TOWN PLANNING I

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PROJECT


مديرية الأمن
كلية الهندسة – ج. بنها
كلية العلوم – ج. بنها
شركة بنها للصناعات الإلكترونية
طريق المصنع الحربي
طريق القاهرة-
الإسكندرية الزراعي
طريق السكة الحديد

PROJECT

2004

2008

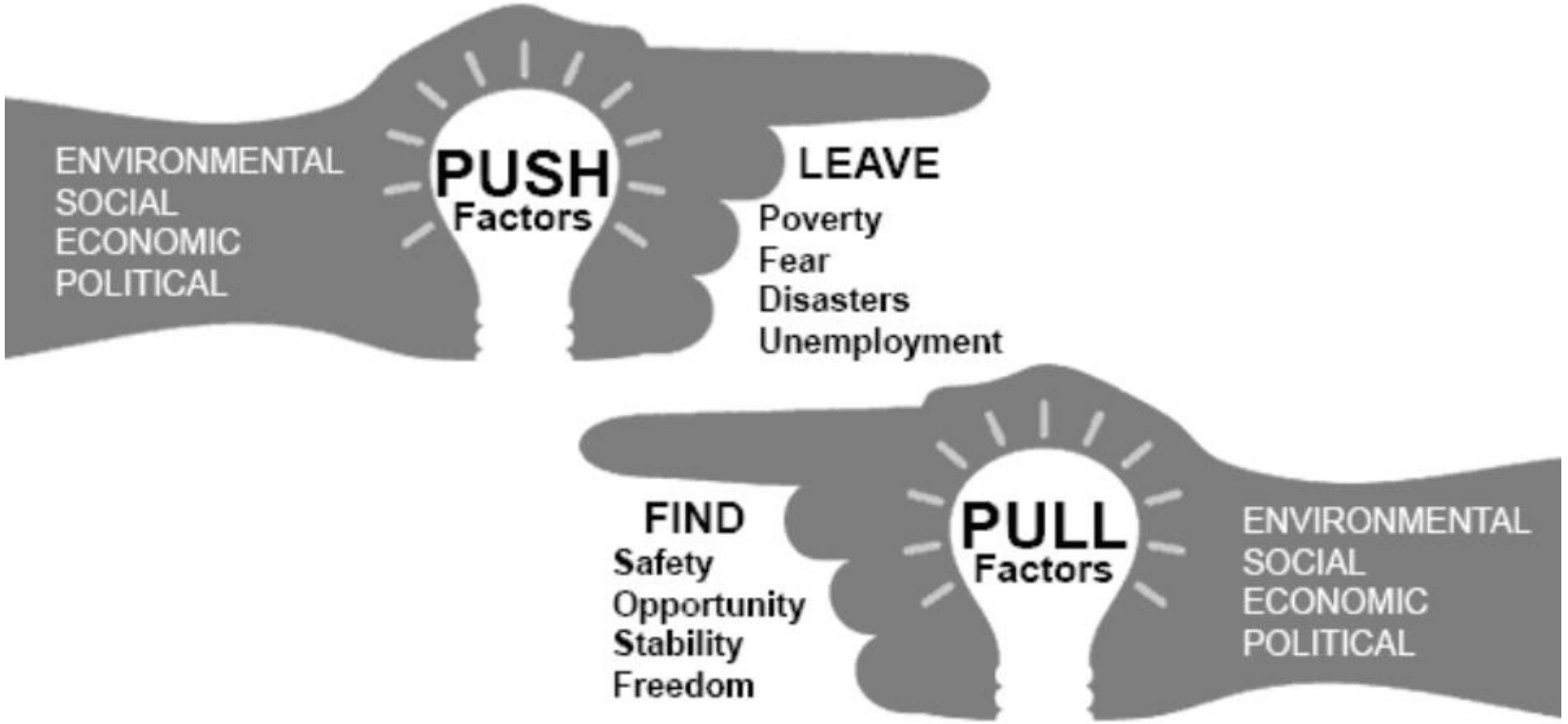
2013

2017

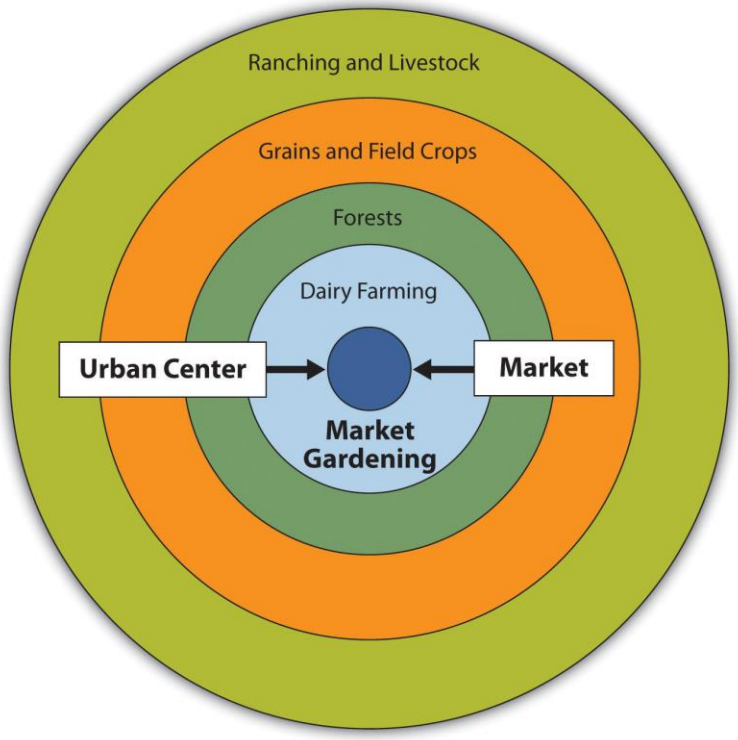
POPULATION SCALE

Unit	Population Scale
Room	2
House	5
House group/ Hamlet	40
Small Neighborhood/Village	250
Neighborhood	1500
Town	**10000**
Polis/ City	75000
