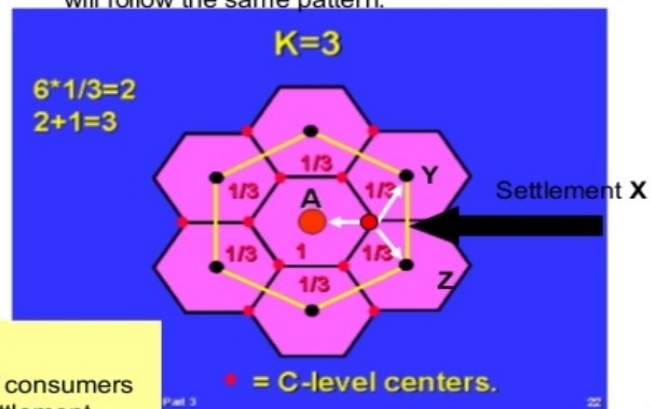
K=3. The Marketing Principle

K=3 The marketing principle

The high order (3rd order) settlement (A) in the middle is surrounded by medium order settlements (black dots) and lower order settlements (small red dots). **These consumers are attracted in equal amounts to whichever large central place is nearby.**

Example -the highlighted lower order settlement (village X) will have 1/3 of its consumers go to the city (settlement A) and 1/3 will go to town Y and 1/3 will go to town Z (middle order settlements)

All the other lower order settlements (red dots) will follow the same pattern.



Why is K=3 called K=3?

Hint → look at the numbers of consumers who visit the highest order settlement

USES -

- Model used by governments to plan location of towns and higher order services .

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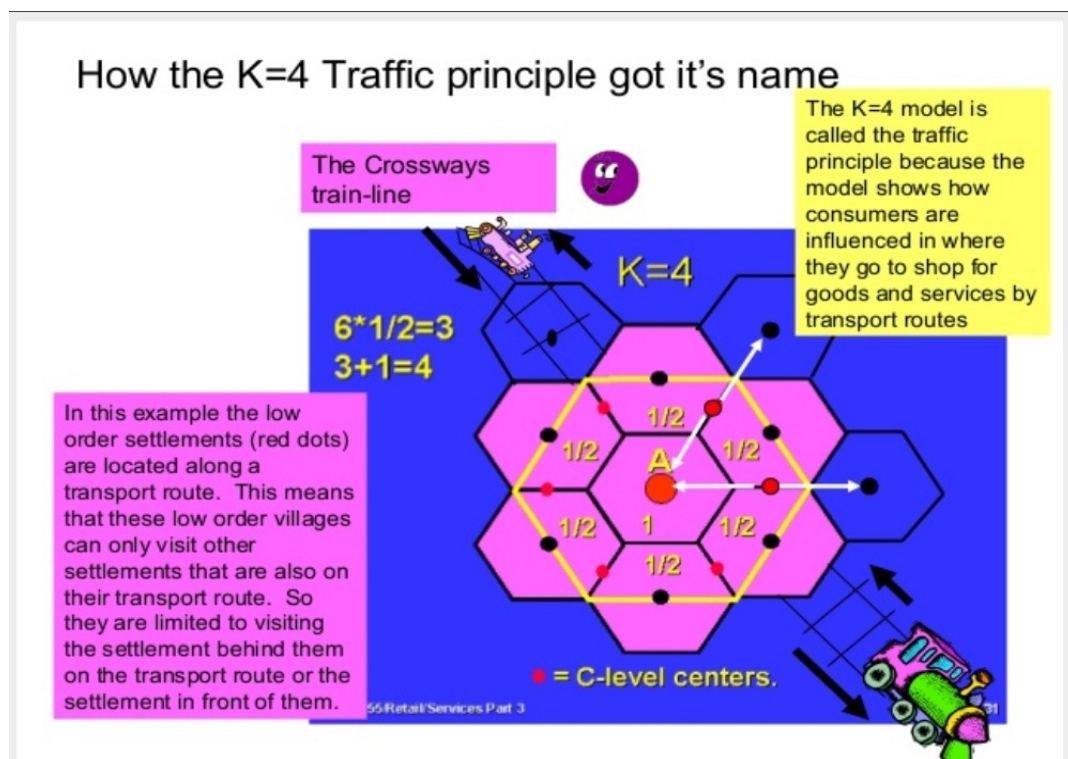
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- It is used by transport authorities to plan transport routes.
- Businesses use this model.



