Spatial Strategies for the Just City

A vision for inclusive and fair sustainability transitions in the Amsterdam Metropolitan Area (AMA)

Urban Region Networks - EMU Fall Semester - 2019-20
Urban Region Networks

Spatial Strategies for the Just City
A vision for inclusive and fair sustainability transitions in the Amsterdam Metropolitan Area (AMA)

TU Delft, Faculty of Architecture, Department of Urbanism
EMU – European Post-master in Urbanism
www.emu.tudelft.nl     emu-bk@tudelft.nl

EMU Course Director
Associate Prof. Dr. ing. Steffen Nijhuis
s.nijhuis@tudelft.nl

EMU Course Coordinator / Semester Coordinator
ir. Luiz Carvalho Filho
L.M.deCarvalhoFilho@tudelft.nl

Semester Instructors
Associate. Prof. Dr. Roberto Rocco
R.C.Rocco@tudelft.nl
ir. Luiz Carvalho Filho
L.M.deCarvalhoFilho@tudelft.nl
Ass. Prof. Dr. ir. Gregory Bracken
G.Bracken@tudelft.nl
Ass.Prof. Dr. Rodrigo Ordonez Viseu Cardoso
R.O.V.Cardoso@tudelft.nl
Ass. Prof. Dr. Akkelies van Nes
A.vanNes@tudelft.nl
Dr. Bardia Mashhoodi
B.Mashhoodi@tudelft.nl
Associate Prof. Dr. Dominic Stead
D.Stead@tudelft.nl
Ass. Prof Dr. Marcin Dabrowski
M.M.Dabrowski@tudelft.nl

Contents

5   Urban Regions Networks
17 Research and Design Studio
25 Theories of Urbanisation, Regionalization & Networks
29 Design and Planning Support Tools
35 Regional Strategies & Territorial Governance
Cities and urban regions in Europe, and around the world, are providers of vital ecosystems for development, social and technological innovation, and human progress. At the same time, however, cities magnify the intertwined social, economic and environmental challenges of today and tomorrow. Moreover, the manifestation of those challenges in the urban context is very uneven, due to deepening socio-economic and spatial inequalities.

Some of these inequalities declined in the EU between 1994 and 2008. However, the 2008 financial crisis marked the start of a period of turmoil and uncertainty. Although aggregate indicators of inequality have grown only slightly after 2008 (Darvas, 2018), austerity measures have had an impact in Europe, and among social groups in the continent. In addition to austerity measures, other causes for concern are growing migration and the so-called refugee crisis beginning in 2013, housing shortages, and the increasing precariousness of work, due in part to labour deregulation, but also to automation, ‘robotisation’ and the ‘sharing economy’. As a consequence, the continent has seen the rise of populist movements that put the democratic project in check. Cities and regions have a crucial role in how those challenges are managed. This is the object of our studio.
Socio-economic and spatial inequalities undermine the European project’s core objectives of social, economic and territorial cohesion, and the EU’s strategic goal of smart, sustainable and inclusive growth, while fuelling support for populist movements and anti-EU sentiment (see e.g. Rodriguez-Pose, 2018, Kuhn et al. 2014). Justice and injustice in the distribution of the burdens and benefits of development are reflected in the urban geography of cities and regions. Crucially, different social groups experience the effects of these processes in very different ways. The experience of justice and injustice in the city is deeply connected to the affordances and limitations offered by urban spaces, structures and infrastructures. The issue of accessibility is central to this discussion and to the idea of increased life-chances (Bristow et al. 2009, Farrington 2007, Farrington 2004). This must be coupled with the underlying questions of distribution of resources and opportunities throughout the territory, the health of the environment and democratic empowerment for effective and just decision making that tackles both.

The EMU fall semester addresses these challenges by integrating concepts of justice and sustainability into socio-technical transitions thinking, in order to formulate strategies for inclusive, participatory and fair urban environments. It does so by exploring and operationalising the concept of spatial justice, identifying the spatial drivers of inequality, setting up benchmarks for spatially just and environmentally sound policy and spatial design, through an understanding of the human, technical and natural systems that make up the so-called Amsterdam Metropolitan Area (the northern part of the Randstad, the networked city region lying in the west of the Netherlands, that comprises some of its biggest cities and most of its economy). It explores those systems to find ways to design fairer and more inclusive policy for three burning challenges of cities today, each of which have a major impact on inequalities and socio-spatial justice: 1) climate change, 2) housing commodification; and 3) shifting urban economies.