Small Metropolis	500000
Metropolis	4 Million

PUSH VS PULL FACTORS



MODEL OF AGRICULTURAL LAND USE

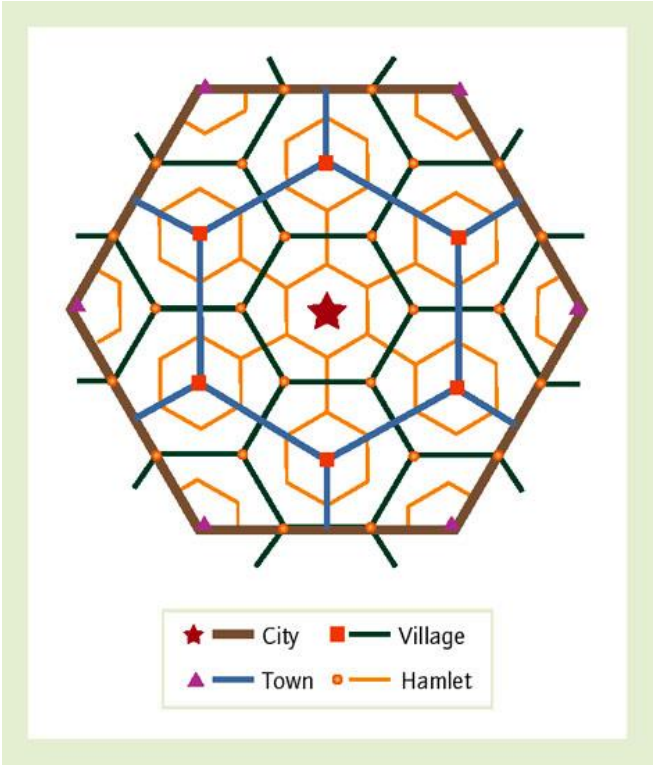


Von Thunen, 1826

MODEL OF AGRICULTURAL LAND USE

THEORY	• Rural areas organize agricultural production in support of an urban center. Distance from the center determines the use of land.
FINDINGS	• Longer distance from market • Less profitability • Easier to transport
APPLICABILITY OR PLANNING IMPLICATION	• Showed the early analysis of human behavior and its spatial consequences