The traffic Principle

LIMITATIONS –

- Few real life regions fit Christaller's model

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- People do not always go to the nearest central place.
- Large areas of flat lands rarely exist.
- People and wealth are not evenly distributed.
- Markets do not often control where towns are located.

3. GROWTH POLE THEORY OF PERROUX

The growth pole theory was developed by French regional economist, Francois Perroux, in 1955. He was concerned with the phenomenon of economic development and with the process of structural change.

He attempted to explain how modern process of economic growth deviated from the stationary conception of equilibrium growth.

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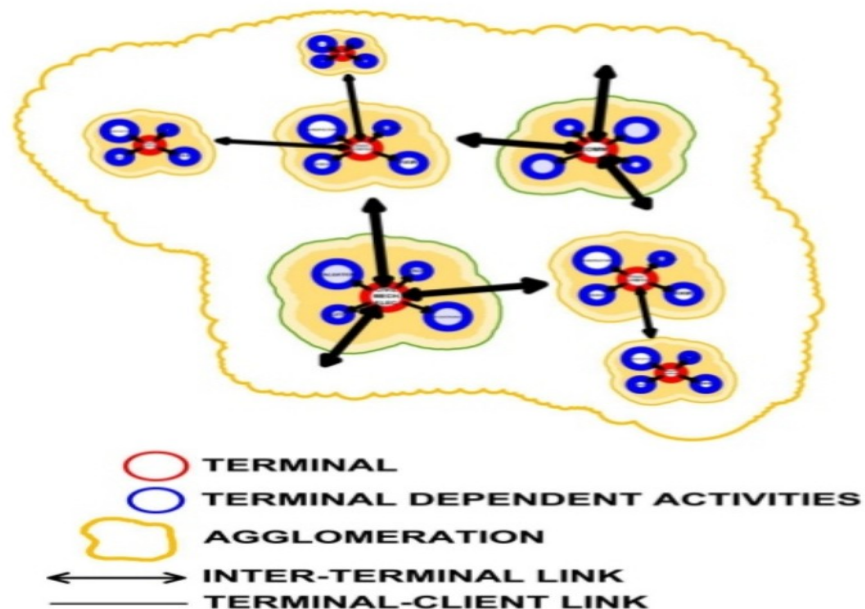
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Perroux's theory is based on Schumpeterian theory of development and theory of inter-industry linkages and industrial interdependence. According to him, "Growth does not appear everywhere and all at once, it appears in points or

Example: (1) Vidhyanagar as an educational hub



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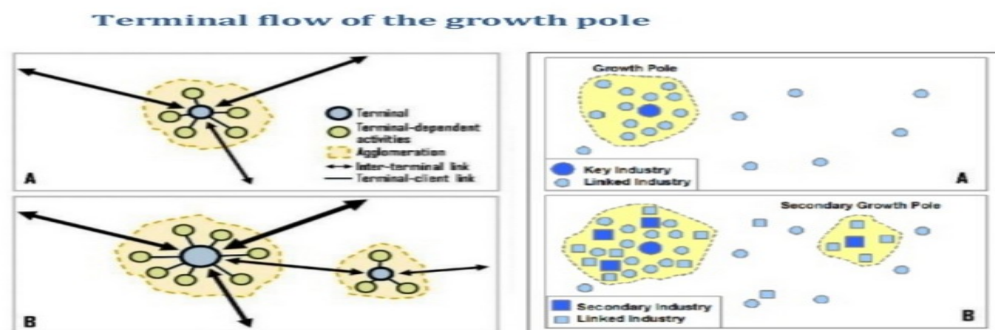
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development poles, with variable intensities, it spreads along diverse channels and with varying terminal effects to the whole of the economy". It is related to Perroux's idea of an economic space as a field of forces consisting of centres, "from which centrifugal forces emanate and to which