We will investigate the role of spatial planning in conceiving strategies that foster regional and metropolitan development, through the implementation of actions, policies, and projects of strategic value in the frame of the systems transitions necessary to achieve sustainability and resilience, paying special attention to the fair distribution of benefits and burdens that underscores social sustainability.

The objective of the EMU’s first semester is to develop research, analysis, and design skills in order to enable students to formulate spatial strategies for sustainable, fair and inclusive development in metropolitan regions.

The semester consists of a design studio and three supporting courses, focusing on theory, methodology and technology. It also includes a research and design workshop in Paramaribo, that aims to present students with an alternative case in which they can apply knowledge acquired.
Spatial Justice and Socio Technical Transitions to Sustainability

Spatial justice focuses on the geography of distribution of burdens and benefits of development (distributive justice), but also on how urban spaces and structures are governed and negotiated (procedural justice).

Soja defines spatial justice as “an intentional and focused emphasis on the spatial or geographical aspects of justice and injustice” and the “the fair and equitable distribution in space of socially valued resources and the opportunities to use them” (Soja, 2009, p. 2). Spatial justice is firmly inscribed in a longer tradition of citizen empowerment and participation that seeks to deepen the democratic experience and to connect it to how citizens decide upon distribution and shape the city.

Fainstein (2014, 2006) does not adopt the term spatial justice as her own, but has delved into the problem of justice in the city like no other. She seeks to answer the question: “how do we make and sustain democratic cities in which the diverse needs, capabilities, and aspirations of urban residents are recognized and in which those residents can live fulfilling lives free from marginalization and repression?” (Staeheli, 2013, p.756). In general terms, Fainstein sees the problem of justice in the city as a conundrum between development and redistribution, in which the collective good ought to supersede individual advantages, and where sources of positive change come simultaneously from “social movement strategies and goals as well as appropriate public policy” (Fainstein, 2006, p.28).

The EMU Fall semester adopts spatial justice as a normative concept that is particularly helpful in exploring the nature and drivers of socio-economic inequalities in cities and regions, both in their distributive and procedural dimensions.

Next to the spatial dimension, the question of how distribution of burdens and benefits of development is decided (procedural justice) is central to the EMU semester, which follows the EU’s lead in considering citizen engagement crucial to delivering inclusive models of growth.

In recent decades, participatory practices in urban policies and in spatial planning have become widespread in Europe, often incorporating innovations in digital and mobile technologies in efforts to include citizens in decision-making. However, these practices tend to fall short of achieving significant democratisation of urban governance (Sorensen and Sagaris, 2010, Brownhill and Parker, 2010). There is also wishful thinking about the benefits of digital technology for participation, but little evidence on its positive effects (Kleinhans et al., 2015). By the same token, policies for promoting inclusive growth have proliferated across EU Member States and European cities. The concept, however, remains fuzzy, and is interpreted differently in different contexts, while there is little knowledge on what policy interventions actually deliver results and effectively promote more just distribution of the benefits of economic growth (Lee, 2019).

Whereas spatial justice as a concept has been widely explored, EMU assumes that the connections between (i) spatial justice as a condition for social sustainability and (ii) spatial strategies for sustainability transitions is lacking.
Fundamental aspects of sustainability transitions are the social drivers that support them and the ethical and moral imperative to make these transitions inclusive and fair, underscoring social sustainability. The social drivers of transition can be defined as "social structures, institutions and agency, grounded in social norms and values, that determine directions and processes of change" (UNRISD, 2014, n.p.). For the United Nations Research Institute for Social Development, "sustainable development is necessarily 'people-centred and planet-sensitive' (Bali Communiqué of the High-Level Panel, 28 March 2013), guided by values of equal rights and social justice, enabled by proactive states and well-functioning institutions, and shaped through the participation of empowered populations" (UNRISD, 2014, n.p.).