CENTRAL PLACE THEORY

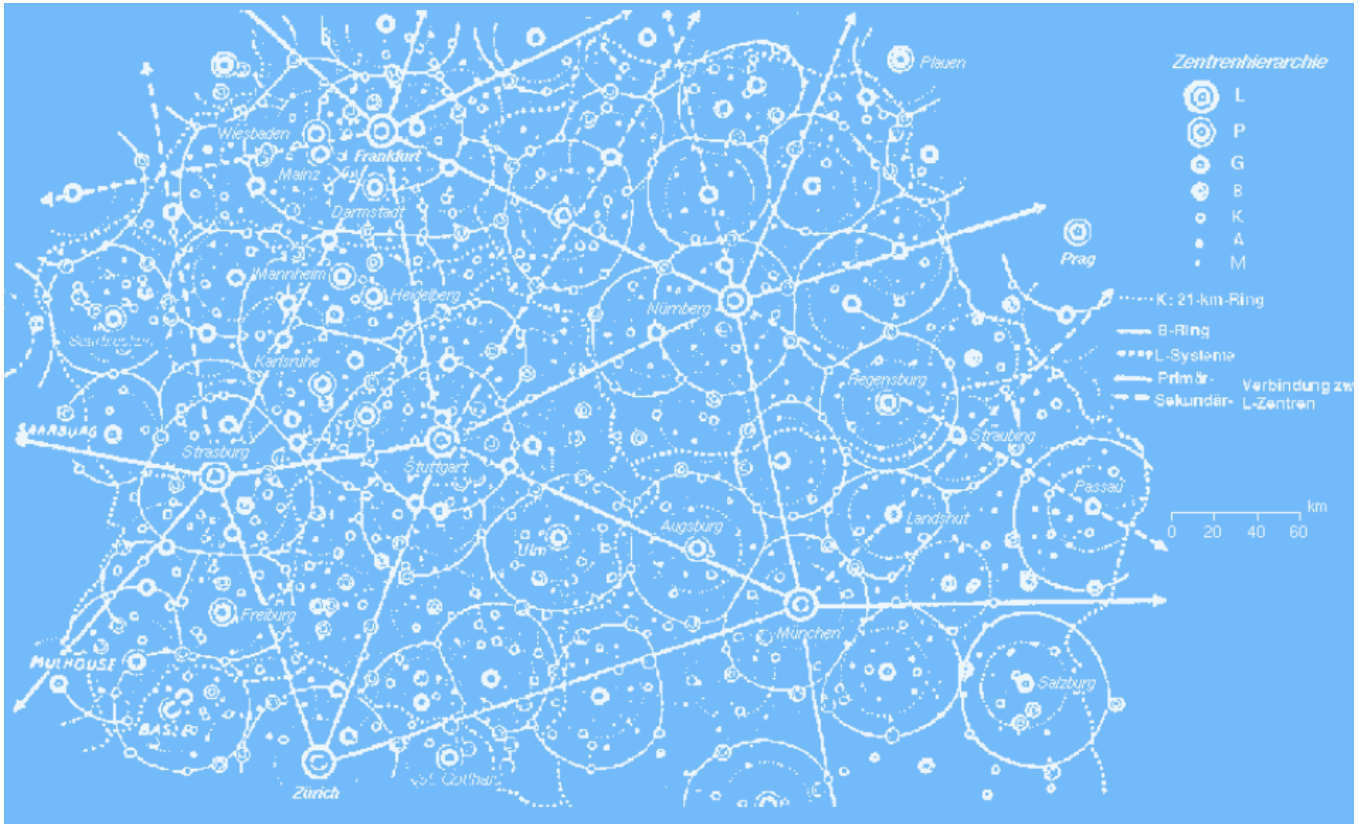


W. Christaller, 1933

CENTRAL PLACE THEORY

THEORY	• The range of good and threshold population of retail shops and service establishments are the major influences in explaining the number, size and distribution patterns of settlements.
FINDINGS	• Consumers avoid higher transport costs by going to the nearest service location. • The larger the settlements in size, the fewer in number they will be. • The more number of settlements, the higher order of services, and the higher the degree of specialization that occurs.
APPLICABILITY OR PLANNING IMPLICATION	• Provides an economic and spatial development of regions through provision of appropriate goods and services, with establishments according to scale.

CENTRAL PLACE THEORY



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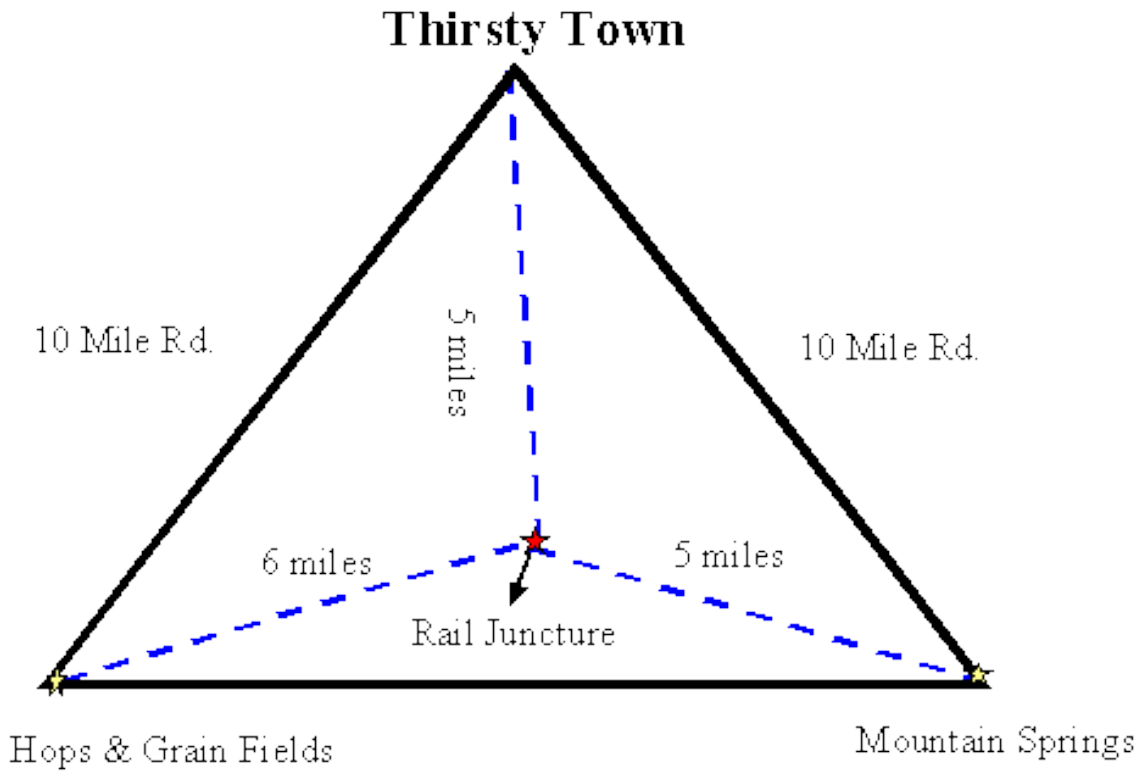
LEAST COST THEORY OF INDUSTRIAL LOCATION