Source: Dr. Jean-Paul Rodrigue, Dept. of Global Studies & Geography, Hofstra University, New York, USA

Above mention **figures-A** shows that initially any single growth pole started and then its dependent terminal started clustering near that parent or growth pole. And then due to that cluster people started migrating nearer to that so it creates an agglomeration near that.

Same way **figure-B** shows that due to the growth of that primary pole, another growth pole also started over that region it is called secondary growth pole. This may connect with the primary terminal. And then it will grow like primary growth pole.

centripetal forces are attracted. Each centre, being a centre of attraction and repulsion, has its proper field which is set in the field of other centres.”

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4. URBAN FUNCTION

Economic functions are keys to the growth of cities. The economic base concept states that two types of activities or functions exist: those that are necessary for urban growth and those that exist primarily to supplement the necessary functions. The former are called basic functions. They involve the manufacturing, processing, or trading of goods or the providing of services for markets located outside the city's boundaries. Economic functions of a city-servicing nature are called nonbasic functions. Grocery stores, restaurants, beauty salons, and so forth are nonbasic economic activities because they cater primarily to residents within the city .

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5. METROPOLITAN CITY AND CHANGING URBAN FUNCTION

A metropolitan area combines an **urban agglomeration** (the contiguous, built-up area) with zones not necessarily urban in character, but closely bound to the center by employment or other commerce. These outlying zones are sometimes known as a commuter belt, and may extend well beyond the urban zone, to other political entities. For example, **Islip, New York** on **Long Island** is considered part of the **New York metropolitan area**. In practice, the parameters of metropolitan areas, in both official and unofficial usage, are not consistent. Sometimes they are little different from an urban area, and in other cases they cover broad regions that have little relation to a single urban settlement; comparative statistics for metropolitan area should take this into account.

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Urban Areas & Metropolitan Areas: Contrast EXAMPLE: PARIS URBAN & METROPOLITAN AREA

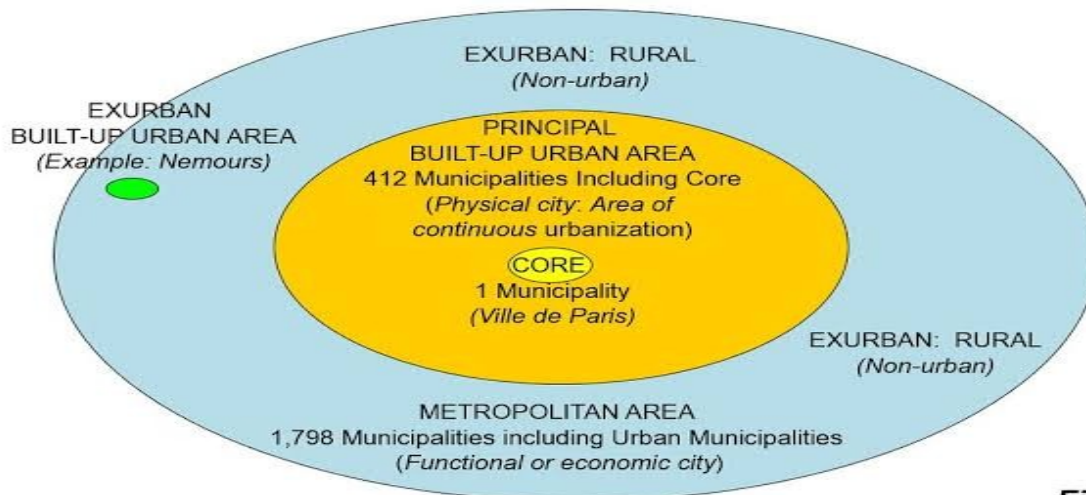


Figure 6

6. RANK SIZE RULE

The rank-size rule says that 'In an ordered set of cities representing a given country, the product of the rank and size of a city is constant' (Dziewonski 1972: 73). The rank-size rule is also commonly referred to as Zipf's Law because the model

