Sustainable Urban Development Planning

Lecture 1

SUSTAINABLE URBANISM

Key Concepts
- Sustainability Definition
- Sustainable City
- Planning Low carbon cities in India
- Exploring Cities and Their Formation: A Multitude of Approaches and Geographies
Introduction to Sustainable Development & Sustainability

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Contents

- ‘Sustainable Development’ - definitions
- Evolution of concept - Sustainable Development
- Pillars of Sustainable Development
- Difference between ‘Sustainable Development’ and ‘Sustainability’
- Application of sustainability & sustainable development
- Need of the hour....
Definitions
Sustainable Development
Definitions

- **Hawken** -- Sustainability as “an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations” (1993).

- **Common** -- “To sustain is to support without collapse and the sustainability problem is taken to be: how to address problems of inequality and poverty in ways that do not affect the environment so as to reduce humanity’s future prospects” (1995).
Definitions

- **Dryzek** -- “The legitimate development aspirations of the world’s peoples cannot be met by all countries following the growth path already taken by the industrialized countries, for such action would over-burden the world’s ecosystems;” however, since improving the conditions of the world’s poor is a desired international goal, economic growth should be promoted “in ways that are both environmentally benign and socially just. Justice here refers not only to distribution within the present generation, but also to distribution across future generations” (1997).

- **Elkington** -- “It’s the principle of ensuring that our actions today do not limit the range of economic, social, and environmental options open to future generations” (1998).
Definitions

Meadows -- “Sustainable development is a social construct, referring to the long-term evolution of a hugely complex system — the human population and economy embedded within the ecosystems and biogeochemical flows of the planet” (1998).

Berke and Conroy -- “A dynamic process in which communities anticipate and accommodate the needs of current and future generations in ways that reproduce and balance local social, economic, and ecological systems, and link local actions to global concerns” (2000).

More than 100 definitions of Sustainable Development
Most commonly used definition

Bruntland Report, 1987

‘Meeting the needs of the present without compromising the ability of future generations to meet their own needs’
Evolution of concept: Sustainable Development
Evolution of concept

- Certain publications in late 1960’s and early 1970’s inspired interest in the environmental movement.
  a) 1962 - Rachel Carson’s ‘Silent Spring’
  b) 1968 - Garret Hardin’s ‘The Tragedy of the Commons’

- Many people in the 1960s predicted a doomsday in the 1960s.

- Called for an immediate moratorium on growth, for they believed growth to be the root cause of environmental destruction.
Evolution of concept

UN set up the World Commission on Environment and Development (WCED), 1983

Environmental degradation, which had been seen as a side effect of industrial wealth with only a limited impact, was understood to be a matter of survival for developing nations.
Evolution of concept

World Commission on Environment & Development, 1987

• Published a report entitled ‘Our common future’, prepared under the leadership of Gro Harlem Brundtland of Norway.

• Commission put forward the definition and concept of ‘Sustainable Development’ as an alternative approach to one simply based on economic growth.

• Document is popularly known as ‘Brundtland Report’
Pillars of Sustainable Development
Pillars of Sustainable Development

Sustainable development – three dimensions or pillars or domains

- Economic / Economy
- Environmental / Ecology
- Social / Equity
Pillars of Sustainable Development

Source: http://www.business.mmu.ac.uk/seeg/whatis.php
True sustainable development is achieved when all three pillars are balanced....
Pillars of Sustainable Development

If only 2 pillars (out of 3 pillars) are achieved:

- Social + Economic = Equitable
- Social + Environmental = Bearable
- Economic + Environmental = Viable
Pillars of Sustainable Development

- Social
- Economy
- Environment

Bearable Equity Sustainable Viable
Pillars of Sustainable Development

Two pillars do not represent true sustainability or sustainable development practice.
Alternative visual representation of Sustainable Development
Alternative representation

[Diagram showing a structure with three pillars labeled Social, Environment, and Economy, supporting a roof labeled Sustainable development.]

Source: https://lackofenvironment.wordpress.com/tag/nele-marien/
Alternative representation

Environmentally sustainable

Socially acceptable

Economically feasible

...where we need to be!

Source: https://lackofenvironment.wordpress.com/tag/nele-marien/
Alternative representation

Alternative representation

Source: http://www.education4sustainability.org/2013/02/25/the-social-side-of-sustainable-development/
Fourth Pillar of Sustainable Development
Pillars of Sustainable Development

• Various researchers have expanded the concept and discussed about including fourth dimension / pillar /domain to sustainability concept

• This fourth pillar has been discussed in various formats:
  - Institutional / Governance / Political
  - Culture / Aesthetic
  - Religious / Spiritual
Difference between Sustainable Development & Sustainability
Sustainable Development vs. Sustainability

• Subtle difference – between sustainable development and sustainability

• Best illustrated:
  ‘Sustainable development is the pathway to sustainability’
Sustainable Development vs. Sustainability

- Sustainable development: ‘meets the needs of the present without compromising the ability of future generations to meet their own needs’

- Sustainability: ‘A program that is enacted “sustainably” means that attention has been given to meeting human and environmental needs’.
Sustainable Development vs. Sustainability

- Seemingly simple concept

- However difficult to articulate concept

- Thus, sustainable development may be considered as the pathway to sustainability
Application of Sustainable Development & Sustainability
Application

- Concept – connects various aspects / disciplines / area / sectors
- Emergence of new field – Sustainability Science
UN Millennium Declaration

• Identified principles and treaties on sustainable development

• Includes:
  • Economic development
  • Social development
  • Environmental protection
United Nations – Agenda 21

• Non-binding, voluntarily implemented action plan of UN with regard to sustainable development

• Specifies ‘culture’ as the fourth domain of sustainable development
Circles of Sustainability

- Understanding and assessing sustainability
- Manage development processes / projects – socially sustainable results
- Method – used for urban areas
- Help to analyze questions of resilience, adaptation, security, reconciliation
Circles of Sustainability

Source: http://www.education4sustainability.org/2013/02/25/the-social-side-of-sustainable-development/
Transforming our world: the 2030 Agenda for Sustainable Development

• Commonly known as ‘Sustainable Development Goals’

• 17 Sustainable Development Goals and its associated 169 targets

• Adopted by 93 countries of UN General Assembly
Transforming our world: the 2030 Agenda for Sustainable Development

1. **Poverty** - End poverty in all its forms everywhere

2. **Food** - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

3. **Health** - Ensure healthy lives and promote well-being for all at all ages

4. **Education** - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

5. **Women** - Achieve gender equality and empower all women and girls

6. **Water** - Ensure availability and sustainable management of water and sanitation for all

7. **Energy** - Ensure access to affordable, reliable, sustainable and modern energy for all

8. **Economy** - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

9. **Infrastructure** - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Transforming our world: the 2030 Agenda for Sustainable Development

10. **Inequality** - Reduce inequality within and among countries

11. **Habitation** - Make cities and human settlements inclusive, safe, resilient and sustainable

12. **Consumption** - Ensure sustainable consumption and production patterns

13. **Climate** - Take urgent action to combat climate change and its impacts

14. **Marine-ecosystems** - Conserve and sustainably use the oceans, seas and marine resources for sustainable development

15. **Ecosystems** - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

16. **Institutions** - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

17. **Sustainability** - Strengthen the means of implementation and revitalize the global partnership for sustainable development
Need of the hour.....
Need of the hour....