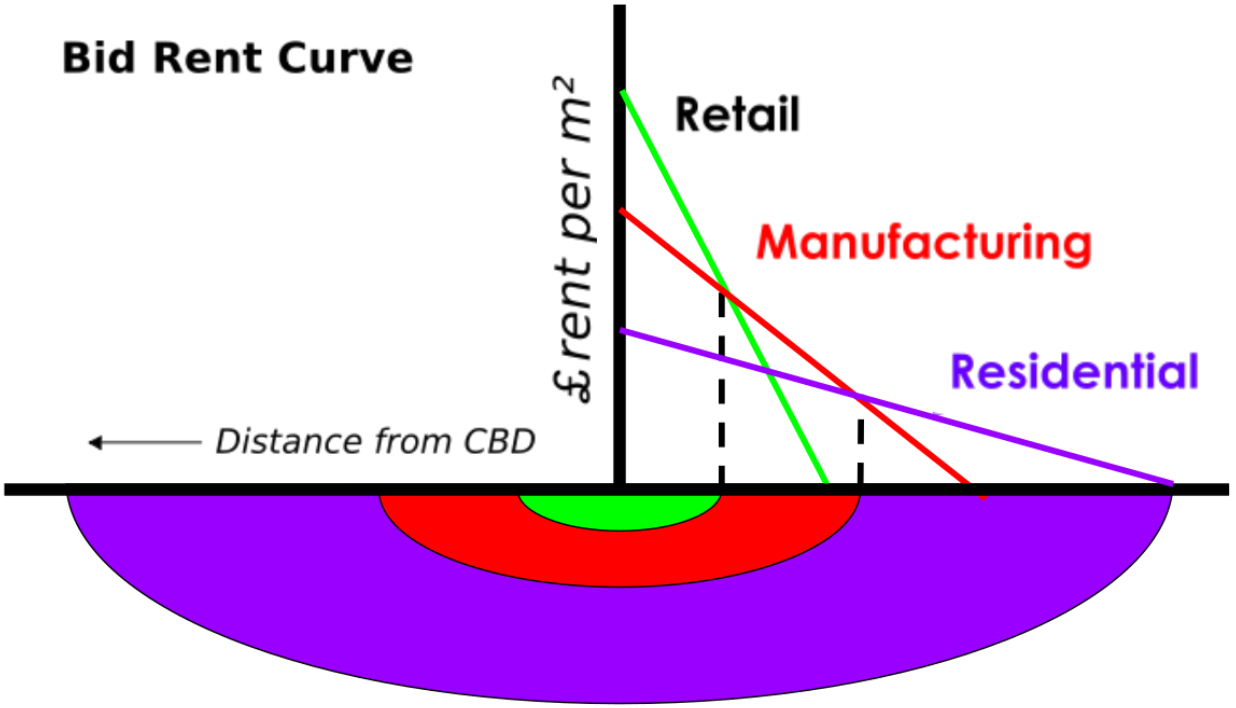


A. Weber, 1929

LEAST COST THEORY OF INDUSTRIAL LOCATION

THEORY	• A factory or plant locates where transport and labor costs are at a minimum, determined by cost of distance vs. weight of raw materials, cost of labor, agglomeration and deglomeration.
FINDINGS	• The point of least transport costs is that at which the combined weight movements involved in assembly (from sources and in distribution is at a minimum). If savings in labor cost is labor cost per unit output exceeds the extra transport costs, labor will attract the industry to the location.
APPLICABILITY OR PLANNING IMPLICATION	• Brings economics into the spatial domain. • Provides rationality in determining the location of a firm.

THEORY OF LAND RENT:THE BID-RENT FUNCTION



W. Alonso, 1964

THEORY OF LAND RENT:THE BID-RENT FUNCTION

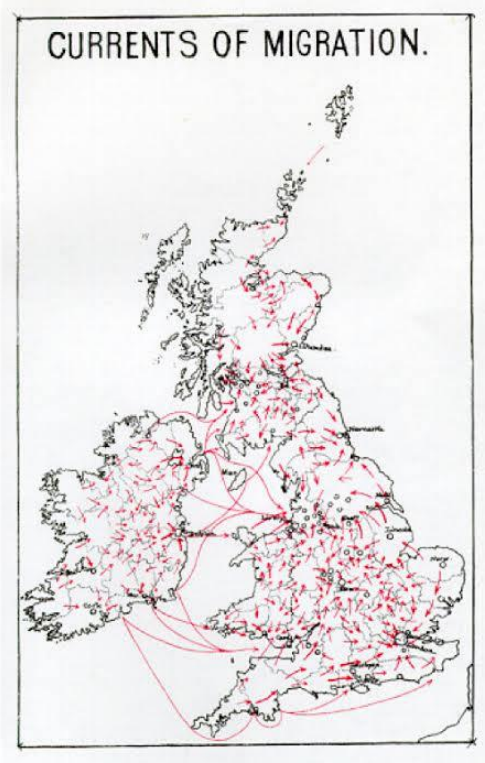
THEORY

- The price of and demand for land changes according to the distance from the center (CBD). The center commands the highest value of land because of its proximity to business establishments and supports services as well as the market.