Social sustainability is the bedrock on which environmental sustainability can be grounded and is founded on well-functioning political, institutional and legal systems that deliver just outcomes regarding environmental, economic and social burdens and benefits of development and growth. As noted, these burdens and benefits are often spatially bound or embedded in spatial structures and infrastructures and their distribution and accessibility in space. The issue of accessibility is central to this discussion and to the idea of increased life chances, concepts widely explored in transport geography and planning (Bristow et al. 2009, Farrington 2007, Farrington 2004). Hence, urban space and how the burdens and benefits of development are spatially distributed, as well as the decision-making processes involved in this distribution, are at the core of this EMU semester.

FIG. 1.4 C. van Eesteren, Western Garden Suburb 1934. Amsterdam Municipal Department for the Preservation and Restoration of Historic Buildings and Sites.

FIG. 1.5 C. van Eesteren, Design for Slotermeer Garden Suburb, 1939. Collection Het Nieuwe Instituut.
Why is a regional spatial strategy relevant?

The aim of this teaching component is to unveil what is a strategy in spatial planning and design and to connect spatial strategy-making to issues related to the opportunities and challenges posed by the development of a complex networked city region in transformation and which needs to promote transitions to sustainability.

Transition strategies towards sustainability involve an understanding of complex systems of production and consumption, how these systems are interrelated and how they relate to natural and human-made landscapes.

As advanced economies experience a number of challenges related to demographic changes (aging and immigration being two notable issues), income distribution (with inequality on the rise), environmental sustainability (with the energy transition being perhaps the most pressing issue) and social sustainability (with challenges in how liberal democracies have delivered prosperity), we expect substantial impacts in spatial landscapes of work and living.

Spatial strategies must therefore cater for the need to strengthen democratic processes, to cater for the wishes and needs of stakeholders, and must be based on a clear set of societal values that are able to steer transition that is inclusive and fair. Once the objectives are set, we must understand what spatial interventions, policies and investments are necessary to accomplish the goals formulated and must then conceive planning processes that will steer the necessary systems transitions to sustainability.

The spatial strategy must take into account a myriad of stakeholders distributed across different sectors and who might have conflicting objectives: governments fostering innovation and willing improve quality of living, local and multinational corporations in search for higher productivity and lower costs; workers with low-skills and low-education that see their livelihood threatened; citizens unhappy with how the fruits of prosperity have been distributed, etc.

The role of design here is multiple. Design works as a tool to explore possible and desirable futures, so that actors can coalesce around basic objectives and be able to negotiate. Design is thus a tool for exploration, but also a tool for negotiation and coordination for a myriad of stakeholders with conflicting interests. Hence, design here refers both to the design of processes and artefacts (infrastructures, spaces and other physical interventions).

Design has the potential to help stakeholders understand what is possible and what is not, but also helps stakeholders expand the horizon of possibilities, and anticipate them. Finally, design helps stakeholders visualize and materialize ideas.

In the studio, we will therefore formulate a desirable vision of the future and design a regional spatial strategy that caters for defined societal objectives, with clear steps of implementation, financing, citizen engagement. The strategy should be able to present stakeholders with alternatives in case of failure or unforeseen change.
This spatial strategy is composed of actions, projects and policies that are able to deliver the desired vision and has the ability to steer the actions of a multitude of stakeholders towards common agreed objectives.

In order to conceive a vision and a spatial strategy, knowledge from different areas and a set of diverse skills are necessary. Those are explored in the studio, but the supporting courses have a big role providing students with knowledge and skills to accomplish the task.

**Teaching aims**

- Students are introduced to basic notions of spatial planning, including the notions of multi-level and multi-sectoral governance, stakeholders, vision, plan and strategy.

- Students are introduced to a theoretical, conceptual, and practical background with respect to the relationship between the organization of a complex metropolitan region in North-Western Europe and the need to promote transitions towards sustainability that are inclusive and fair and can deliver spatial justice, with emphasis on the Amsterdam metropolitan region (AMA) as main case study.

- Students are familiarized with the concepts of strategic planning and design, and can make a strategic plan expressed in design for a complex urban city region.

