

M U N I

From positivist to post-positivist approaches

Pavel Doboš

Before positivist geography

- At first there was descriptive regional geography
 - prior to the 1950s, geography focused on detailed descriptions of specific regions.
 - geographers aimed to catalog the physical and human characteristics of different areas, emphasizing uniqueness and particularity
 - holistic approach, integrating physical geography (landforms, climate) with human geography (culture, economy)
 - atheoretical and primarily qualitative, relying on subjective interpretations and personal observations
- Then Schaefer vs Hartshorne “debate” came

Birth of positivist geography

- Scientific revolution
 - advances in the natural sciences which emphasized empirical observation, measurement, and the scientific method
- Critique of descriptive methods and adoption of quantitative methods
 - so-called “quantitative revolution“ in geography
- Philosophy of empiricism and positivism
 - focus on observable, measurable phenomena
- Technological advancements
 - enabled to handle large datasets, perform complex analyses, and create sophisticated spatial models

Characteristics of positivist geography

- Searching for universal laws in spatial science
 - analyses of spatial patterns, relationships, and processes that govern the distribution of phenomena across space
- Integration with other disciplines
 - statistics, economics, engineering, physics (gravity model)
- Utilization of remote sensing to get data
- Location theories
 - Examination of the optimal locations for economic activities and settlements
- Foundation for modern geography

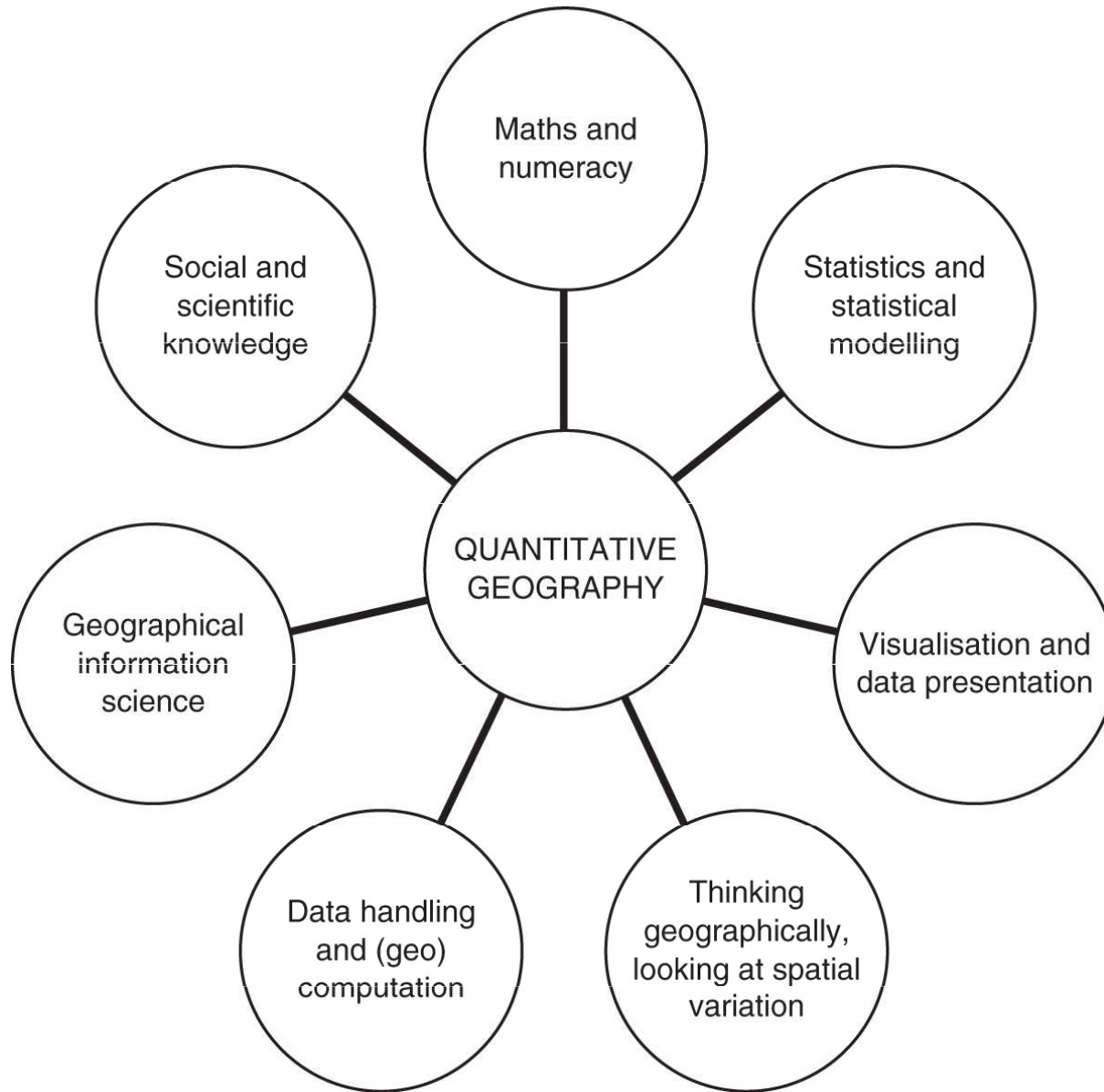
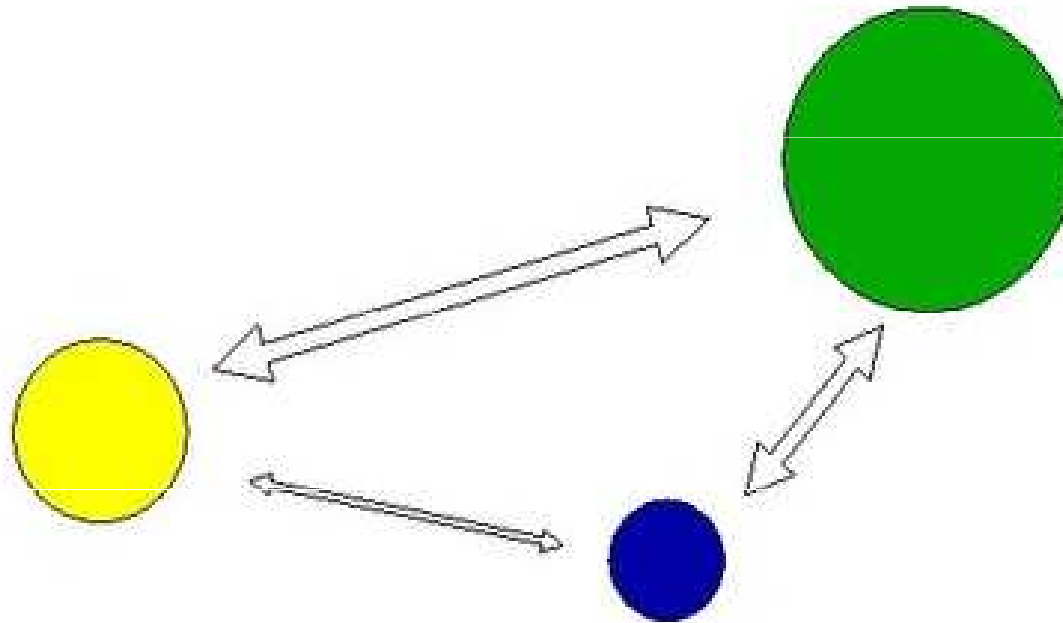


Illustration of the Gravity Model



*The shorter the distance between two objects,
and the greater the mass of either (or both) objects,
the greater the gravitational pull between the objects.*

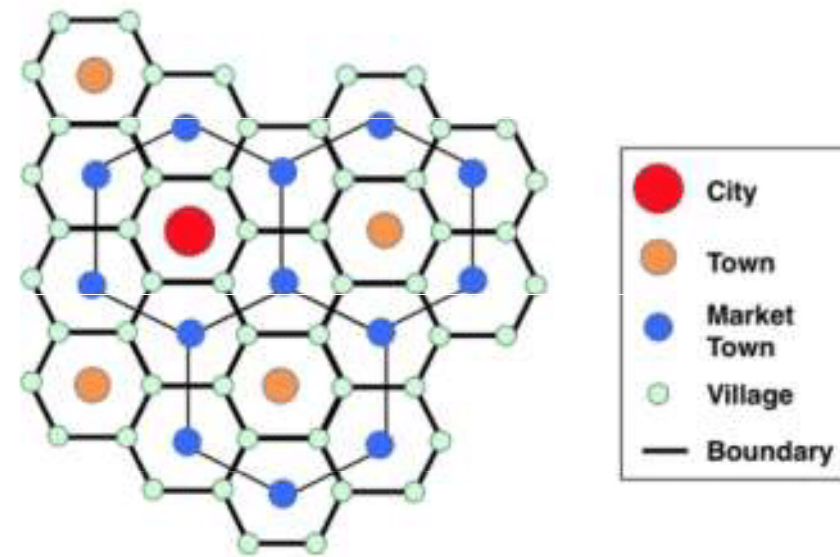
Example of an important gravity model theory: Walter Christaller's Central Place Theory

Central Place: A settlement that provides goods and services to its hinterland (the surrounding area).