IUCN Programme (2005-08):

- Used the interlocking circles model to demonstrate that the three objectives need to be better integrated, with action to redress the balance between dimensions of sustainability
Need of the hour....

The three pillars of sustainable development, from left to right, the theory, the reality and the change needed to better balance the model.
Reference


• Harris, J (2000), Basic Principles of Sustainable Development, Global Development & Environment Institute (Working Paper 00-04), Retrieved from URL http://www.ase.tufts.edu/gdae/publications/working_papers/Sustainable%20Development.PDF

Sustainable City

Luca D’Acci
Definition of “Sustainable”

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Brundtland Commission of the United Nations on March 20, 1987

“Sustainability is defined as a requirement of our generation to manage the resource base such that the average quality of life that we ensure ourselves can potentially be shared by all future generations. ... Development is sustainable if it involves a non-decreasing average quality of life”

Three pillars of sustainability

The sustainable development goals identified by the 2005 World Summit on Social Development are:

1. economic development,
2. social development and
3. environmental protection
Definition of “City”

“The lower limit above which a settlement can be considered urban varies greatly, between 200 and 50,000 inhabitants.”
United Nations (2013) World Economic and Social Survey 2013: Sustainable Development Challenges, Chapter 3

“The size of a city can be made significantly larger if fringe populations are included [...] Most large cities have more than one boundary – boundaries for the central city, for instance, for an entire metropolitan area, or for a wider planning region which often includes many rural settlements.”
United Nations (2013) World Economic and Social Survey 2013: Sustainable Development Challenges, Chapter 3
“In general, countries’ **urban population** are defined as the residents whose main source of income is not from agriculture or forestry”

United Nations (2013) World Economic and Social Survey 2013: Sustainable Development Challenges, Chapter 3
“United Nations, Department of Economic and Social Affairs, Population Division (2012) uses two auxiliary concepts: (a) urban agglomeration, which refers to ‘population contained within the contours of contiguous territory’ inhabited by, e.g., 750,000 inhabitants or more and (b) metropolitan region, which includes both the contiguous territory and ‘surrounding areas of lower settlement density’ which are under the direct influence of the city through frequent transport, roads, commuting and so forth.”

United Nations (2013) World Economic and Social Survey 2013: Sustainable Development Challenges, Chapter 3
“Cities exist because individuals are not self-sufficient. If each of us produced everything we consumed and we didn’t want much company, there would be no need to live in cities”.

“Man is the only animal that makes bargains; one dog does not change bones with another dog”.
Adam Smith

“For, essentially, the city consisted of a group of men who [...] has evolved a workable system of self-governement” E.R. Chamberlin (1965). Everyday life in renaissance times.

“Cities are the physical manifestation of our interactions”.
George West

“The city is [...] only an arbitrary geographic container of diverse economic, social and political phenomena”.

“Cities are physical manifestation of our behaviors, chronologically stratified in history, economically localized and shaped, that can be read by mathematical laws, translated into numbers even each keeping their own untranslatable unique art and genius loci”
Definition of Sustainable City

In 1991 the United Nations Centre for Human Settlements (UNCHS) Sustainable Cities Programme, defined a sustainable city as one “where achievements in social, economic and physical development are made to last”

“a sustainable city must have a low ecological footprint and reduce risk transfer (economic, social and environmental) to other locations and into the future (Rees, 1992)”

“Sustainable cities should meet their ‘inhabitants’ development needs without imposing unsustainable demands on local or global natural resources and systems” (Satterthwaite 1992)

United Nations (2013) World Economic and Social Survey 2013: Sustainable Development Challenges, Chapter 3
“For a city, sustainable development should always be subject to the test of whether key aspects of our daily lives and the urban systems within which they play out can be continued indefinitely into the future from a social, environmental and economic perspective”

Urban Ecosystem Services

Ecosystem: “the complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space”
(Encyclopædia Britannica)
Ecosystem services: the benefits that we obtain from ecosystem functions (de Groot et al. 2002)

direct or indirect contributions from ecosystems to human well-being (TEEB, The economics of ecosystems and biodiversity 2010)
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<th>Ecosystem Services</th>
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<td>Provisioning</td>
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<td>Regulating</td>
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<td>Supporting</td>
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<td>Cultural</td>
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<th>Energy</th>
<th>Carbon Sequestration</th>
<th>Climate Regulation</th>
<th>Water Management</th>
<th>Habitat</th>
<th>Recreation</th>
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<td>![Recreation Icon]</td>
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Urban Ecosystem services are those where the built infrastructure covers a large proportion of the land surface, or those in which people live at high densities (Pickett at el., 2001)
Ecosystem services provided by urban trees

- Air pollutant reduction (O₃, NO₂, SO₂, PM₁₀)
- CO₂ sequestration
- Energy savings & avoided emissions due to shading
- Aesthetic value (increased market value)
- Stormwater runoff reduction
Urban farming
Urban farming
Water flow regulation and runoff mitigation

- **Natural Ground Cover**
  - 25% shallow infiltration
  - 25% deep infiltration
  - 40% evapotranspiration
  - 10% runoff

- **Impervious Cover**
  - 10% shallow infiltration
  - 5% deep infiltration
  - 30% evapotranspiration
  - 55% runoff

75%-100% Impervious Cover
Urban temperature regulation

°F
92

°C
−33

−32

−31

−30

85

Rural
Suburban Residential
Commercial
Downtown
Urban Residential
Park
Suburban Residential
Rural Farmland

Late afternoon temperature
Noise reduction

Sound Level Decrease with Distance Due to Tree/Shrub Buffer

- Control - (No tree/shrub buffer - truck noise at 55 mph)
- Truck noise with 100-ft wide tree/shrub buffer
- Car noise with 100-ft wide tree/shrub buffer

Sound Level Decrease with Distance Due to Tree/Shrub and Landform Buffer

- Control - (No tree/shrub buffer - truck noise at 55 mph)
- Truck noise with 100-ft wide tree/shrub buffer & 4-ft high landform
- Truck noise with 100-ft wide tree/shrub buffer & 12-ft high landform

60 to 65 dBA acceptable noise levels for outdoor conversation
55 to 60 dBA acceptable noise levels for daytime residential areas
Air purification

tree leaves can capture 50%+ of particulate matter pollution
CO2 sequestration

The Greenhouse Effect

Some sunlight that hits the earth is reflected. Some becomes heat.

CO2 and other gases in the atmosphere trap heat, keeping the earth warm.

Source: ERS/USDA
Recreation and Cognitive development
Resilient City

Resilience:
the ability of a substance or object to spring back into shape; elasticity.
The capacity to recover quickly from difficulties; toughness.