- Students understand the role of spatial strategies for urban planning and design processes and are able to apply this knowledge.

- On the one hand, students get to understand the roles, potentials and actual influence of stakeholders on a strategic design (spatial planning tools). On the other, students are expected to develop understanding on strategic design processes (negotiation, governance and decision-making tools).

- Students learn how to deal with a variety of strategic analyses, planning and evaluation methods and approaches within the field of urban planning and their pros and cons.

- Students are able to apply principles of a variety of technology-based design and planning tools and decision-making techniques, as well as their advantages and disadvantages.

- Students critically assess theories on socio-spatial justice, and connected analysis, planning and evaluation methods, approaches and techniques. Students can apply methods, approaches and techniques in a concrete, complex strategy design task.

The design and research studio led by Roberto Rocco and Luiz Carvalho, will use the Amsterdam Metropolitan Region (AMA), in the Randstad as a case study and analyse how issues of mobility, housing, and energy transition are embedded in this region, and the new related platforms and workspaces that are emerging in it, as well as their implications for urban development.

Students build up academic research skills in Q1 and critically reflect on the topics described here, to develop visions and propose strategies based on scenarios. In Q2, they develop regional strategies and specific spatial designs based on future demands, trends, and risks.

In the Methodology course issues of comparative research and knowledge contained in literature are discussed. In the Theory course issues concerning theories of regionalization and knowledge contained in literature are discussed. In the Technology course, students get familiar with the latest technology and theory in spatial analysis and modelling.

Apart from particular skills and knowledge related to the planning and designing activity, the semester promotes the development of critical thinking as an essential tool for action in today’s world. Critical thinking makes reference to the need of developing analytical skills and research abilities in order to construct strong narratives with which stakeholders can identify themselves and that are academically valid.
Introduction

The studio aims to explore and speculate on the opportunities and risks for the region afforded by socio-technical transition to sustainability focused on delivering spatial justice in three key areas: housing, mobility and energy transition. Contemporary urban regions demand visions and strategies that not only provide a transition towards more sustainable economies, but that speculate on ways to gain leverage for the common good in the transition toward sustainability, anticipate disruptions, provide new livelihoods, and a renewed quality of urban life. With this studio, EMU acknowledges how systems thinking underscored by spatial justice is a key factor in the planning, development and direction of cities and regions. This shifts how we view the meaning of urban planning and design concepts in relation to societal and economic developments, and the way global actors continuously shape the built environment in local contexts. The studio is a follow-up of the proposal CiVIC (CItizen Engagement for Inclusive and just Cities), developed by Roberto Rocco, Marcin Dabrowski and Andrea Überbacher.

Grounded on an understanding of regional networks and systems, the development of visions, scenarios and strategies will also take into account new developments in planning theory and practice in the Dutch context, which contemplate multi-stakeholder engagement. The knowledge acquired through research on both planning theory and practice as well as the region will be projected onto the future in diverse scenarios in order to develop a spatial strategy and regional design for the AMA. This strategy must address the opportunities and challenges brought about by socio technical transitions from the perspective of policy, planning, and design, as well as consider the actors, institutions and systems that inform these transformations.

This research and activities of this semester are also part of a collaboration with the Borderline City Project. This collaboration is an initiative of the German National Urban Development Policy with contributions from several European schools of planning aiming at the reform of the Leipzig Charter on Sustainable European Cities, that will take place in 2020. The central questions in this project are: How do people live, learn and work in border-less and isolated districts, cities and regions? What types of tension are prevalent in border towns or border-related situations? How can these border landscapes be developed, planned and shaped?

The contribution of EMU studio to the collaboration will be on discussing interregional spaces for cooperation and city networks with trend-setting urban development targets. The work produced in the studio will integrate a summer school, symposium and exhibition in Berlin in 2020.
Amsterdam Metropolitan Area - AMA: testbed for socio-technical transitions to sustainability

The Amsterdam Metropolitan Area is a joint venture between the provinces of Noord-Holland and Flevoland, 33 municipalities and the Amsterdam Transport Region. It has a population of over 2.4 million people from 180 nationalities.