Hinterland: The market area or service area surrounding a central place.

Threshold: The minimum population size needed to support a service or business.

Range: The maximum distance people are willing to travel to access a service.



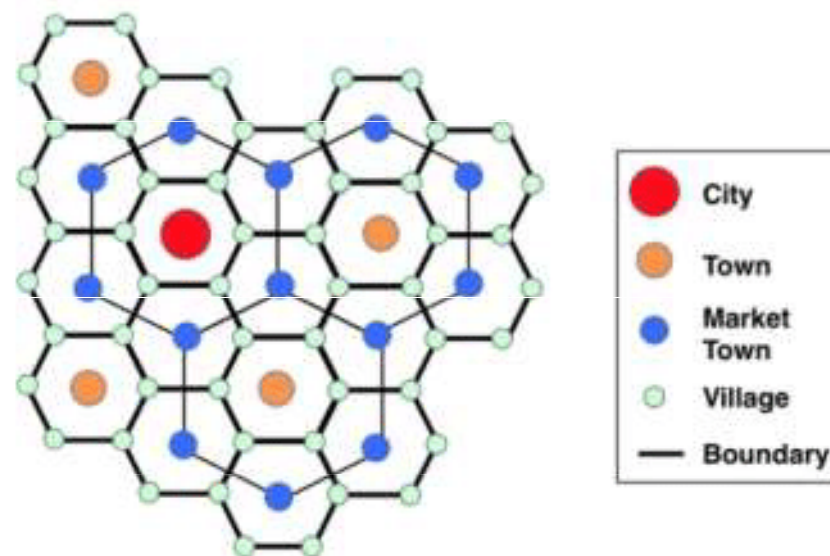
Central Place Theory in geography

Assumptions of the Theory:

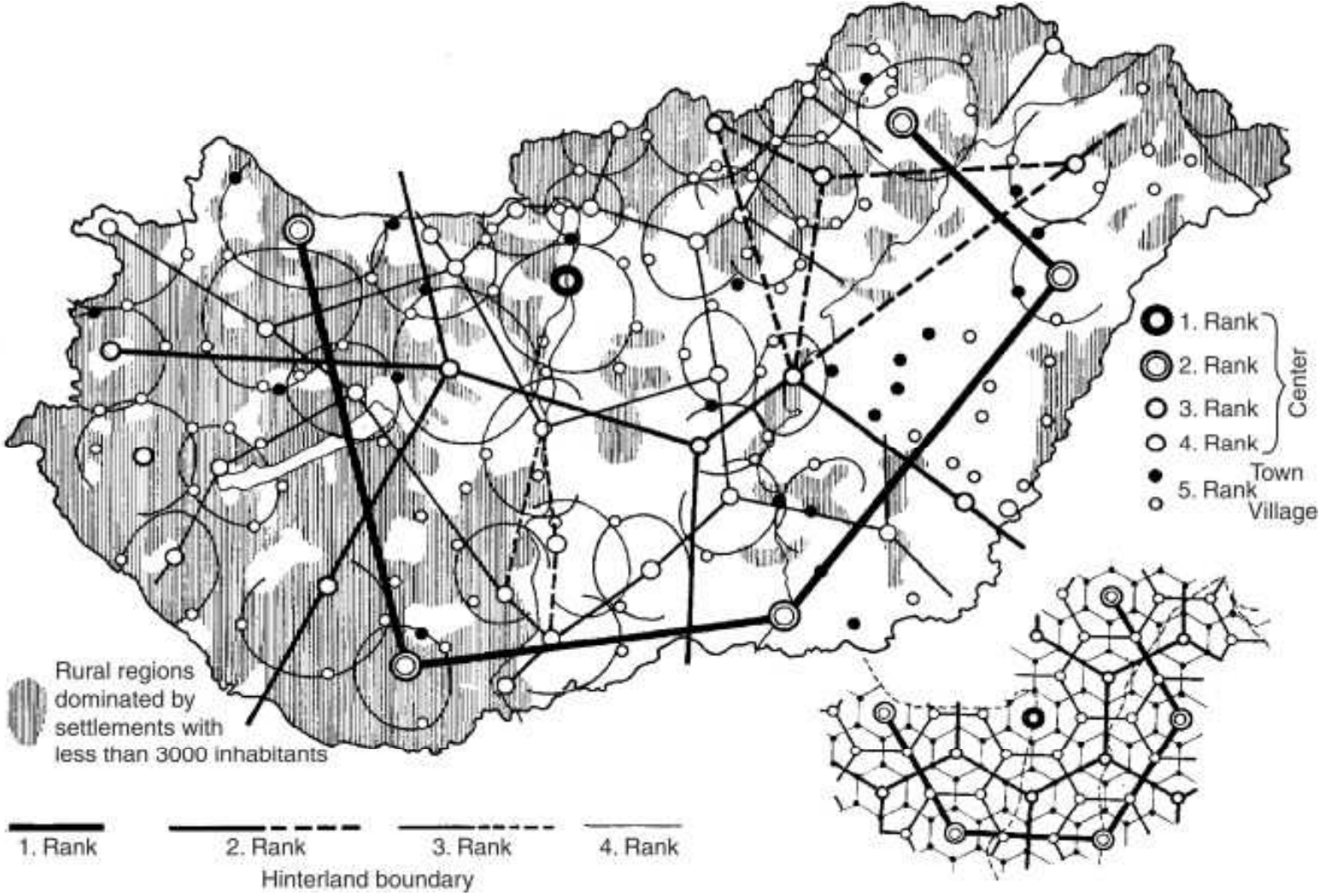
isotropic plain, equal accessibility, rational economic behavior, even population distribution

Applications: urban planning, regional science and regional development

Limitations: simplistic assumptions, problems with advances in transportation and communication, dynamic nature of settlements