(oxford dictionaries)
Resilience:
“the ability of a system (e.g. a city system) to absorb disturbance and reorganize to retain ‘essentially the same function, structure, identity and feedbacks’” (Walker et al. 2004, p.5)  


Resilience:  
“concerns the capacity of an urban system – including its natural, built, social and economic elements – to manage change, learn from difficult situations and be in a position to rebound after experiencing significant stress or shock”  
Modification to household structure to reduce impacts of climatic events

Source: Haque et al. 2013
Resilience Against...

Rapid, Disruptive Events
- Storms
- Heatwaves

More Gradual Trends
- Sea-level rise
- Increase in average global temperature
Resilience: Systems

Redundancy

- Spare capacity to accommodate unexpected service demand or extreme climate events
- System components and pathways provide multiple options or substitutable components for service delivery
Examples:

- **Water supply systems**: Reservoir storage capacity exceeds demand under drought conditions
- **Communications**: Redundant transmission towers
- **Energy**: Back up generators for crucial services
- **Transportation**: Multiple access routes
- **Food and medicine**: Maintain high stock/flow balance in case of disruption
Resilience: Systems

Flexibility

• The system can meet service needs under wide range of climate conditions
• Key elements are spatially distributed and can substitute for each other but are functionally linked
Examples:

- **Water supply systems**: Multiple, geographically distributed water sources (ground and surface water)

- **Transportation**: Multiple modes and capacities for transporting key goods and people

- **Food**: Supply sourced from diverse geographic areas
Resilience: Agents

Capacity to Learn

- Ability to internalize past experiences, avoid repeated failures and innovate to improve performance. This includes the capacity to build and retain knowledge over time.
Low Carbon City

Global warming reasons

Cities = 70% global GHG emissions
Global Warming Effects
Quality of life
"64% decide first where they want to live, then they move there, then they look for a job"

TEDCity2.0 · Filmed September 2013
Jeff Speck: The walkable city

"by planning good cities we could increase their attractiveness; not just because in the city one can have a higher income or education, but because one lives in a beautiful city"

BUILDING

Up to 25% heat loss through the roof

35%

Up to 35% heat loss through un-insulated walls

15%

15%

25%

10%
PEOPLE
“We've changed all our light bulbs to energy-savers, and you should do the same thing, but changing all your light bulbs to energy-savers saves as much energy in a year as moving to a walkable city does in a week”

TEDCity2.0 · Filmed September 2013
Jeff Speck: The walkable city
URBAN GOVERNANCE & TECHNOLOGY
Transportation: **28%** of GHG Emission. **Cars** account for **over half** of the emissions from the Transportation sector.

http://www.epa.gov/climatechange/ghgemissions/sources/transportation.html

“**Doubling** population-weighted **density** is associated with a **reduction in CO₂** emissions from household **travel** and **residential energy** consumption by **48% and 35%**, respectively. Centralized population and polycentric structures have only a moderate impact in our analyses. Given that household travel and residential energy use account for **42% of total U.S. carbon dioxide emissions**, these findings highlight the importance of smart growth policies to build more compact and transit friendly cities as a crucial part of any strategic efforts to mitigate GHG emissions and to stabilize climate”.

SIZE
Atlanta and Barcelona have similar populations but very different carbon productivity

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<th>Atlanta</th>
<th>Barcelona</th>
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<tbody>
<tr>
<td>Built-up area</td>
<td>![Atlanta map]</td>
<td>![Barcelona map]</td>
</tr>
<tr>
<td>Population</td>
<td>2.5 million</td>
<td>2.8 million</td>
</tr>
<tr>
<td>Urban area</td>
<td>4,280 km²</td>
<td>162 km²</td>
</tr>
<tr>
<td>Transport carbon emissions</td>
<td>7.5 tonnes CO₂/person (public + private transport)</td>
<td>0.7 tonnes CO₂/person (public + private transport)</td>
</tr>
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</table>
STRUCTURE
MULTIFUNCTIONALITY
Green Growth

The green growth sought to harmonize economic growth with environmental sustainability


Green growth is about being able to foster **economic growth and development**, while ensuring that the **earth’s natural** assets continue to provide the resources and environmental services on which our **wellbeing** relies. Looked at more simply, it is about **cleaning up the way our economies grow**, both by better managing how we do things today and investing time, money and effort into harnessing new sources of smarter, cleaner economic activity.

Green Growth

Congestion costs: **3.4% of GDP** in Buenos Aires, 2.6% in Mexico City, 1% in Europe.

Total costs of motorised transport, including air pollution and congestion: in Beijing **7.5-15% of GDP**.

Pollution related health costs: **5% of GDP** in cities in developing countries, over 90% of which can be attributed to vehicle emissions.

Social costs of road transport in OECD countries, China and India: **$3.5 trillion/year**.

Urban road accidents in developing country cities alone cost **2% of GDP**

A $2.8 billion investment in the transport sector (efficient vehicles, cleaner fuels, public transport) could generate an annual savings of $1.1 billion: **payback in 2.6 years**.

In 1995 transport costs in transit-oriented Singapore were **$10 billion less** than in car-oriented Houston (both with similar population size and wealth)
Economic returns – Compactness

Urban sprawl costs the US $400 billion per year.

Compact, connected urban development could reduce global infrastructure requirements by more than $3 trillion over the last 15 years (2015-2030).

Sprawling Houston spends 14% of its GDP on transport compared with 4% in relatively compact Copenhagen, and 7% typically in Western European cities.

Cars cover more than 20% of a city’s surface, but operate at capacity only 5% of the time.

Cars are in use only 4% of the time, and much of that time is spent stuck in traffic or searching for parking.
Economic returns – Buildings

Design, insulation, efficient heating/cooling, lighting technologies, small-solar renewables: investments of $1.7 billion in domestic energy efficiency may generate annual saving of $626 million. **Payback in less than 3 years** and reducing emission from the domestic sector by 16%.

Economic returns – Waste

$224 million investments could cut by 41% by 2025 GHG emissions waste-related. Annual savings of $18.8 million. **Payback in 11.8 years**.
Economic returns – Jobs

30 low-carbon technologies such as light-emitting diode (LED), street lighting, new building technologies and electric buses: adopting them in world’s megacities may create more than 2 million jobs.

Economic returns – Coastal cities

Hurricane Ssandy in 2012 caused $19 billion in damages in New York alone.

136 port cities globally with more than 1 million residents, in 2005 had $3 trillion worth of assets at risk (5% of global GDP). By 2070 may be $35 trillion (9% global GDP).
Planning Low Carbon Cities in India

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The Challenges

- Housing
- Jobs (Economy & Competitiveness)
- Energy Supply
- Transport and Communication
- Health and Education
- Safety and welfare

- Green Economy
- Sustainable Energy Supply
- Low Carbon Footprint
- Green Building, Green Transport, Clean Air
- Clean Water, Zero Waste, Access to Nature
The Challenges

- **Transport Problem**
  - Rapid Urban Growth: Increased travel
  - Sprawl type development: Increased use of Private Automobiles
  - Improving economy and income levels: Poor NMT and PT infrastructure
  - Changing demographic structure: Energy efficient fuel choices

- **Buildings**
  - Old Stock non-energy efficient
  - Demand and supply gap
  - Low affordability levels

- **Infrastructure**
  - Rapid urbanization
  - Low levels of present supply
Where we are now

Sources (Per capita emissions): UNEP; (Total emissions): C. A. Kennedy et al. go.nature.com/nJUtKR (World Bank 2009); UNEP

The current CO$_2$ emission in countries like India both per capita and overall are very low compared to the developed world.