The metropolitan region covers a diverse area and extends from IJmuiden to Lelystad and from Beemster to Haarlemmermeer. The region has two airports, seaports, the financial centre of the Netherlands, the flower auction of Aalsmeer, Media Valley and clusters of creative companies. Besides, the region is characterized by numerous attractive historic cities and a large variety of landscapes.

The Amsterdam Metropolitan Area is one of the top five economic regions in Europe and has set an agenda for the future at the beginning of 2016. Priority is given to boosting the economy, improving accessibility and building homes (250,000 new homes until 2040). The latter is extra urgent because of the popularity of the metropolitan region among home seekers. In the economic field, the MRA wants to play a pioneering role in the knowledge and circular economy. Sustainability is also high on the action list. The same applies to the strengthening of landscape elements, with a focus on expanding recreational opportunities and the experience of nature.

Key figures:

- Population - 2,480,995
- Households - 1,100,000
- Companies - 260,000
- Jobs - 1,200,000

In sum, the central research question of the studio is the following:

How can the AMA promote socially sustainable and inclusive socio-technical transitions to sustainability in the areas of mobility, housing and energy while improving the quality of democratic and participatory planning?

Associated sub-questions are:

- How is spatial planning practiced in the Netherlands and how does it address socio technical transitions to sustainability? How does it promote spatial justice?
- What are the spatial implications of sociotechnical transitions to sustainability on inclusive and fair housing, mobility and energy productions and consumption?
- How can the region’s strategic position in various systems contribute to spatial justice?
- What are the new organizational and spatial conditions afforded by a systemic approach to transitions in the region?
- What is the governance of the area in question and what is the governance of a possible spatial transition strategy?
- What is the role of the education and research sectors? What is the role of the private sector? And of the government?
- What are the urban networks and systems that will be most affected transition strategies?
- How can the idea of spatial justice impact the organization and design of urban networks, systems and urban and regional form? What kinds of new forms of territorial occupation and use are they bringing and or might be expected?
- What will such a transition bring to the government’s agendas for innovation, education, and welfare?
- How can this lead to an increase/decrease in direct and indirect forms of employment?
- How can we define and visualize the idea of spatial justice?
- What sorts of institutional arrangements, policy changes, and strategic projects would be needed to promote sustainability transitions?
Learning Outcomes

At the end of this course, students will be able to:

- To EXPLAIN and UTILISE principles of spatial planning and strategy-making in relation to regional development in the context of environmental, technological and societal transformations.
- To EXPLAIN and DEMONSTRATE, through designs and texts, the challenges presented by transition strategies in regional, metropolitan, and urban development.
- To INCORPORATE the notion of spatial justice in regional planning and design in advanced economies and to DESCRIBE the stakeholders involved in each phase of the strategy (who does what when?), through process design and systems thinking.
- To CRITICALLY DISCUSS and REFLECT on the possible roles planning and design professionals might have in steering transition strategies and to take a position in relation to spatial justice, democracy and citizen engagement.
- To ACTIVELY CONNECT issues of governance, participation, diversity, equality, and democracy to a spatial-plan and design for the region in question
- To CONNECT research and design through practical interactive exercises.

Teaching Approach and Method

The main goal of the EMU semester is to introduce post-master students to spatial planning theory, scenario thinking, and plan-making practice connected to two distinct but converging ideas: spatial justice and socio-technical transitions to sustainability. Imagining spatial strategies for regional development considering the societal and spatial impact of sustainability transitions is the theme of the studio this semester.

The semester will be divided in two parts. In the first one, the emphasis will be on academic research and the definition of the task, gathering tools and skills to accomplish it. Mapping, vision making, and stakeholder analysis will be put in practice. This understanding of the region must lead to a preliminary spatial strategy for its future development, to be presented in the midterm. The first quarter will work as a research laboratory, that is, a coordinated group of people including teachers and students seeking to answer relevant questions through academic research. In this sense, the first weeks will be dedicated to an understanding of the area in its physical, ecological, economic, and social geographies, the exploration of existing literature and to the elaboration of research questions related to vision and spatial planning and design, in the theoretical and topical framework defined by the studio. The objective is to formulate an understanding of the context (AMA), the issues at hand, the role of planning in steering development and in addressing the challenges and opportunities of innovative automated technologies in production and logistics, with the ultimate aim to improve the region’s performance and, most importantly, its citizens’ well-being. In the subsequent phase, students will be invited to apply knowledge gained in the first quarter and develop alternative spatial strategies and designs for the case region. Guest lectures by experts, field trips to environments that illustrate the built environment of automation, and workshops will complement the work during the semester.