APPLICABILITY OR PLANNING IMPLICATION

- Provided an explanation on why slums and squatter settlements proliferate in areas close to the CBD or commercial centers

LAWS OF MIGRATION



E. G. Ravenstein, 1885

LAWS OF MIGRATION

THEORY	• Birth, mortality rates, and population movement are major determinants of settlement patterns.
FINDINGS	• Migration is caused by economic reasons. • Migrants tend not to go straight to their ultimate destinations. They leapfrog.
APPLICABILITY OR PLANNING IMPLICATION	• Gives basis for migration and urban growth studies: distance decay, push-pull studies on migration, and gravity modeling

MIGRATION IN DEVELOPING COUNTRIES

M. Todaro, 1885

MIGRATION IN DEVELOPING COUNTRIES

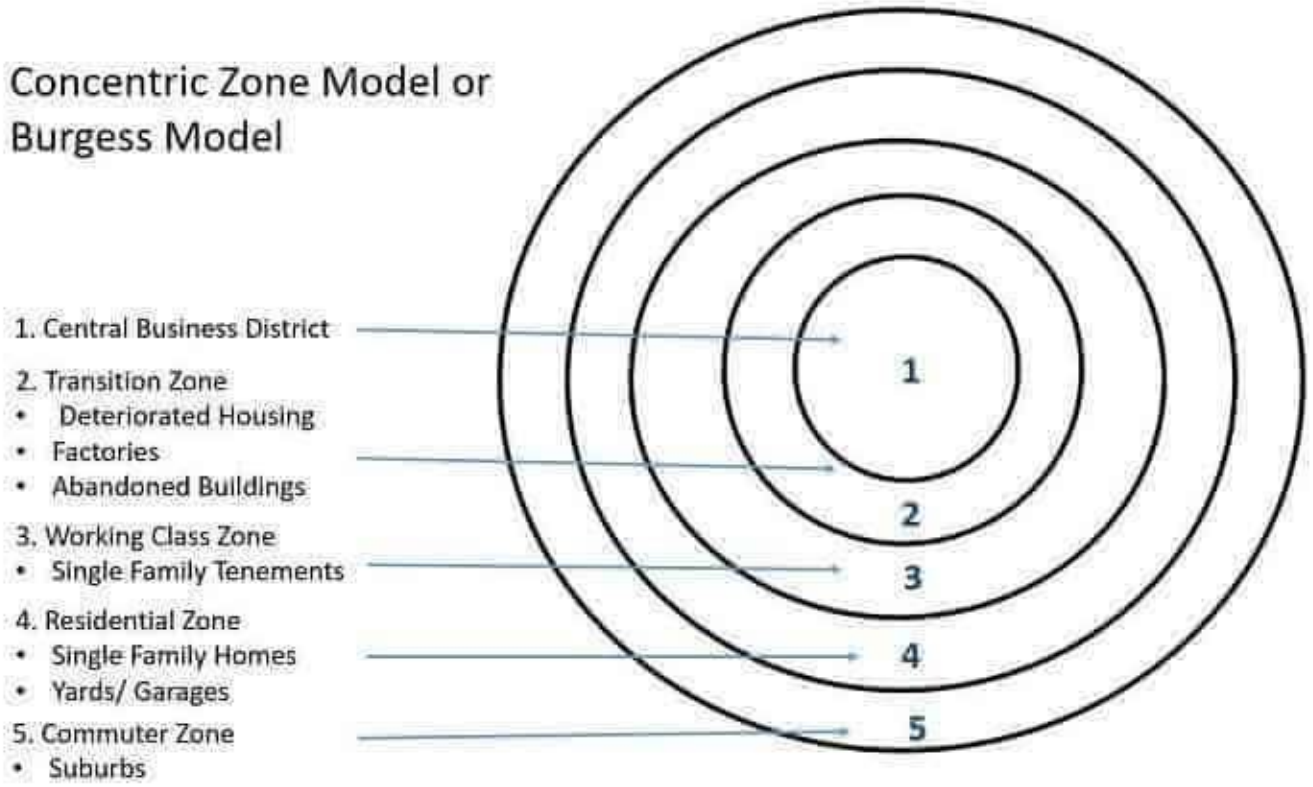
THEORY

- Migration is an economic dimension of rural dwellers where individual and household members believe that there is a higher expected income in urban areas.