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describing a constant relation between the size of an event and its rank was at first developed by G. Zipf. In the case of cities distribution by population, when the natural logarithms of the rank and of the city size (in terms of the number of people) are calculated and represented graphically, a remarkable log-linear pattern is attained, which is called the rank-size distribution. If the slope of the line is equal or close to -1 (a straight line), the relationship is known as Zipf's Law.

Zipf's has probably the best presentation of the empirical findings on rank and size of the cities. The rank size rule states that for a group of cities, usually those exceeding some size in a particular country, the relationship between size and rank of cities is given by:

$$P_r = P_1/r$$

Where P_r = population of the largest city ranked r

P = population of the largest city

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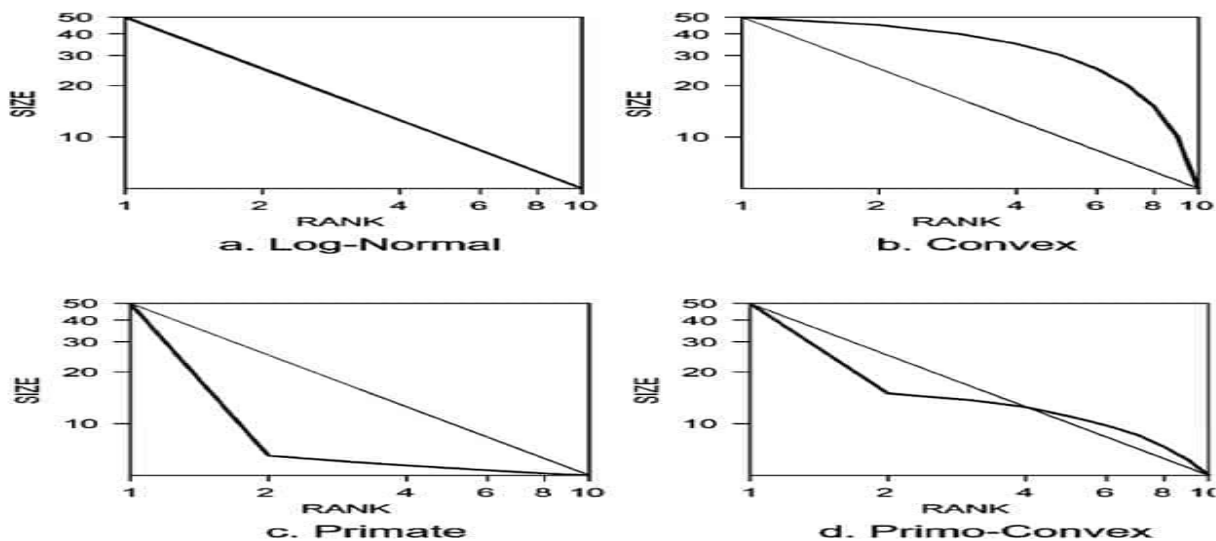
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r = rank of city r

Rank Size Rule is a simple model which states that population size of a given city tends to be equal to the population of the largest city divided by the rank of the given city.



Graphs showing hierarchies of cities in rank size rule

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USES -

- It helps in the interpretation of the relationship between rank and population size of settlements.
- It helps in analyzing the settlement networks.
- It explains settlements with respect to economic activities as increase in activities increase the population size.
- It explains the imbalance between the settlements due to rapid growth in population or activities.

7 . PRIMATE CITY

***“THE PRIMATE CITY IS COMMONLY ATLEAST
TWICE AS LARGE AS THE NEXT LARGEST CITY
AND MORE THAN TWICE AS SIGNIFICANT.***

-MARK JEFFERSON