The workshop is co-organized with the Inter-American Development Bank (IDB) and will focus on Historic Inner City of Paramaribo. The general objective is to engage in the city’s current processes of urban planning and produce outcomes that support the local government’s team (Project Implementation Unit) within the framework of Paramaribo’s Urban Rehabilitation Programme, using principles learned in the EMU course.

In 2016, the Government of Suriname (GoS), financed by a loan from the Inter-American Development Bank (IDB), started the Paramaribo Urban Rehabilitation Program (PURP). The Program contributes to the socio-economic revitalization of Paramaribo’s historic centre. It aims to attract new residents and commercial activities to the historic centre of Paramaribo, to restore to value its cultural heritage, to reduce traffic congestion and to strengthen the institutional framework for managing its sustainable development. The Program applies a climate-smart approach to infrastructural interventions.

Through carefully planned sessions of community participation, it will be essential to document and represent how neighbours understand and envision changes in their city within a broader context that includes social and economic inclusion, heritage conservation and climate change adaptation. The connection with the studio topic and case study (AMA) will be through the understanding of everyday life of the Surinamese community living in the Netherlands. It will be essential to learn how this community used to experience the city centre of Paramaribo before emigrating to the Netherlands, and it is an opportunity to collect examples of the active use of the spaces in the historic city centre and to speculate on how these dynamics can be once again integrated.

The specific objectives include:
- To support the Project Implementation Unit (PIU) of the (PURP) to improve technical knowledge on climate adaptation and sustainable urban mobility, with a specific focus on the understanding of participatory approaches to climate-ready rehabilitation and sustainable urban mobility in the Historic Inner City of Paramaribo.

The specific objectives include:
- To provide useful and timely support to PURP’s PIU;
- To build upon and complement completed studies and consultancies and engage with ongoing ones (avoid redundancy);
- To promote stakeholder participation in all the phases of the workshop;
- To produce workshop outcomes that can be sustainably integrated into the PURP, in the form of a (design) report and video.

Fig. 1.12 Historic city centre of Paramaribo. Photos: Luiz Carvalho.

FIG. 1.12 Historic city centre of Paramaribo. Photos: Luiz Carvalho.
References


Farrington, J. (2004). Settlements, services and access: the development of policies to promote accessibility in rural areas in Great Britain: final report. [Cardiff]: [Welsh Assembly Government].


Cities and urban regions can be seen and analysed as products of historical processes of networking between other cities and urban regions on a variety of different scales. Some would even say—like the historians McNeill and McNeill—that human history can be interpreted as the weaving of webs between the places where humans live right from the moment when agriculture made the formation of cities possible, about 11,000 years ago.

The present pattern of urbanisation in many parts of the world has a history which goes back at least 1,000 years and can be interpreted as a layered system of different cities taking the lead in different periods of time. The current hierarchy of cities seems to be dominated by a limited number of much-discussed global cities.

What is typical of 20th- and 21st-century cities is that they have become truly regional manifestations: nearby cities have become vast agglomerations or dense, polycentric networks of individuals, cities, and town interspersed by a large variety of spaces and places with different functions and a different morphology. This has lead to a bewildering vocabulary of concepts to catch up with the modern ‘metropolis’, from ‘megalopolis’ to ‘patchwork metropolis’.

The Course

The aim of this course of eight seminars is to help students engage with concepts such as the city, city networks, the world economy, globalization and regionalism, polycentric urban regions, strategic spatial planning, and mapping. The aim of examining these concepts is to see how they can be practically applied to urban studies, with particularly reference to the studio work.