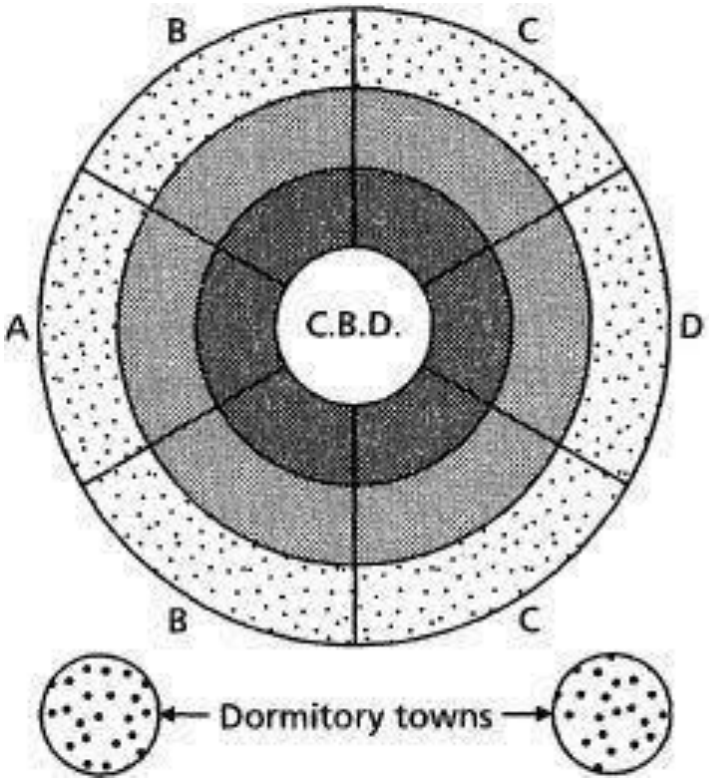
APPLICABILITY OR PLANNING IMPLICATION

- This influenced national policy on on-site and services approach to low cost housing, resettlement, relocation and minimization of rural-urban disparities.

BURGESS ET AL'S CONCENTRIC MODEL, 1923



PETER MANN'S CONCENTRIC ZONE MODEL, 1965



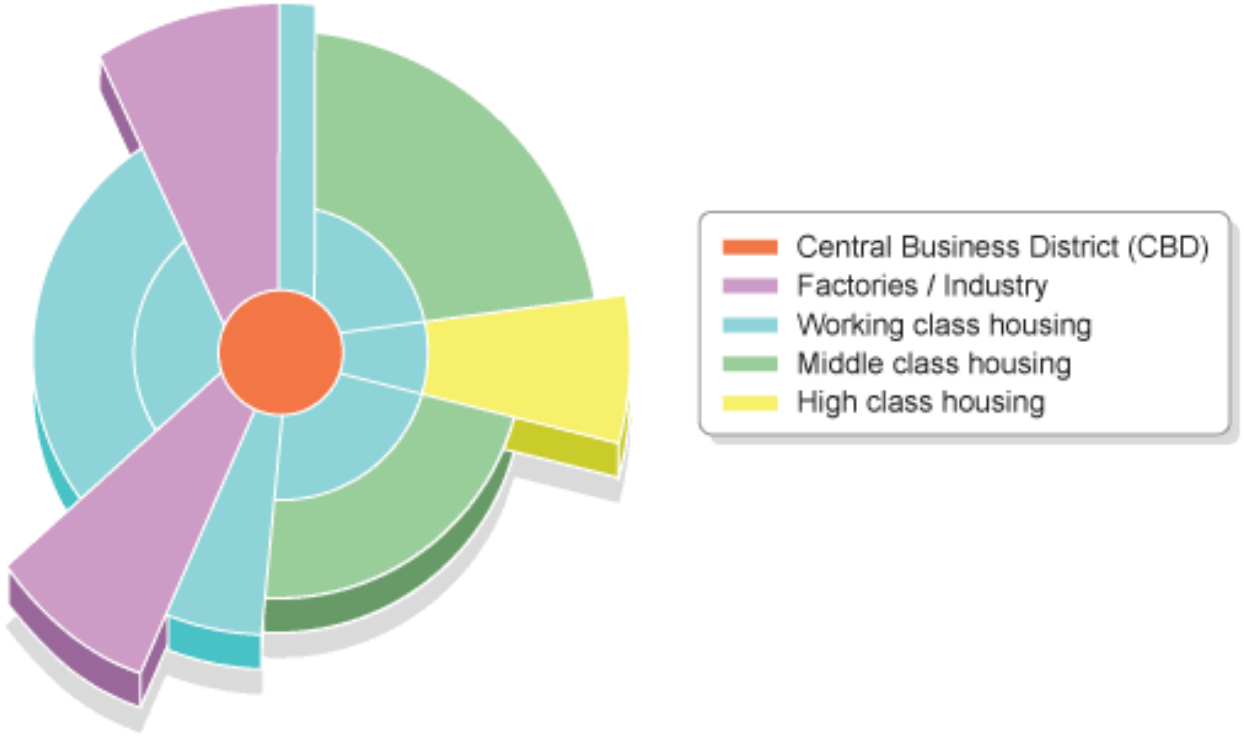
Age of building

- Transition zone
- Pre1918
- Post 1918

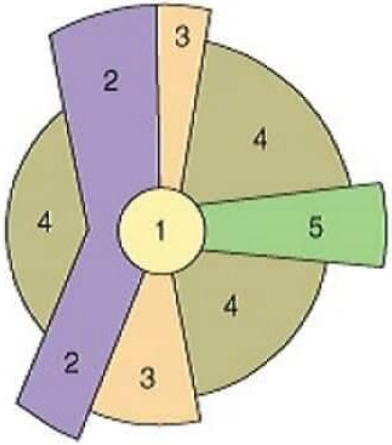
Housing

- A Upper } middle class
- B Lower } middle class
- C Working class
- D Poorest houses plus industry