What can be the transitions

- The average household size in urban India is likely to reduce from around 5.5 to less than 3.
- This couple with projection of around 50% urbanization level in the same period of time is likely to have a negative repercussion on CO\(_2\) emissions.

ANNUAL ENERGY CONSUMPTION PER HOUSEHOLD (TOE HH)

- Residential
  - ANNUAL ENERGY CONSUMPTION PER PERSON (LTS EQ. PETROL/PERSON)
  - ENERGY CONSUMPTION PER '000 PKM (KGOE/'000 PKM)

TRANSPORT

COMMERCIAL

ENERGY USED PER UNIT SERVICE GDP (TOE/MILLION INR)

What can be the transitions

• In Business as Usual scenario
  • The annual energy consumption per household and energy consumption per passenger kilometer are likely to reduce, but as the number of household will increase substantially overall energy consumption will be high.
  • The consumption of electricity for residential use and energy consumption for transport are likely to increase many folds as both per capita consumption per household and number of household are likely to increase.
  • Thus energy consumption per capita and overall is likely to increase in the BAU scenario if no interventions are made.

What can be done
Transport Example

Case Studies

Transport Cases

Low Carbon Comprehensive Mobility Plan for Rajkot
(http://www.unep.org/transport/lowcarbon/PDFs/LCMP_Rajkot.pdf)

Low Carbon Comprehensive Mobility Plan for Vishakhapatnam
(http://www.unep.org/transport/lowcarbon/PDFs/LCMP_Vizag.pdf)

Low Carbon Comprehensive Mobility Plan for Udaipur
(http://www.unep.org/transport/lowcarbon/PDFs/LCMP_Udaipur.pdf)

Other Cases

Low Carbon Development in China and India
http://www.teriin.org/projects/locci/pdf/Factsheet_China-IndiaLCD.pdf)
Exploring Cities and Their Formation: A Multitude of Approaches and Geographies

Technische Universität Darmstadt (TUD)
Contents of the Lecture:

• What is a city?: A brief introduction
  - In class discussion on what a city is
  - Selected Theoretical approaches

• A Brief Introduction to
  Post-Colonial City through the lenses of Dar es Salaam of Africa

• Formation of a City: Urbanization, Suburbanization, Counterurbanization and Reurbanization, and In-between City

• A Critique of the 20th century Urban Theory: A New Approach to Settlement Typology

• Discussion and Questions
Questions Central to the Debate of Urban Development:

- How can the city be understood? What theoretical approaches are useful for understanding cities (beyond that of a compacted structural shape)?
- What patterns of urban development are emerging?
- What forms of planning and governance could enable sustainable urban development?
- Which actors from policy/planning, business, associations and civil society interact within urban development processes?
- How do cities and regions change in different national and international contexts? Which forms of planning and governance can contribute to the sustainable urban and regional development in which ways?
- Which new challenges on spatial and infrastructure planning arise from global environmental changes, such as climate mitigation, climate adaptation or flood prevention?
What is a City?
Let us do some thinking
Public space, Exchange Alley by La Citta Vita
https://www.flickr.com/photos/la-citta-vita/6262481685

Newyork by faunggg
https://flic.kr/p/9uptjo
What is a city?: Various Approaches

Benevolo (1983): The history of the city (Italian architect and architecture historian):

• “City as the main form of development of the environment [...] typical example of construction and architecture”;

• “[...] The city as complex and independent entity [...] in which all the smaller and partly itself city-like architectural structures - such as individual buildings, neighborhoods, etc. - are integrated” (Benevolo 1983: 5).

Source (unofficial translation):
What is a city?: Various Approaches

City: a complex and distinct structural shape

The architectural structure of the city and the emergence of the city itself are inseparable from the historic changes connected social relations of production (Benevolo 1983: 5).

Cities → “socially constructed and society shaping”

Source (unofficially translated):
What is a city?: Various Approaches

• “Why do we avert our eyes when we encounter the unaccustomed?” (Richard Sennett 1991: 60f.)

• “… is the place where strangers live... In the city, foreign faces are the normal; only the familiar attracts attention. In the village it is the reverse. Everyone moves on the streets of a city, even the locals, as a stranger among strangers” (Walter Siebel).

• “The city is everywhere and in everything.” (Amin & Thrift 2003: 1).

Sources:


A City: History vs. Today

City in history:
• Special legal status;
• Specific form of settlement (density);
• Spatial coherence (city walls);
• Center and districts division.

Cities today:
• Legal definition
• Centered form of settlement;
• Density of development and population;
• Specific acquisition structure: control, information, service;
• Substantial absence of the primary sector.
Legal Definitions of the City:

• “...is the center of trade, commerce and transport, and often has key responsibilities. Classification: small (5,000 to 20,000 inhabitants), Medium (20,000 to 100,000 inhabitants), large (100,000 to 1 million inhabitants), World City (over 1 million inhabitants.)” (Brockhaus 2001).

• “... is the result of market forces and political will. ..... decisions of different actors change the cityscape over again” (Bundesamt für Bauwesen und Raumordnung 2000: 3).

Sources (unofficial translation):
Brockhaus, FA 2001: Brockhaus Enzyklopädie.
Bundesamt für Bauwesen und Raumordnung, 2000: Stadtentwicklung und Städtenbau in Deutschland: ein Überblick. BBR, Bonn, DE.
Therefore, a city is/could be?

• City is a complex subject, which can be considered and explored in many ways;
• The city should not be reduced only to one aspect, such as built environment, the aesthetics, economy, environment or culture;
• The professional views of architects and town planners are among the many possibilities. Therefore, deciding for the cities requires embracing the perspectives of a variety of stakeholders and disciplines.

peintures rupestres by Patrick Marioné
https://www.flickr.com/photos/p_marione/16313557264
Characteristics of Urban Areas

Physical Structure
• Topography and morphology of the built city and the open spaces, construction sites, quarters, technical infrastructure, ...

Functions
• Economies, work, housing, consumption, transport, leisure, culture, recreation, nature, urban climate, ...

Socio-cultural aspects
• Demographics, social structures and milieus, city life, economics, politics, ...
City, Country Side and City Regions

A duality: city and countryside:

- Urban and morphological characteristics: residential density, higher floor-area ratio
- Demographic characteristics: population density, structure
- Economic characteristics: workplace, income, profession structure
- Ecological characteristics: resource flows, recreational areas
- Integration with the vicinity, i.e. commuting

City regions (after Boustedt 1975):

- Core area: core and the vicinity
- Urbanized area with loosely structured cityscape
- High numbers of commuters in the core area
- Edge with a higher proportion of agricultural labor force

Source (unofficial translation):
What is a City?
Selected Theoretical Approaches
Chicago School Approach of the 1920s and 30s

- Research on Chicago by Park, Burgess et.al.