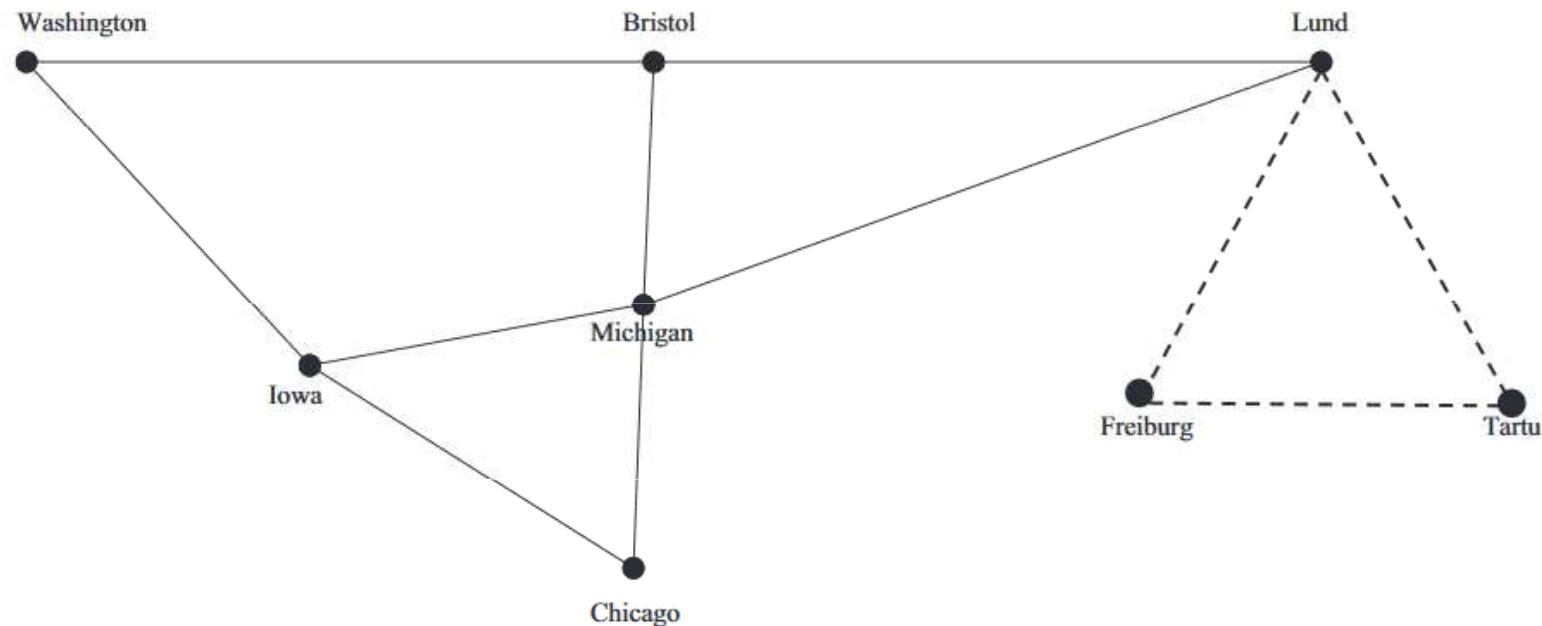


CPT in practice

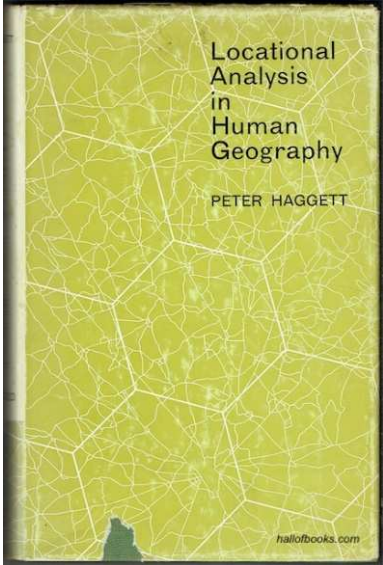
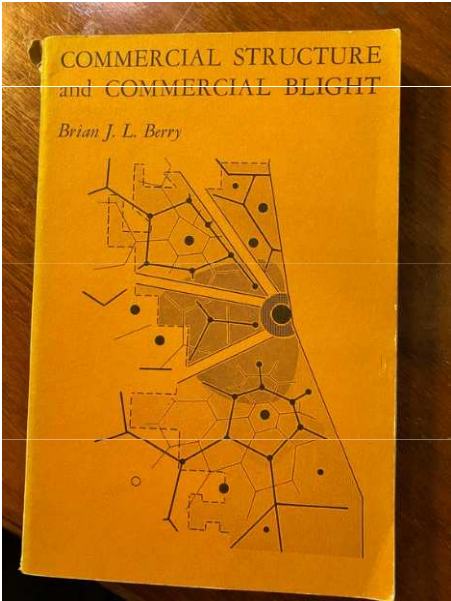
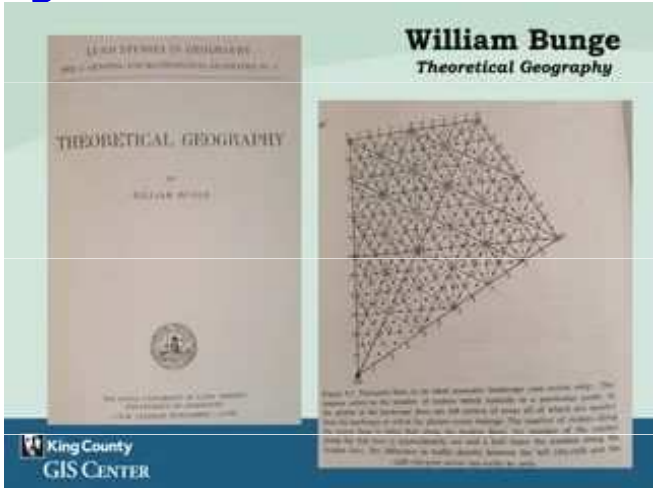
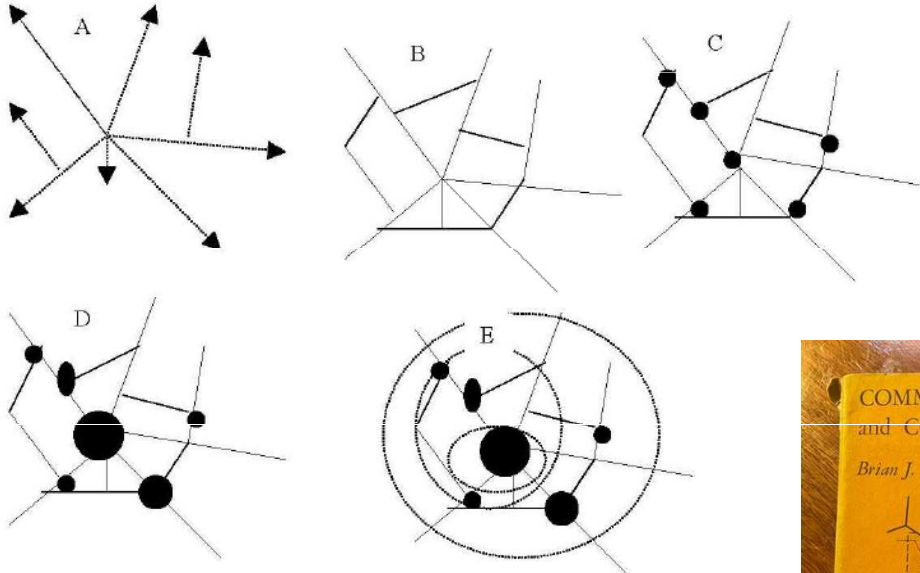


Diffusion of CPT in the 1950s and 1960s

- From Germany to Estonia and Sweden
 - Edgar Kant, Torsten Hägerstrand
- Then to the Anglophone geography
 - Peter Haggett in UK, William Garrison and “space cadets” in USA



Fascination with the geometry on the face of the Earth



Critiques of positivist geography

- Reduction and oversimplification
 - complex social and environmental phenomena reduced to simplistic quantitative models
- Loss of context
 - broader social, historical, and cultural contexts neglected
- No humans, or just as numbers in space
 - ignoring the subjective experiences, perceptions, and meanings that individuals and communities attach to places
- Emphasis on universal laws and patterns
 - ignoring cultural differences and local specificities
- Assumptions of objectivity and neutrality
 - Neglect of the perspective of researchers and how their own context influenced them

More critiques

- Power dynamics overlooked
 - ignoring how power relations and social inequalities influence geographic phenomena (and the production of knowledge)
- Inadequate for certain phenomena
 - Some phenomena are not easily quantifiable (justice, identity, cultural practices, ...)
- Rigid and inflexible
 - Statistics and geometrical models needed everywhere
- Ethical problems
 - Pure technical and scientific rigor can lead to ethical oversights, such as the impacts of research on communities and the environment
- Often non-relevance to pressing social Issues
 - detached from politics, failing to address problems such as poverty, inequality, or environmental degradation