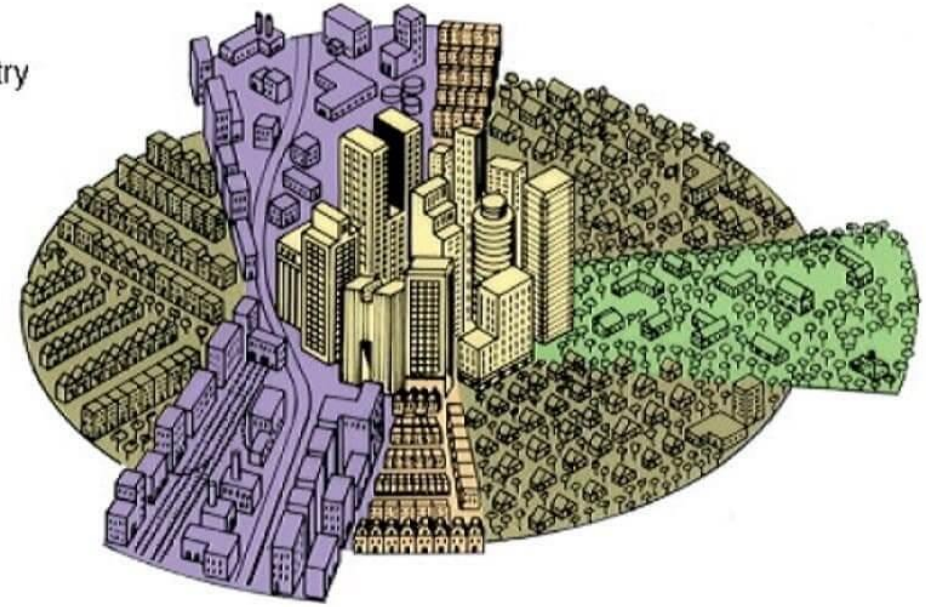
HOMER HOYT'S SECTOR MODEL, 1939



HOMER HOYT'S SECTOR MODEL, 1939



1. Central business district
2. Transportation and industry
3. Low-class residential
4. Middle-class residential
5. High-class residential