- New population groups in the city and their existence in certain places

- Conceptualization of the city through the use of ecological terms (city is resembled to a living organism)

- Darwinian understanding: “Survival of the fittest!”

Source: Balaban, Osman. 2008: Capital accumulation, the state and the production of built environment: the case of Turkey, Unpublished PhD Thesis, Middle East Technical University, City and Regional Planning Department.
Chicago School Approach of the 1920s and 30s

Chicago School:
• City as a research laboratory for modernity (exemplary studies, using the example of Chicago)

Three definitional characteristics of the municipality:
• Size
  – Population, surface area, building structure

• Density
  – Built environment
  – Node and focal points of the flows and exchange, the production and consumption, the organization of work, communication, transport, material flows, etc...

• Heterogeneity
  – City society, cultural diversity, building structure, economy.

Source:
The Urban Question: (Capitalist) Urbanization as a process

- Introduced by David Harvey (1935-)
- Critical geographer
- Prof. Of Antropology at CUNY
The Urban(ization) Question: Urbanization as a process

• Today, we talk about all sorts of crisis: economic, environmental, waste, water and etc.

• Different Explanations for Economic Crisis:
  – Human Nature
  – Institutional Failure
  – False theory (belief in the efficiency of markets)
  – Cultural origins (US home ownership etc.)
  – Policy failure (too much regulation in the wrong sort)

• Harvey offers a Marxist explanation: Systemic risk/Internal contradictions of capital accumulation and role of crisis in the history of capitalism

Source: Harvey, David: 2010. RSA (www.theRSA.org) Lecture on Crisis of Capitalism; https://www.youtube.com/watch?v=qOP2V_np2c0 [retrieved on 15 February 2016]
The Urban(ization) Question: Urbanization as a process

• The crucial question is not about the city but the social relations that produced the city historically. Why, by whom and the current issues?
  – Insufficient employment, infrastructure and healthcare
  – Poverty vs. Tower Blocks

• “Process of urbanization driven by the necessity to absorb capital surpluses”: eradication of all the barriers against the investment

Source: Harvey, David: 2007. Lecture on the Neo-liberal City at the City University Newyork, recorded by Clark Foundation; https://www.youtube.com/watch?v=rfd5kHb-Hc8 [retrieved on 15 February 2016]
So, let’s think a little bit about NYC!

New York City by kaysha
https://flic.kr/p/MEQ6V
NYC in the 1930s and 1940s

- 1929, Great Depression (Economic crisis due to over accumulation of capital; crisis of mass production) and unemployment

- Roosevelt, building highways, bridges under the Public Works Project but could not solve the problem of over-accumulation (surplus labour and capital)

- The cure for capital was WWII
  - Ships, tanks, planes (capital)
  - Army and the factories (labour)

- How to absorb the surplus labour and capital when the war is over?
  - After WWII; Robert Moses, government and the corporate capital re-shaped the NYC
  - The NY Metropolitan Region was reshaped through development of roads, highways and subways (you could bring the story up till today but no time; check the book or the below mentioned presentation)
  - Not only NYC but LA; Chicago and etc.

Sassen’s Global City (1991)

• Saskia Sassen (1949 - )
• Dutch-American sociologist
• Prof. of Sociology at Columbia University
The Urban(ization) Question: Sassen’s Global City (1991)

- Provision of command, control and management functions; as well as finance and alike specialized services such as banking, accounting, insurance, and estate

- Functions lead to the need for well functioning, quality hard and soft infrastructure

- Well-paid professionals working in the previously mentioned sectors, the demand for luxury housing

- (Local) Consequence is “inequality”.

The Urban Age Debate

“This book opens with a city that was, symbolically, a world: it closes with a world that has become, in many practical aspects, a city” (Lewis Mumford 1961).

21st Century: Urban age

Since 2007:
→ More people living in cities when compared to rural areas

Till 1950:
→ Higher urbanization rates, especially in Europe and North America

Since then:
→ Urbanization, especially in Southeast Asia and Africa

Cities as engines of social, cultural and economic development

Source:
Urban Agglomerations

In 1950, the average population of the 100 megacities in the world was 2.1 million; in 1990 it exceeded already 5 million

- Largest urban areas in 1950: New York City, London, Tokyo, Shanghai and Paris

Most megacities are located in the global South

<table>
<thead>
<tr>
<th>City</th>
<th>Inhabitants (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo</td>
<td>39,4</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>32,6</td>
</tr>
<tr>
<td>Shanghai</td>
<td>29,6</td>
</tr>
<tr>
<td>Jakarta</td>
<td>27,0</td>
</tr>
<tr>
<td>New Delhi</td>
<td>25,3</td>
</tr>
<tr>
<td>Seoul</td>
<td>24,2</td>
</tr>
<tr>
<td>Karachi</td>
<td>23,2</td>
</tr>
<tr>
<td>Mumbai</td>
<td>22,6</td>
</tr>
<tr>
<td>Manila</td>
<td>22,5</td>
</tr>
<tr>
<td>Mexico City</td>
<td>22,2</td>
</tr>
<tr>
<td>New York</td>
<td>21,8</td>
</tr>
</tbody>
</table>

The Urban Age Debate

20 Imegacities along the years (Bronger, 2004) – in million inhabitants:

<table>
<thead>
<tr>
<th>City</th>
<th>1940</th>
<th>1960</th>
<th>1980</th>
<th>2000</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo</td>
<td>12.740</td>
<td>17.864</td>
<td>28.697</td>
<td>44.413</td>
<td>248,6</td>
</tr>
<tr>
<td>London</td>
<td>8.615</td>
<td>7.992</td>
<td>6.713</td>
<td>7.172</td>
<td>-16,7</td>
</tr>
<tr>
<td>Mexico City</td>
<td>1.970</td>
<td>5.471</td>
<td>14.053</td>
<td>18.070</td>
<td>796,4</td>
</tr>
<tr>
<td>Mumbai</td>
<td>2.280</td>
<td>5.281</td>
<td>11.078</td>
<td>18.576</td>
<td>714,7</td>
</tr>
<tr>
<td>Sao Paulo</td>
<td>NA</td>
<td>4.654</td>
<td>12.352</td>
<td>17.276</td>
<td>271,2</td>
</tr>
<tr>
<td>Cairo</td>
<td>NA</td>
<td>4.910</td>
<td>8.090</td>
<td>14.793</td>
<td>201,3</td>
</tr>
</tbody>
</table>

Source (unofficially translated):
Bronger, D 2004: Metropolen, Megastädte, Global Cities. Die Metropolisierung der Erde. WBG.
A Brief Introduction to Post-Colonial City with through the lenses of Dar es Salaam of Africa
Back to The Urban Age Debate

Source:
United Nations, Department of Economic and Social Affairs, Population Division 2011. 
*World Urbanization Prospects: The 2009 Revision*, Highlights
Urbanization in sub-Saharan Africa

Rates of urbanization in Africa are the highest in the world!