The humanisation of geography

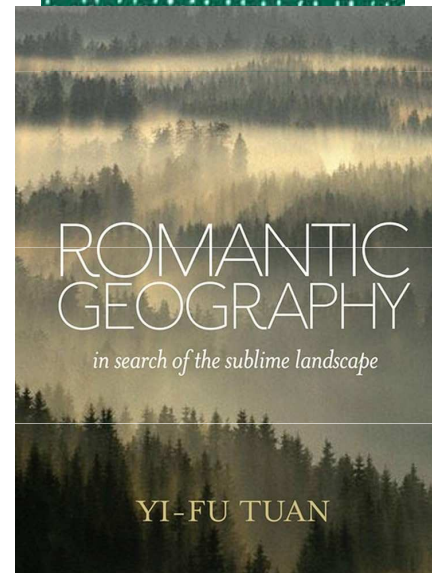
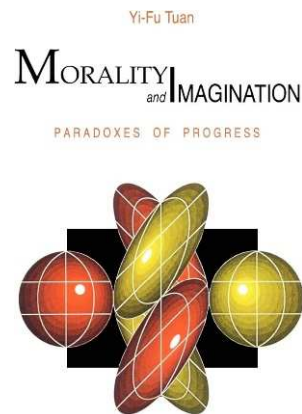
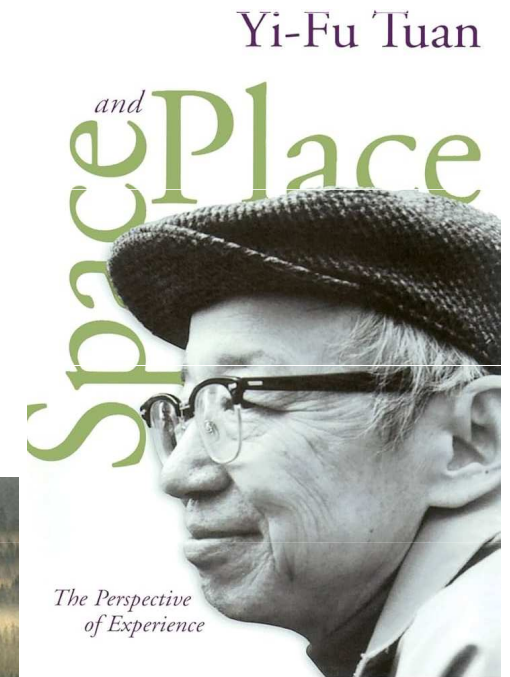
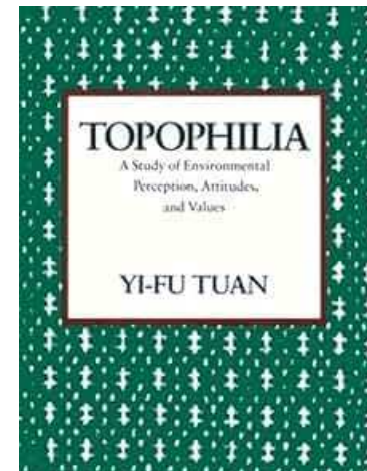
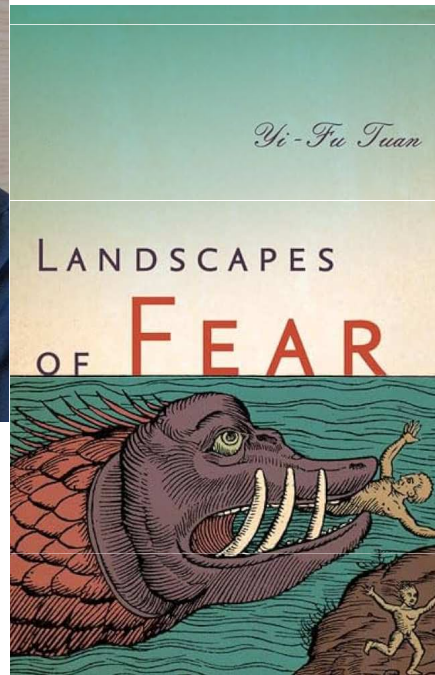
- Focus on human experience and subjectivity is (also) needed
 - Inspirations in philosophies of humanism, existentialism, and phenomenology
 - Not how geographical objects and issues **are** (objectively), but how they **are perceived** by humans (subjectively)
- Emphasis on the concept of place
 - The concept was downgraded by positivist geography
 - Sense of place very important
- Even space no longer just abstract and geometrical, but experiential
 - sensory, emotional, and cognitive dimensions of spatial experience

Humanistic geography

- Embracement of qualitative methods (again)
 - but not an atheoretical description of regions
 - interviews, ethnography, personal biography narratives
 - detailed case studies to explore specific places and the meanings they hold for people
- Integration of insights from the humanities
- Aesthetic and ethical considerations
 - the aesthetic appreciation of landscapes and places, as well as the ethical implications of human-environment interactions
- Critique of technological determinism
 - overemphasis on technological solutions could lead to alienation from the natural and built environments

Key person: Yi-Fu Tuan

5th December 1930 (Tianjin, China) – 10th August 2022 (Madison, Wisconsin, USA)



M U N I

Geography and modernism: from modern to post-modern thought

Pavel Doboš

What is modernism?

- Cultural, intellectual, and artistic movement that emerged in the late 19th and early 20th centuries
 - belief in objective truths and universal principles
 - focus on linear progress and development
 - emphasis on order and structure
 - creates grand narratives about humanity
 - eurocentric



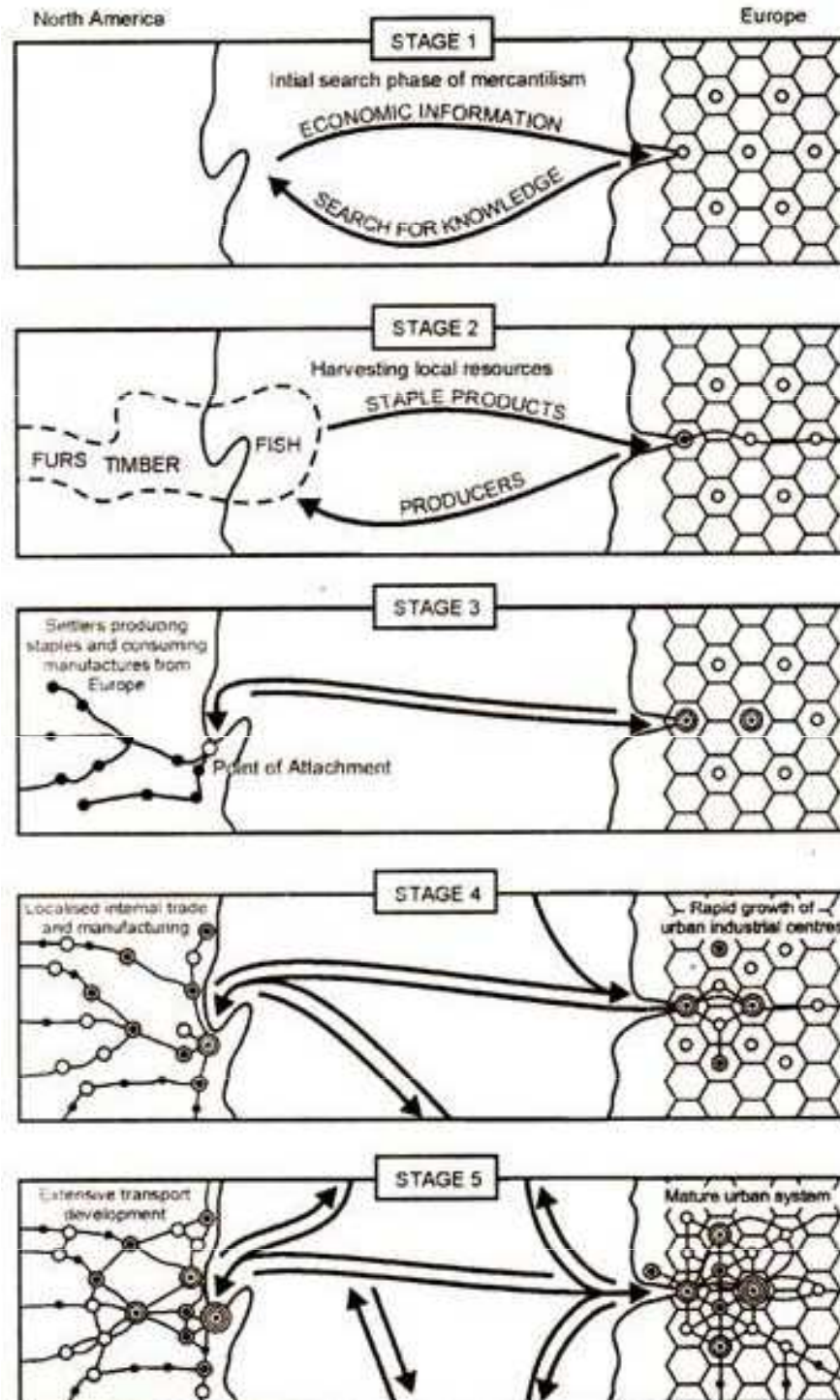
Modernism and positivist geography – interconnected issues