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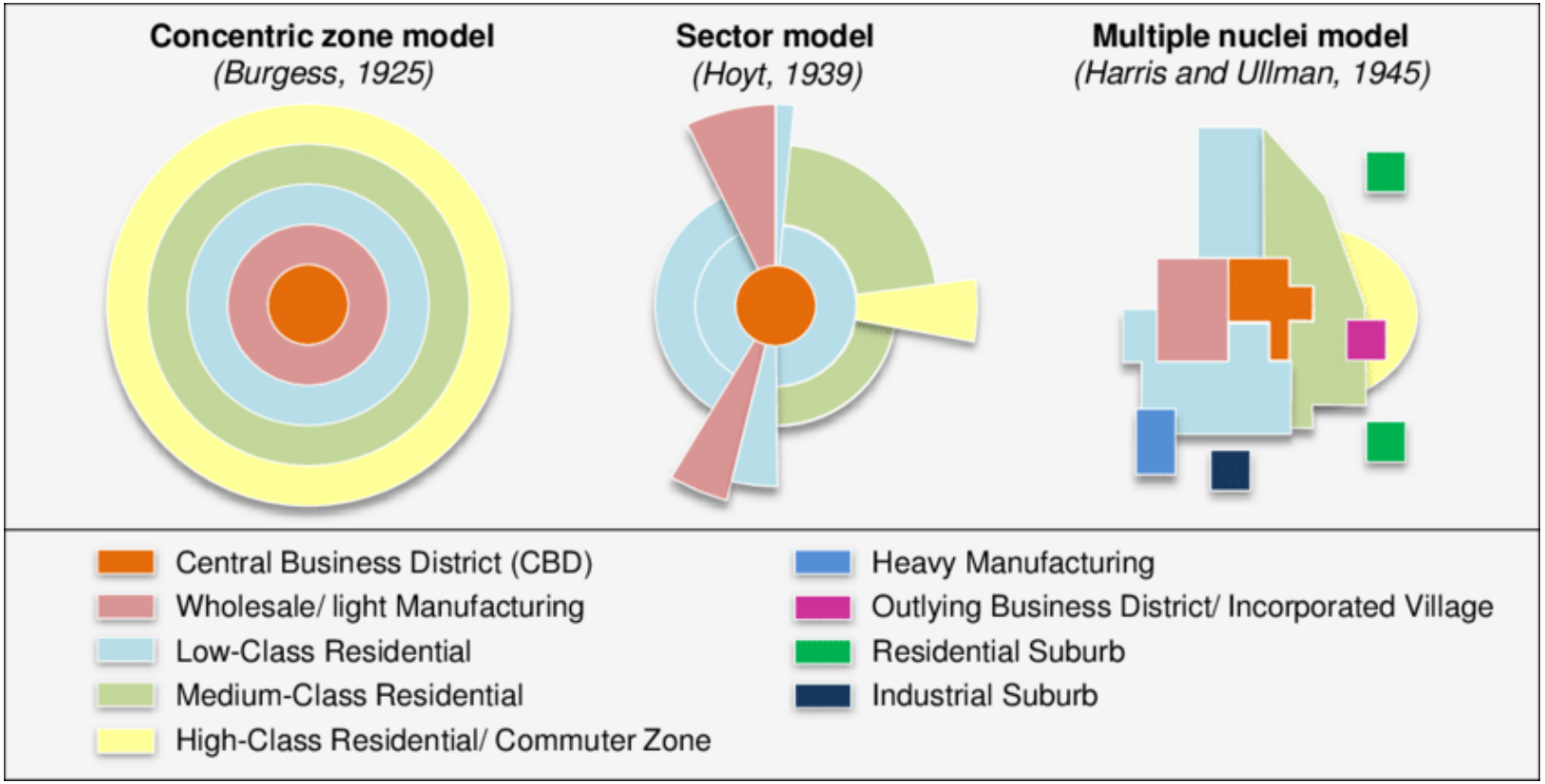
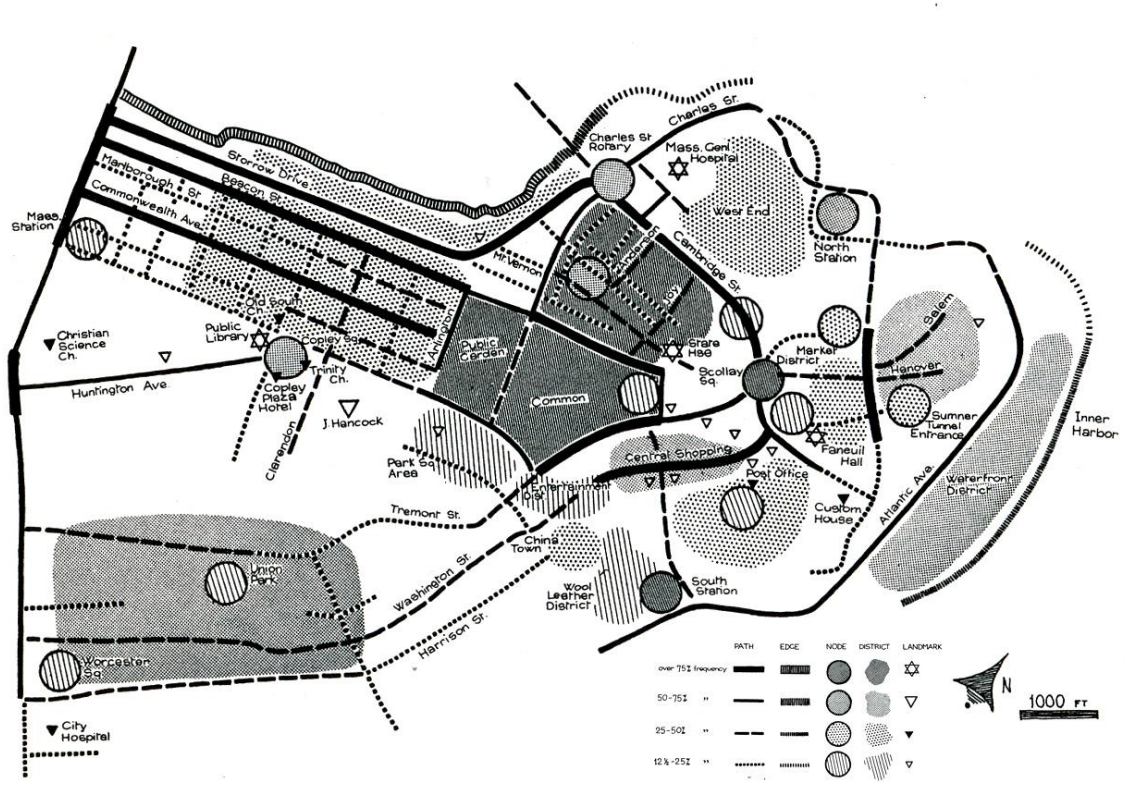
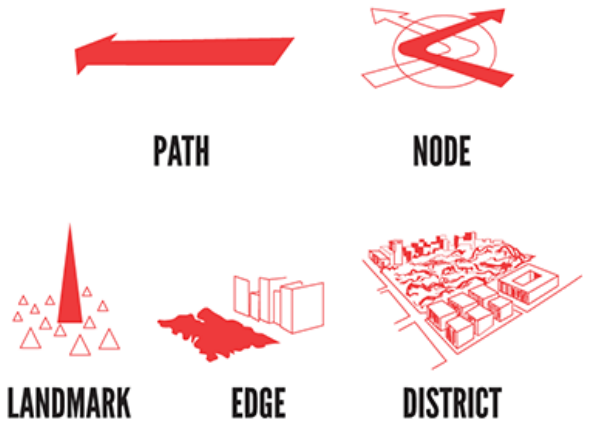


KEVIN LYNCH .. 1918-1984

THE ELEMENTS OF A CITY





THANK YOU

NEXT LECTURE: CITY, LAND USE, CITY CALCULATIONS