Lagos, Nigeria

https://www.flickr.com/photos/bbcworldservice/3077950742
Lagos, Nigeria

Lagos – Untitled by Ryan Paetzold
https://www.flickr.com/photos/14924334@N00/499548189

Lagos – Untitled by Ryan Paetzold
https://www.flickr.com/photos/14924334@N00/499548219
Lagos, Nigeria

Wax market by Zouzou Wizman
https://www.flickr.com/photos/zouzouwizman/12129005/
Urban development in Africa

• Rapid urbanization rates in formerly rural sub-Saharan Africa;

• “African urbanization” is poverty-driven process and not the industrialization-induced Socio-Economic Transition” (UN Habitat, 2008);

• “Informal” settlement development;

• African cities are generally portrayed as deficient, chaotic or as “off the map of global interconnection” (Robinson, 2002).

• Can we generalize “African urbanization” as such”? Let us also discuss this!

Sources:
Urban development in Africa

Postcolonial Urban Research: limits to “deficit analysis” or the “African exceptionalism”

Towards an analysis of African cities as “regular cities“:

• Existing influence of industrialized countries;

• Place-specific patterns of adaptation, international circulation of ideas and ideals, organizational and planning models, practices, etc.;

• Place-specific patterns of urbanity, creativity and “cityness”
African cities

Pre-colonial urban culture:

- Existing African city-tradition before colonization (i.e. Culture Kilwa in Tanzania)

Cities as places…

- *of exchange* → commercial and political influence in Zanzibar on pre-colonial Urban Development in East Africa;
- *of different cultures* → indigenous, Islamic and European influences
- with specific communication networks and associated impact areas;
- with a specific division of labor and class structure
Colonial cities: Dar es Salaam

Dar es Salaam as a colonial distribution center for goods and exports between African and the European countries;

Features:
• Socio-spatial and functional segregation;
• Planned (European section) / unplanned settlements;
• Different buildings densities;
• Limited residence rights for Africans in the city, connected to their activities in the colonial system (i.e. servant or export of raw materials worker);
• Scarce industrial production

Colonial cities: Dar es Salaam

European urban planning / building codes

- Zones I II and III as a hierarchical order of the city, depending on political and economic power:
  I. European housing settlements as well as administrative and trading centers;
  II. Business district and housing settlements for Asians traders;
  III. Housing settlements for the African population;

- Building code regulations and different quality of infrastructural development;

- “Cordon sanitaire” as a safeguard zone to European settlements

Source:
Post-colonial African city

- Continuity of colonial period’s segregation patterns, with corresponding differences in infrastructural development and housing settlements (legal vs. illegal);

- Unlimited residence rules, leading to:
  - Rural-urban migration
  - Rapid urbanization

- Coupling the urbanization on formation of “informal economies” instead of urbanization due to industrialization (Europe, North America);

- Proximity of formal and informal economy with functional links.
Post-colonial African city

Dar es Salaam – city history

Dar es Salaam overview:

- 4.36 million inhabitants in Dar es Salaam Region;
- Population density: 3.133 inhabitants/km²
- 80% of the population live in informal settlements;
- Population growth rate 8% / year
- Administrative divisions: Kinondoni, Illala, Temeke municipal administrations and Dar es Salaam City Council

Source:
Dar es Salaam – city history

Colonial period – German East Africa:

- Founded about 1862 as a port location by the Sultan of Zanzibar;
- 1887 German East Africa Company acquired trade and customs rights;
- 1891 German capital of East Africa → Urban Development by German military and administrative activities;
- 1907 Railway → development of hinterland

Source:
Dar es Salaam – city history

Colonial period – German East Africa:

• Population: 3000 (1887) and 22,500 (1913);
• Radial road connection from the port, active till today
• Socio-spatial segregation reinforced by German planning:
  – Zone I: Oyster Bay northeast of the center with German districts and central administration;
  – Zone II: Indian section, with residential and commercial functions;
  – Zone III: Kariakoo as a section for Africans

Source:
Dar es Salaam – city history

Colonial period – German East Africa:

History by imke.stahlmann
https://www.flickr.com/photos/11264282@N02/6065381767
Dar es Salaam – city history

Colonial period – German East Africa:

Stone church, German East Africa, ca.1907-1914 (IMP-YDS-RG101-013-0000-0075) by Ashley Van Haeften
https://www.flickr.com/photos/wikimediacommons/16454455187
Dar es Salaam – city history

Colonial period – British colony:

• Urban core (Acacia Avenue): shopping street with two- to three-story buildings during 1920s;

• Ethnically-segregated division of labor allows the functionality of the urban economy
  – Black wage workers;
  – Indian and Islamic entrepreneurs;
  – Political and administrative functions controlled by Europeans;
  – Increasing activities of informal economy as an alternative for workers;

• Starting in 1938, informal urban growth in Kinondoni, residential district for African colonial workers of European Oyster Bay.
Dar es Salaam – city history

Colonial period – Post-war:

• 1940s: Rapid urbanization: housing problem and formation of informal settlements;

• 1950s: Construction boom;
  – Suburban settlements in response to housing problem;
  – Extensive infrastructure projects, for example, arterial road

• European planning vs. rapid organic growth
Dar es Salaam – city history

Colonial period – Post-war:
- Beginning of major infrastructure projects in the late 1950s, leading to high levels of immigration; as a result:
  - urban unemployment;
  - informal economy;
- Colonial administration forced immigrants’ relocation to rural areas;
- Uprising of dockers’ unions in the 1950s for better living and working conditions;
- Wide support of TANU (Tanganyika African National Union) for workers and suburb residents;

1961 independence under TANU socialist leadership
Dar es Salaam – city history


- Population: 1957-1967: 93,000 - 273,000;
- Permanent dynamics: social segregation, rural-urban migration, planned / unplanned dichotomy;
- Rapid urbanization arterial streets along built in the 1950s:
  - North: Bagamoyo Road, Msasani-Mikocheni-Mbezi;
  - West: Morogore Magomeni Road and Manzese / Uhuri Street after Ilall;
  - South: Kilwa Road: planned community Temeke.

Source:
Dar es Salaam – city history

Social structure of the city after independence:

- **Oyster Bay and Msasani** as former European colonial settlements with low density;
- **Kinondoni and Sinza**: quarters of the African middle class;
- **Kariakoo**: closest African settlement with up to five-story commercial buildings from the 1960s and one-story Swahili houses;
- **Growing informal settlements** on the edges of the city.