- Emphasis on scientific rationality, objective knowledge, universal principles, and general laws
- Systematic and structured approach
- Technological optimism
- Adoration of perfect geometric structures
- Rational spatial (urban or regional) planning

Modernism, geography, and time

- One universal linear timeline of progress
- Evolutionary thinking toward greater complexity and improvement
 - evolution of spatial patterns and models, spatial diffusion, or regional development seek to predict future trends based on past and present data
- Spatial patterns of societies evolve in a predictable manner from primitive to advanced
 - from underdeveloped to developed

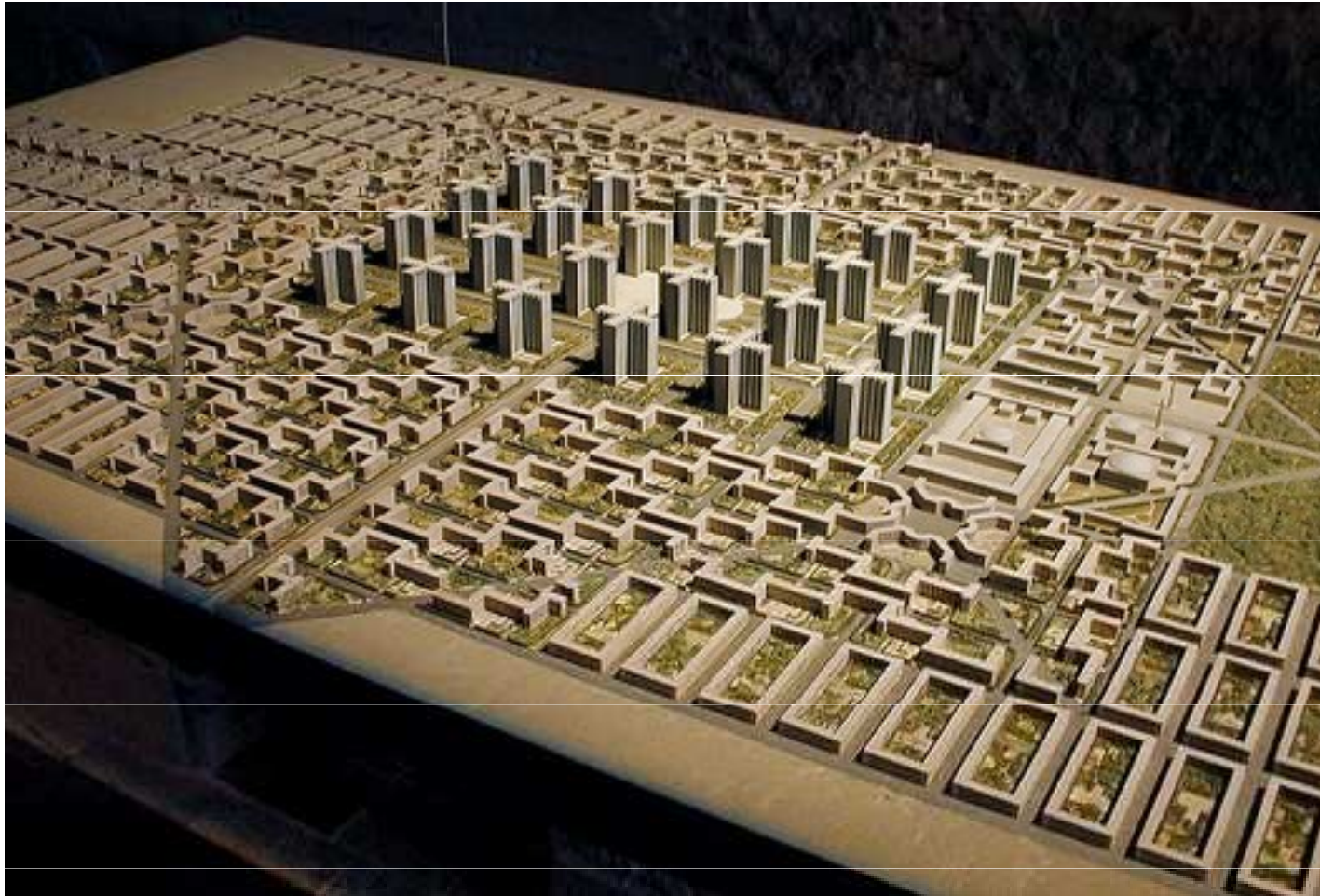
Figure 3.6
Vance's Mercantile Model



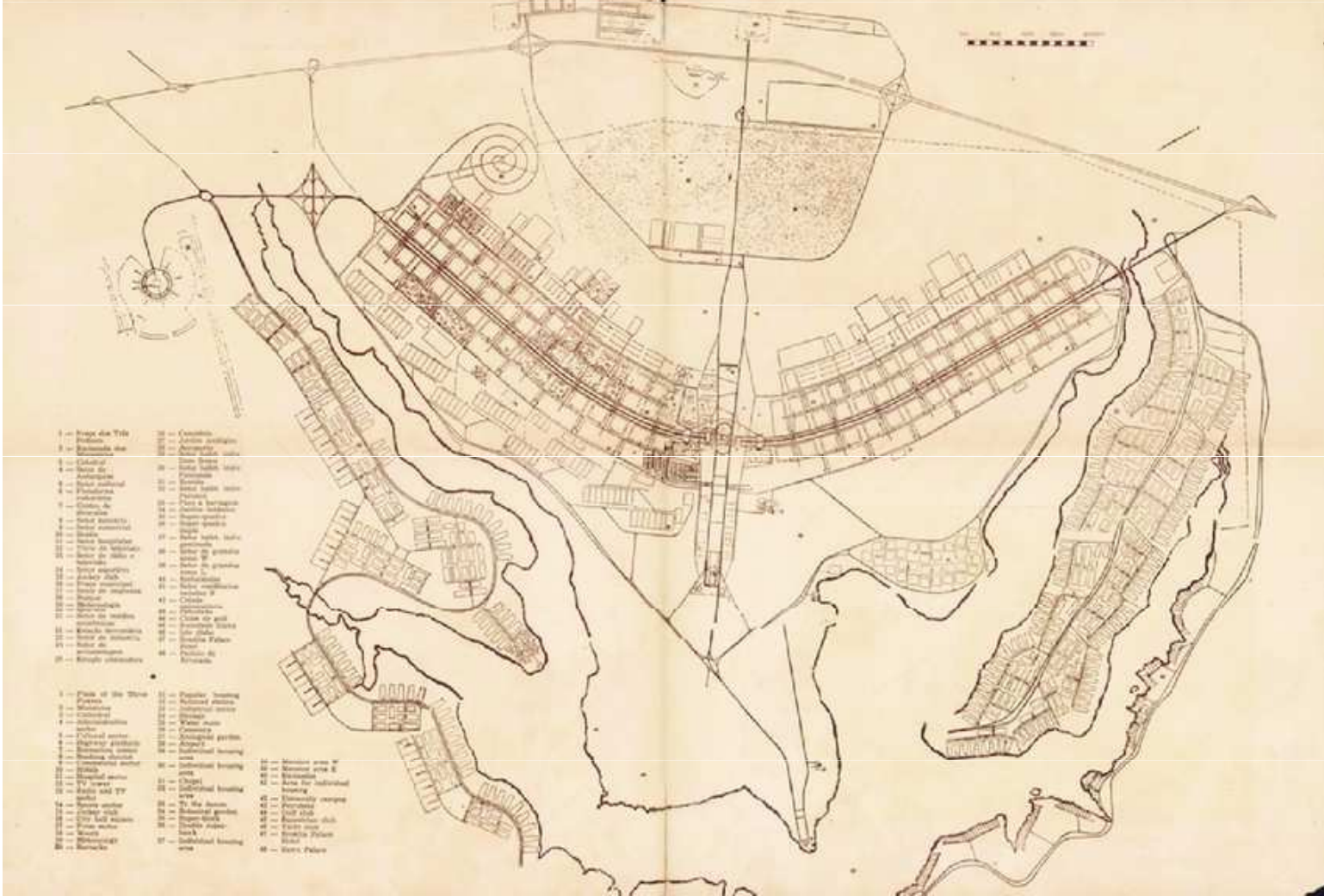
Modernist urban planning

- The application of rationality, functionality, and spatial order to create efficient, healthy, and aesthetically pleasing environments
 - cities for a good future
 - to have a good city means to have a good geometry based on spatial data
 - functional zoning, i.e. separation of urban areas into distinct zones for residential, commercial, industrial, and recreational use
 - use of standardized designs and building practices to ensure consistency and efficiency
 - adoption of high-rise residential and office buildings to maximize space utilization

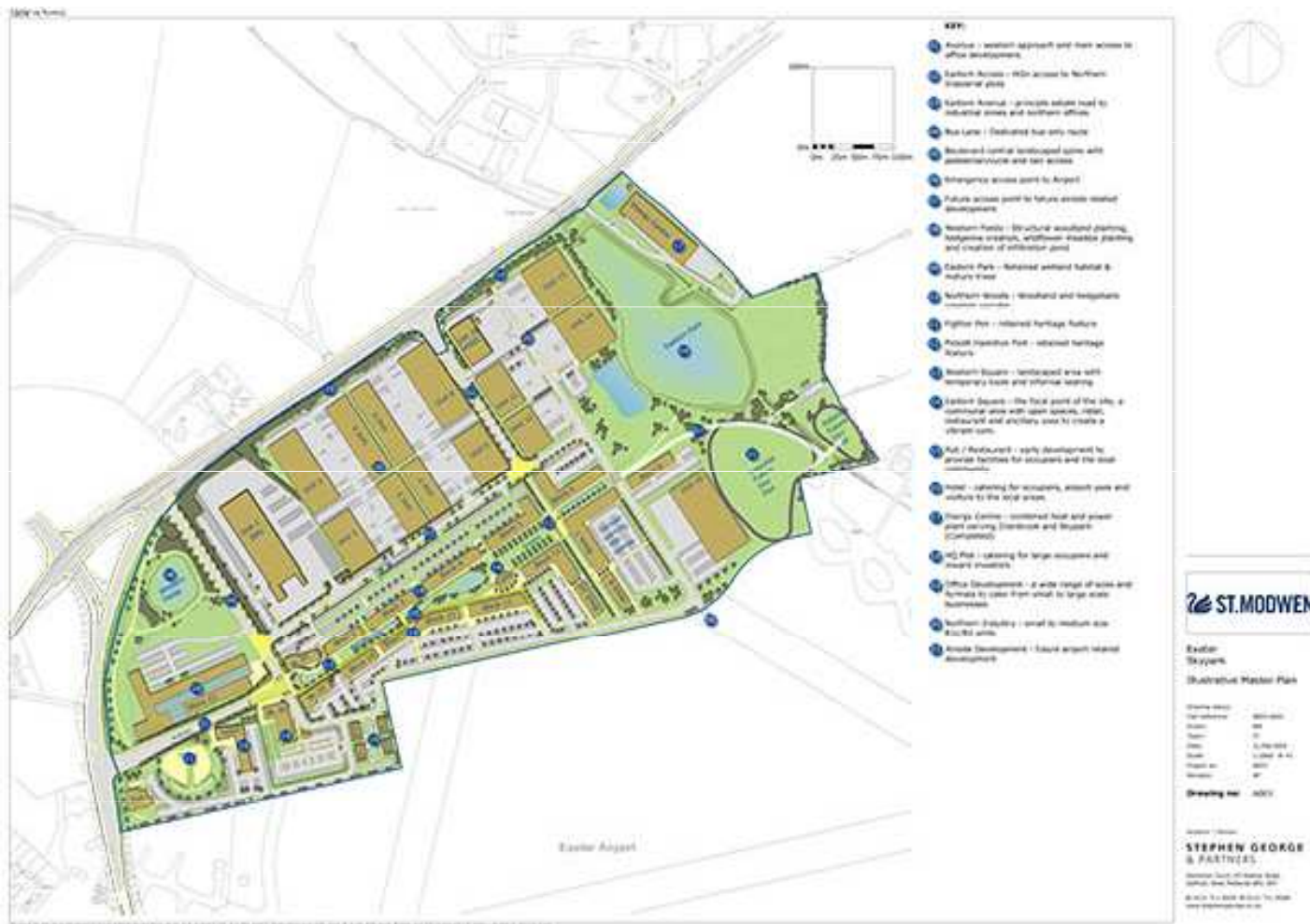
Le Corbusier: Radiant City (Ville Radieuse)