By the end of this course students will be expected to demonstrate the ability to meaningfully engage with concepts such as the ones listed above (and others) but also, and more importantly, show that they are able to formulate their own ways of thinking about them. They will do this via a series of seminar discussions on set readings (students are free to propose their own). Students will then be expected to take a position on one or more of the topics and develop them into a position paper which they will present in draft form to receive feedback from the course leaders and their classmates. For the seminars, the students are expected to have read the readings, actively participate in the group discussions; demonstrate they have understood the readings by taking positions of their own; and finally, critique one another’s positions.
Readings

Session 1: Introduction
Session 2: The City and City Networks
1. Lewis Mumford, The City in History, Chapter 1, ‘Sanctuary, Village, and Stronghold’.

Session 3: The World Economy: The Dutch Perspective
1. Immanuel Wallerstein, The Modern World-System I, Chapter 4, ‘From Seville to Amsterdam: The Failure of Empire’.

Session 4: Globalisation
2. Saskia Sassen, Global Networks, Linked Cities, Chapter 4, ‘Hierarchies of Dominance among World Cities: A Network Approach’ (by David Smith and Michael Timberlake).

Session 5: Student outline essay presentations (no readings)

Session 6: Globalisation (cont.) and Regionalism
2. Andy Pike, et al., Regional Studies, Vol. 4 1.9, ‘What Kind of Local and Regional Development and for Whom?’.

Session 7: Planning

Session 8: Mapping

Suggested further reading

Urban Theory
- Peter Hall, Cities of Tomorrow, Chapter 10, ’The City of Theory’.

City History
- Lewis Mumford, The City in History, Chapter 2, ’The Crystallization of the City’.

City Networks
- Michael North, The Expansion of Europe, 1250–1500, Chapter 5.5, ’Urban Society’
- Michael North, The Expansion of Europe, 1250–1500, Chapter 12.4, ’Urban Society’

Mapping

Planning
- Carl Steinitz, ‘On Scale and Complexity and the Need for Spatial Analysis’.

Study Goals
At the end of this course students will be expected to demonstrate knowledge and understanding of regions and territories according to the following criteria:
- As complex artefacts.
- As products of global and regional flows, migrations, and mobilities.
- As the focus and outcome of planning and urban design.

The student will also be expected to demonstrate the following abilities:
- Reflect in a critical way on urban theory.
- Develop a critical theoretical position in relation to the literature of regions and territories, and take a personal position in relation to these.
- Synthesize ideas.
- State a personal position on a specific case study in an academically rigorous position paper.

Education Method
The literature will be made available at beforehand through Brightspace. Seminars and presentations will consist of the following tasks:
- Read, present, and discuss a series of texts as a support to their studio work.
- Connect theory with studio work.
- Present and write up a critical analysis of a topic relevant to their studio work.

Assessment
Attendance is compulsory.
Students will need to demonstrate the following:
- An understanding of the set literature.
- Make presentations in class in relation to the literature.
- Actively participate in class discussions.
- Develop critical theoretical positions.
- Write a paper (3,000 words) which provides theoretical reflection and/or support to their studio work.

Papers will be checked for originality through a TurnItIn scan.
Introduction

The objective of this course is to introduce the students with different spatial analyses and design support tools. The students will be able to relate spatial data from various sources with place bounded socio-economic data through the use of GIS and Space Syntax. The framework of the course is set by the concept of geodesign which according to Campagna [2014] ‘is an integrated process informed by environmental sustainability appraisal, that includes project conceptualisation, analysis, projection and forecasting, diagnosis, alternative design, impact simulation and assessment, and which involves a number of technical, political and social actors in collaborative decision-making.

The variety of tools introduced, allows the students to support planning and design decisions from the local to the regional scale. The students will be presented with a set of technological based tools for urban and regional analyses and modelling. The main focus will be on network analyses using the Space Syntax method and GIS supported methods. Moreover, the students get an introduction to basic computer aided spatial analyses and statistics. The students will get a chance to test and apply the knowledge gained through the technology course during the in-class exercises and through the assignments. Additionally, the students will be able to closely interact with a reflective attitude when using these tools in the planning and design process in their design and strategic planning projects or on their own research projects.