Source:
Dar es Salaam – city history

_Ujamaa Socialist urban planning:_

- Modernist city planning with linear development in the 60s;
- 1971 Acquisition of Buildings Act: TANU government purchases 3,000 homes for black population in Kariakoo quarters;
Dar es Salaam – city history

Economy (the 1970s’ crisis):

• Dramatically declining wages in the 1970s and 80s → structural unemployment;
• Extremely high debt service of the country in 1984 (70% of GDP);
• Impotence of TANU government towards informal urban development and rising unemployment rates;
• Annulment of colonial immigration restrictions to Dar es Salaam by Government Party (TANU), has an impact on increasing rates of urbanization
• “Informalisation” of economy and urban development
Dar es Salaam – city history

Political change in power and neoliberal reform 1984 (Mageuzi):

• Neoliberal reforms through structural adjustment programs of the International Monetary Fund;
• Privatization and liberalization of water supply, waste disposal, social security, health care, public transport (Daladala buses);

➢ Socioeconomic polarization;
➢ Concurrence of informal and formal economy with strong functional relations;
Dar es Salaam – city history

Neoliberal Urban Development in Dar es Salaam:

- Investors-driven Urban Development in the center (Kariakoo, Oyster Bay, Msasani, Mikocheni), leading to land speculation and building improvement;
- Ribbon-like informal settlement development, especially in suburban areas;
- Urban sprawl with low population densities beyond the city center and (also) the resulting traffic problems;

Socio-spatial polarization in residential area

No title by imke.stahlmann
https://www.flickr.com/photos/11264282@N02/6065950082/
Kariakoo Market

Kariakoo Market by Emil Sjöblom
https://www.flickr.com/photos/emilsjoblom/3491037388
Kariakoo Market

Kariakoo Market by Emil Sjöblom
https://www.flickr.com/photos/emilsjoblom/3490222669
Paradox within Urban Research

Paradox:
• The theory of urban research is based on western tradition and the planning models of the global North, while a large proportion of global urban development takes place in countries of the Global South;
• Only in recent years African cities are also taken in the international urban research agenda (especially in the postcolonial urban studies).

→ Chicago

→ Los Angeles

→ Your city?

Plan of Chicago: street circulation: plan, by Penn State University Libraries Architecture and Landscape Architecture Library
https://www.flickr.com/photos/psulibscollections/5782053988/

Los Angeles CA 1956, by davecito
https://www.flickr.com/photos/23465812@N00/8336927702/
Informal urban development: Mainstream Definition

Informal settlements:

Traditionally defined as:
• A violation of building codes;
• Building without permits;
• Breach of planning law and planned land uses;
• illegal occupation Public and Private Lands.

Informal settlement are, in a broad sense, understood as:
• Those which “rules” and functional mechanisms are separated from the official planning and implementation strategies, but are nevertheless connected with them.
Informal urban development: Alternative Approach

Informal settlements / slums:

• UN-Habitat Definition:
  – Place with high population concentration;
  – Lacking adequate access to drinking water and sanitation;
  – Unsecured control over land and soil;
  – Inadequate buildings

➢ Association of the term informal settlements with the concept of slum, or poor settlements;

Source:
Informal vs. Formal: Be critical

- Informality by Roy 2005: “[…] Series of transactions did connect different economies and spaces to one another”

- In fact no contrast, but interdependence of informal and formal sectors of the economy.

Informality as the controlling logic of urban development in the Global South

Source:
Informal vs. Formal: Be critical

Formalization by neoliberal logic:

• Formalization of property / land ownership. “Unleash the entrepreneurial power of the poor” (Myers 2011: 81 by de Soto);

• Formalization campaigns supported by the State and the World Bank:
  – Establishment of market laws and commodification;
  – Floor price increases;

Source:
Informal vs. Formal: Be critical

How about your countries and cities?

Source:
Formation of a City: Urbanization, Suburbanization, Counterurbanization and Reurbanization

(Champion, 2001)
Urbanization process

4 Stage Model of Metropolitan Area Development (Champion, 2001):

- **Urbanization**
  Core grows over a ring $\rightarrow$ concentration (agglomeration is rapidly growing)

- **Suburbanization**
  Ring grows more than the core (agglomeration growing less strongly)

- **Disurbanization**
  Core decreases rapidly as a ring (agglomeration losing population); decentralization because of agglomeration addition

- **Reurbanization**
  Re-urbanisation: core outperforms ring (re-concentration)

Source:
Urbanization

- Productivity gains in agriculture, birth surplus;
- Rural-urban migration;
- Increase in number of factories and business entities;
- Increase in service facilities.

Cities as locations of industry and employment growth

Suburbanization

Initial approaches to industrialization:
in search of better living conditions by wealthy layer of society
→ Urban and rural house

Better transportation:
• Expansion of regional trains;
• Enforcement of the motorized individual traffic;

Rising incomes after 1950: more choices
• Services targeting individual consumption such as retail stores

Suburbanization

Urban and regional development
• Countryside growing faster than the core city;
• City region still growing.

Life forms:
• Ideal for the bourgeois and small families;
• Implementation of ideas for better living.

Spatial differentiation
• CBD is the location of banks, offices and services;
• Ring around downtown: locations of decay and disinvestment;
• In the region parks, greenbelts and businesses parks are created. In the surrounding areas, the number and range of services providers increases.

Source: Heineberg, H 2000: Stadtgeographie. Ferdinand Schöningh, Padeborn, DE.
Suburbanization and production patterns

Fordism mode of production
- Mass production;
- Standardization;
- Tayloristic organization
- Production line.

Strong weight of large industrial enterprises; corporatist negotiations:
- Trade unions + employers
- Rising incomes

Fordist production:
- Extensive and horizontal

Industrial suburbanization:
- Spatial expansion opportunities and favorable soil.

Ford Prefect production during the mid 1950s by Ford Europe
https://www.flickr.com/photos/fordeu/5709826282
Consequences of Suburbanization

For the surrounding municipalities:

- Growth-oriented planning tasks: land development, infrastructure development, construction of socio-cultural infrastructure facilities. (kindergartens, schools, etc.);

- Fiscal burden; initially high; long-term it presents favorable fiscal effects due to high wage and income tax revenues;

- Urban sprawl in the surrounding areas’ open spaces, leading to increase of traffic congestion, and individual car usage.
Consequences of Suburbanization

For the core cities:

- Shrinkage-oriented planning tasks: revitalization of old neighborhoods, demolition of homes and infrastructure;

- “Fiscal scissors”: on the one hand declining tax revenues, on the other hand unchanged infrastructure costs (central functions, inflexible infrastructure as sewer system); risk of devaluation of the existing infrastructure (sunk costs);

- Loss of important population potential (especially young, better skilled and tax payer employee, especially family households).

- Increase in the socio-spatial segregation; degradation of neighborhoods
Disurbanization ("Counter Urbanization")

Strong decrease in population in the urban core, increase in the surrounding area → Decrease of the city region

- Spatial extent of sub-urbanization in surrounding rural areas;
- Increasing functional disconnection / loss of importance of core city → reticular settlement patterns (also called “periurbanisation”).
- Urbanization or above-average metropolitan growth of rural areas ("exurbia"), which is not on spatial extent (in terms of a “spill-overs”) due to the urban regions

Disurbanization ("Counter Urbanization")

Agglomeration disadvantages (high costs, traffic / pollution etc.)

Increasingly better infrastructure facilities, as well as industrial growth in surrounding area → Migration from the city region;

Trends strongly observed in old industrial regions

Reurbanization

Tertiarization / Post-Fordism:
- Outsourcing from companies;
- Knowledge-intensive / creative economy;
- Growth coordination, control and promotional activities.