Oscar Niemeyer: Ideal futuristic city



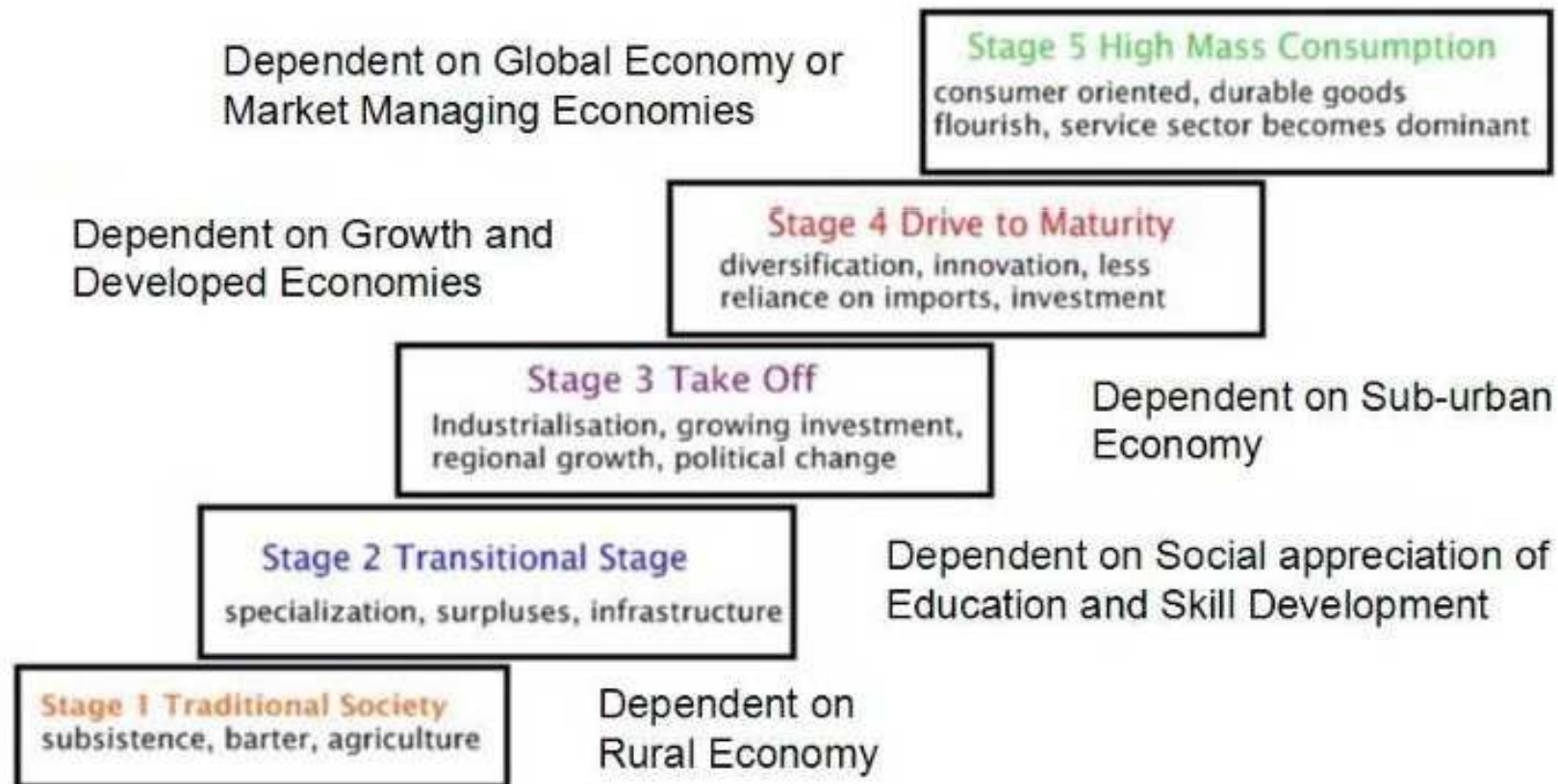
Peter Hall: Enterprise zone concept



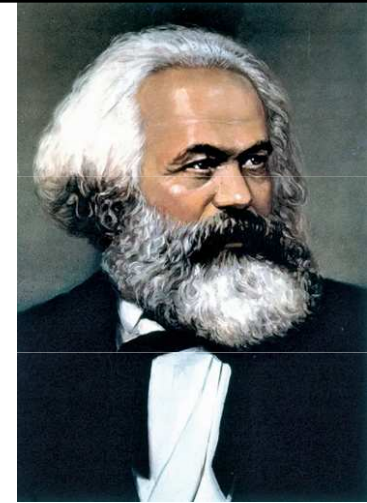
Capitalist development as modernist: Modernization theory

- Development theory that emerged in the mid-20th century, explaining how societies progress from traditional to modern states through a series of stages
 - emphasis on industrialization, technological advancement, and economic growth as indicators of modernization
 - inherent principles of capitalist political economy
 - shift from traditional values and social structures to more secular, rational, and bureaucratic systems
 - belief in „trickle-down effect“
 - optimism in human progress

Rostow's Stages of Economic Growth



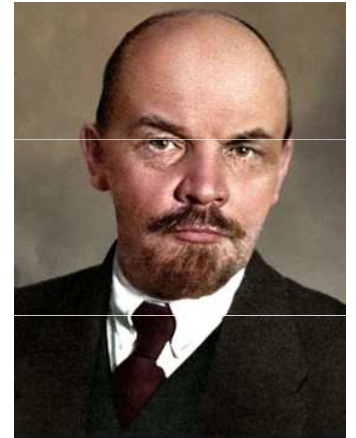
Marxism as modernist



- Historical materialism
 - the idea that material conditions and economic factors shape society and history
- The conflict between the bourgeoisie (capitalist class) and the proletariat (working class) as the driving force of historical change.
- Revolutionary change needed to achieve a classless society.
- View of history as a dialectical process leading to human emancipation

Geography in socialist countries

- Centralization of government
 - Communist parties direct socio-spatial development to reach the final stage
- Scientific Marxism and historico-materialist determinism
- Analysis of spatial structures and patterns should lead to better spatial distribution
 - focus on prognoses that lead to the optimization of spatial structures of economy and society
 - regionalization of industrial complexes
 - movement of people to regions where work is needed



What is postmodernism?

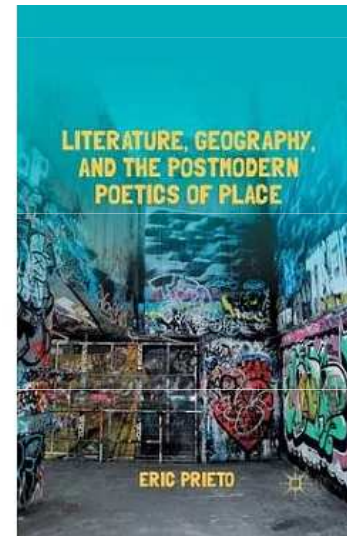
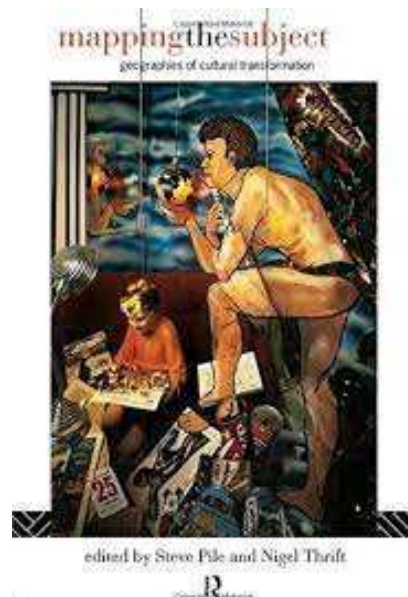
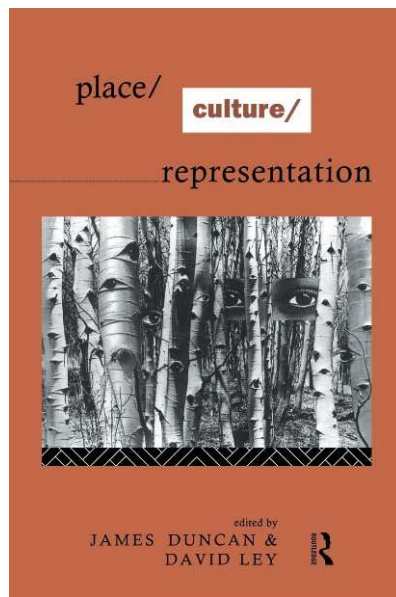
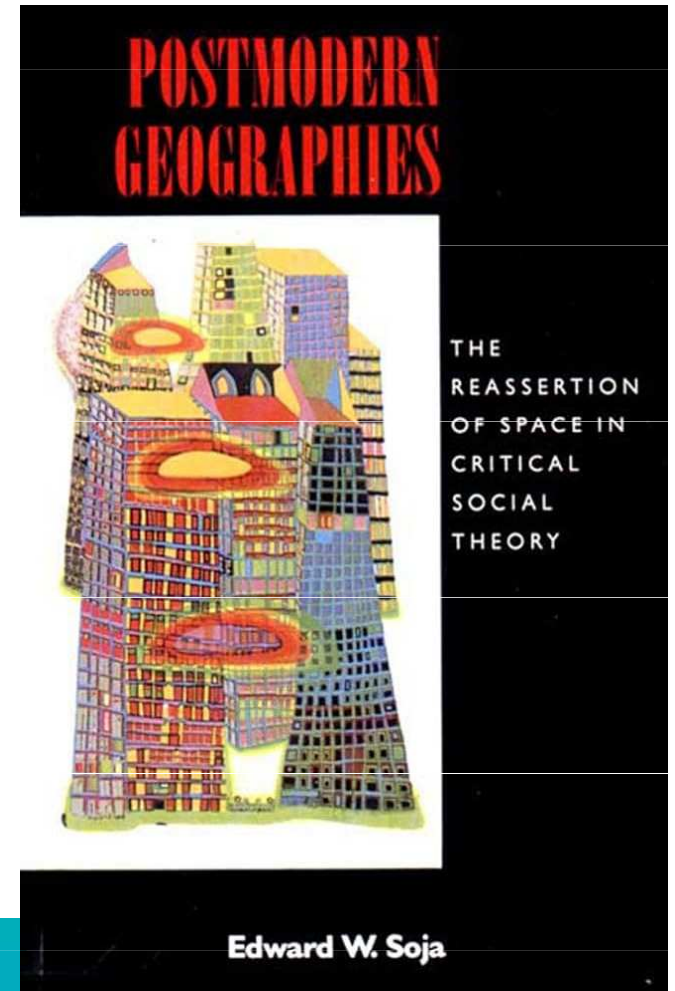
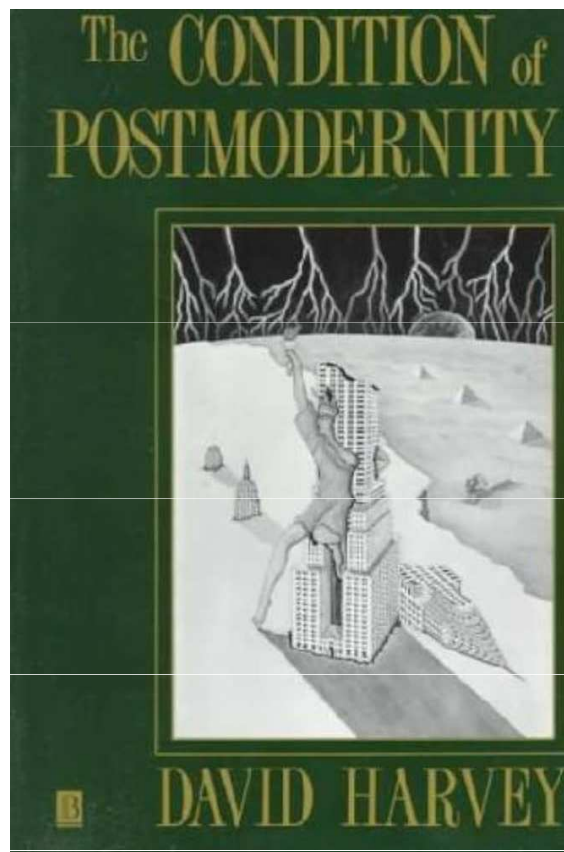
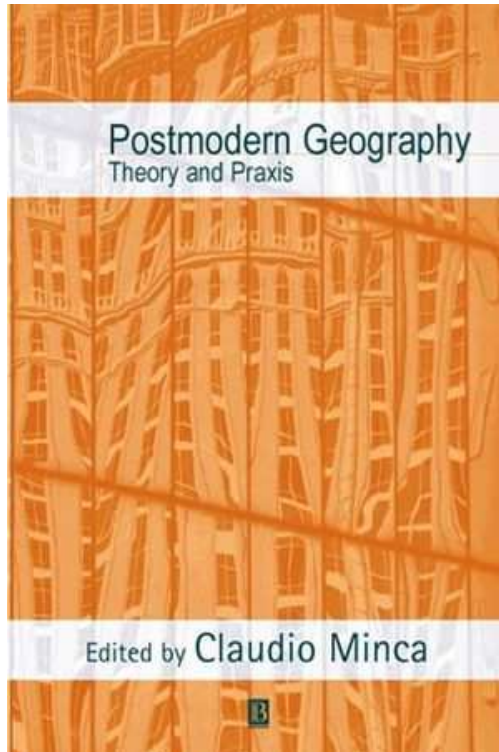
- Broad intellectual, cultural, and artistic movement that emerged in the mid-to-late 20th century as a reaction against modernism
- Skepticism towards grand narratives that claim to explain all aspects of society, history, or human experience
- The idea that truth is discursively constructed rather than absolute or universal (different perspectives can be equally valid)