Changes in Lifestyles:
- Young couples, singles, single parents, student houses;
- New housing preferences, new forms of consumption.

Requirements and Consequences
- Inner-city redevelopment, brownfields revitalization, compacting
- Social infrastructure, arts / culture / entertainment
- Gentrification

## Concentration and De-concentration

<table>
<thead>
<tr>
<th>Concentration – Favorable factors</th>
<th>De-concentration – Favorable factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Core represented with high prestige</td>
<td>• Loss of locational advantages in core city (replacement by functions with a higher yield)</td>
</tr>
<tr>
<td>• Agglomeration advantages (i.e. high density information and contact)</td>
<td>• Physical decay and social conflicts in the urban core</td>
</tr>
<tr>
<td>• Activities with a high demand for centrality (including knowledge-intensive services)</td>
<td>• Locational advantages in the surrounding area, for example, newly developed and easily accessible areas; few construction and use restrictions, housing promotion)</td>
</tr>
<tr>
<td>• Attractive historic structures in the city center (conservation investments)</td>
<td>• Relatively low land prices in the surrounding area</td>
</tr>
<tr>
<td>• High relocation and de-investments costs</td>
<td>• Meeting the demand for larger space needs concerning residential and commercial purposes</td>
</tr>
<tr>
<td>• Core city oriented transport network (good accessibility in public transport)</td>
<td>• Well-developed infrastructure, good accessibility in the region, poor accessibility in the core city, low transport and energy costs (“commuter tax”)</td>
</tr>
<tr>
<td>• Preference for urban lifestyles</td>
<td>• Location factors (living and recreational value, preference for living in the countryside)</td>
</tr>
</tbody>
</table>

Phase Model of Agglomeration: Recap and Critique

1. Urbanization
2. Suburbanization
3. Desurbanization
4. Reurbanization
5. In between Cities? (An important deal breaker or this approach?)

- A rule-based progression of stages in a circular historical urbanization cycle;
- A old industrialized countries (like UK) and spreads in Europe. The countries and places are each at different stages of the cycle;
- Forces: location decisions of companies, workers and households as well as political and planning responses of cities and states.

Changes in:
- population, employment,
- infrastructure, economic and cultural development

Sources:
Criticism of the theory of urbanization cycle

- In theory, very different processes are mixed together: decline of big cities, suburbanization, location choices of companies, policies, etc. These processes should be considered, and must be analyzed separately.

- Suppression of urbanization processes in the global South.

Source:
An Alternative Explanation: In-between City

Theories of postmodern settlement patterns:

Dissolution tendency of the core city centered agglomerations to postmodern settlement structures, for instance:

“Zwischenstadt” (Sieverts 1997) – In-between cities;

Dissolution of the historically compact European city towards a new […. ] urbanized landscape” (Sieverts, 1997)

Sources:
In-between City: development history

Urban sprawl (1960-1980):
- Mass motorization and government funding → many new houses in the outskirts;
- “Satellite towns” (“Nordweststadt” Frankfurt);
- “Main-Taunus center” emerges on the “landscape”;

Consolidation and emancipation of in-between city (1980 - 2000)
- Transition to post-Fordism;
- After 1989: in-between city becomes a part of urban development and remained

Frankfurt am Main, HE, Germany by Jaime Jover
https://www.flickr.com/photos/90795513@N06/14455033153
In-between City

Neither town nor countryside → properties of both (“over-developed urban landscape”):
• Cities and countryside growing at the same time;
• Decrease of historic city-building forces;

A settlement form emerges as part of capitalist industrial mode of production

Result of rational individual decisions
• Search for affordable land, differentiated land rents;
• Successive settlements of living and supply functions to work center;
In-between City

Functional interaction between sprawled areas and former urban core
→ Polycentric city structure (Sieverts 1997: 16)

Inaction of planners against the:
1. Lack of identity in-between city;
2. Conventional urban means are not applicable;
3. Fascination of the myth of the old (European) city adjusted to view of reality
In-between city: manifestations and urbanistic peculiarities

- Determined by coexistence of sub-, de-, and reurbanization → complex socio-economic transformations of urban regions;
- Perception of urban sprawl in everyday life by driving a marked highway (positioning by landmarks) (durch Fahrt auf Autobahn geprägt Standortbestimmung durch Wahrzeichen);
- Villages overwhelmed with massive increase in population figures;
- Town centers become less important;
- New intra-regional centers beyond the city centers → airport; exchange.

Examples:
- Nordweststadt, Limesstadt (cases from Germany) → large shopping malls; office cities

In between cities:
- Space of comprehensive functionality and high autonomy
In-between city

“The in-between city is, on the one hand, the dissolution of the traditional space relationships and a dispersion of dominated space; on the other hand, it distinguishes itself by the economic transformation process as well as by tendencies towards bundling and centripetal developments” (Sieverts).

Suburb, Schwalbach 2011 by Spiegelneuronen
https://www.flickr.com/photos/spiegelneuronen/5943627403
Critique of the 20th Century Urban Theory
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• “.... the geographies of urbanization, which have long been understood with reference to the densely concentrated populations and built environments of cities, are assuming new, increasingly large-scale morphologies that perforate, crosscut, and ultimately explode the erstwhile urban/rural divide.”

What would such logics of seeing the urban as a fixed unit would lead to?

Remember the quote “The city is everywhere and in everything.” (Amin & Thrift 2003: 1)?.

Let us discuss these!
“This proposition suggests that the conditions and trajectories of agglomerations (cities, city-regions, etc.) must be connected analytically to larger-scale processes of territorial reorganization, circulation (of labor, commodities, raw materials, nutrients, and energy), and resource extraction that ultimately encompass the space of the entire world.”

“Within this extended, increasingly worldwide field of urban development, agglomerations form, expand, shrink, and morph continuously, but always via dense webs of relations to other places, territories, and scales, including to realms that are traditionally classified as being outside the urban condition.” The latter include, for example,

- “small- and medium- size towns and villages in peripheralized regions and agroindustrial zones,
- intercontinental transportation corridors, transoceanic shipping lanes,
- large- scale energy circuits and communications infrastructures,
- underground landscapes of resource extraction,
- satellite orbits,
- and even the biosphere itself.”

“Consequently, whatever their administrative demarcation (meaning boundaries), socio-spatial morphology, population density, or positionality within the global capitalist system, such spaces must be considered integral components of an extended, worldwide urban fabric.”

Theories of Urban(ization): Planetary Urbanization

This new perspective argues that present conceptual and cartographic frameworks that are used to explain the urban phenomena, could only partly explain the capitalist spatial transformation of our era:

- settlement/boundary fetishism
- urban-rural divide
- distributional model of urban transition: Spatial transformation and change is reduced to population change between the presumed settlement types (most apparent in the state’s administrative boundaries).

Urban not as a unit or a type but rather a process that transforms in diverse scales, sites, territories and landscapes.

Comments and Questions?