Postmodernism and its risks

- Embracement of relativism
 - celebration of diversity, multiplicity, and fragmentation in cultural expressions, identities, and viewpoints
 - focus on local, particular, and individual experiences
 - questioning established norms, conventions, and meanings
 - risk of moral and epistemological nihilism, i.e. approaching all beliefs and perspectives as equally valid can undermine efforts to establish objective truths or universal ethical standards
- Focus on how language, symbols, and narratives shape social reality and power dynamics
 - risk of the neglect of material conditions, i.e. forgetting that people are (also) bodies inside the material world

Postmodernism and geography

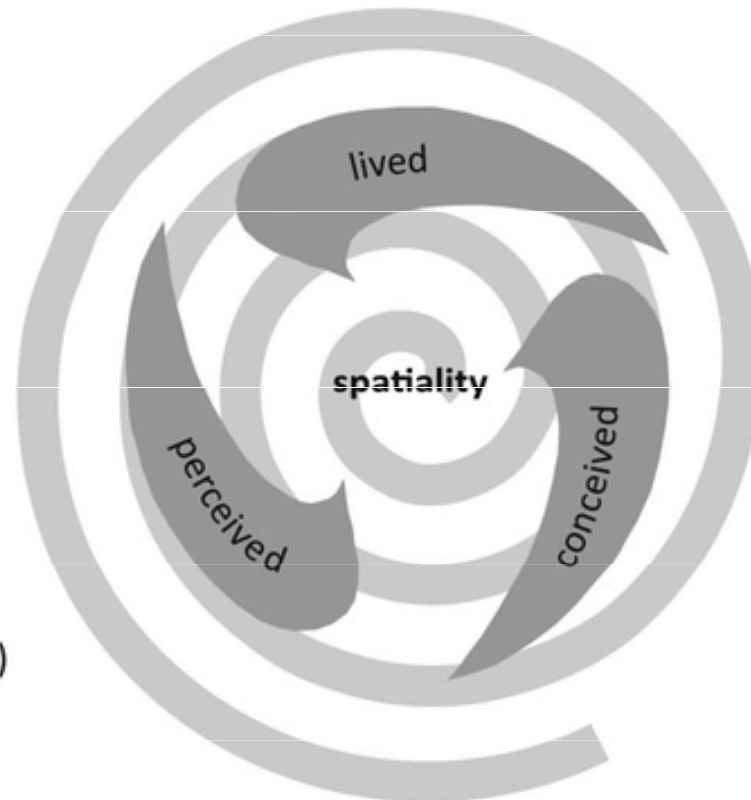
- No grand theories, the plurality of paradigms is needed
- Uncertainty and false objectivity of representation
 - geographical representations (maps, texts, images) are linked to power relations and influence our understanding of space and place
 - they can reinforce dominant power relations and ideologies
- Distrust towards perfect and precise geometries
 - Liveliness of the lived world cannot be deduced from geometrical patterns
- No single universal timeline of progress
 - future changes are not easily predictable from synchronic analyses of spatial patterns and structures
 - plurality of temporalities



Space reconsidered

- Not merely a physical container but produced and shaped by social relations and power dynamics
- Not just a backstage for events, histories, becomings, or social processes
 - space itself recreates and reforms them in diverse ways
- People interact with and create space through their daily practices
 - emphasizing the role of agency and local knowledge in shaping spatial realities

espace vécu
the lived space
spaces of representation, products of complex symbolizations
by their inhabitants and their social relationships
Thirdspace



espace perçu
the perceived
(materialized) space
as the product of spatial
practice (e.g. material
artifacts and infrastructure)
Firstspace

espace conçu
the conceived space
as a representation of space
(e.g. codes, signs, maps,
texts, discourses
→ concept of ordering)
Secondspace

Place reconsidered

- Places are socially constructed and imbued with multiple meanings
 - different groups may experience and interpret the same place in varying ways, depending on their cultural, social, and historical contexts
- No fixity or stability inside places
 - they are seen as dynamic and constantly changing, influenced by social processes, cultural practices, and global flows



Spatial boundaries reconsidered

- Hybrid, fluid, and dynamic spatialities challenge fixed and bounded notions of spatial identities, places, territories, or regions
 - focus on effects of globalization or transnationalism
 - focus on intersections of various identities (race, gender, sexuality, class, ...) and how these influence people's spatial experiences