Space Syntax allows to analyse how the layout of the build environment influences the social, economic and environmental performance of places from the scale of the entire city to the scale of the individual street and building. Space syntax allows to measure the strength of spatial layouts, both existing and proposed, and to interpret how spatial layouts impact the way that people move, interact and transact in streets and buildings.

A geographic information system (GIS) is a tool that integrates hardware, software and data for capturing, managing, analysing, and displaying all forms of geographically referenced information. The GIS session focus each on different spatial aspects: demographical distribution, different forms of density and accessibility. Spatial research questions for all these aspects are developed and the students are introduced to the different tools that are provided by ArcGIS to investigate them.
The aim of this technology-based course is to underpin strategic design scenarios through using and developing representation and evaluation models. Likewise, the representation and evaluation models will be used to support the decision-making process in a transparent, scientific, accurate, accelerated and flexible manner.

At the end of the semester students will be able to propose own ideas on how to approach problems during planning and design process through scientific grounded tools.

At the end of this course students should be able to:
- understand different (urban) design support tools and related software;
- perform spatial analyses and modelling of their research areas;
- use GIS tools to support their research process in a transparent, scientific, accurate, and flexible manner;
- understand some of the key methodological problems, limits and restrictions of (urban) modelling and analyses.

**Assignment**

After each lecture the students must carry out individual or group assignments. The purpose is to use the software skills taught in each course. At the end of the semester the students must submit a report where they show the application of space syntax and GIS in their studio projects or own research projects. In the report a demonstration, discussion and reflection of the analyses of their sites and analyses of design proposals before and after proposed interventions must be carried out. Likewise, historical analyses of a town or city can also be carried out.

Since students get inputs and evaluations during the workshops and exercises, students must also discuss and reflect upon the results from their findings in the report. Finally, the students must be able to write critically about the methods limitations and possibilities in relationship to the evaluation of their proposed model.

All take home assignments during the sessions have to be added to the report followed with a text with description and critical reflections.

The aim of the assignments is to have insight based questions. The purpose is to combine the information given in the lectures and provided literature to analyse an urban area. Moreover, the application-based questions motivate the students to link the knowledge to specific situations, to discuss and solve a problem for a concrete situation.

The assessment consists of two parts. The first part is a presentation of each assignment during the lectures. The second part is an application of GIS and Space Syntax on the studio work or own research project. The grade each student gets is the average of the result of the assignments after each lecture and the final report. The students get assessed on their submitted report. Every assignment a student misses to deliver during the courses reduces the final grade by 0.5 points.

**Teaching**

The course consists of eight half-day sessions. Four sessions focus on the spatial modelling part with a main focus on the space syntax method, and four sessions focus on the GIS based spatial analyses and modelling. Parts of every session are used to integrate the different tools presented. Some lectures are accompanied by online tutorials the students are obliged to take as preparation before the class, as otherwise they will not be able to follow the class. A link to these tutorials is provided in the detailed session description.

All sessions consist of the following parts:
- Lectures where theoretical background and results from recent research are presented which relate theory to the tools of the course.
- Software demonstrations and thereafter small exercises for the students to test the learned knowledge immediately.
- Presentations and discussions of the take home assignments of the students.
- Discussion with the students to develop research questions and related methods and work-flows for the studio assignments/research projects.

**Evaluation**

The students will be evaluated on the following criteria:
- Ability to apply the methods on their strategic planning and design projects or own research projects (for the PhD students).
- Ability to use the method critically and to be aware of its possibilities and limitations.
- Ability to evaluate own design proposals or research projects critically.
Literature


Additional Reading


Data Sources:

All data for the course will be provided by the tutors and be downloadable from Brightspace. For further studies this sources of geo-data may be helpful. This list is far from complete and new sources appear every day.

Netherlands

– PDOK https://www.pdok.nl/en/node
– Open government data portal of the Netherlands
– Dutch geographic Data (Central statistics office)
– Data Archiving Network
– http://www.dans.knaw.nl/content/categorieen/nieuws/kadasterdata
– Digital collection of the TU-Delft Maproom

EU

– EUROPEAN FORUM FOR GEOSTATISTICS http://www.efgs.info/data
Different combinations of methods and tools for regulating urban development are used across Europe. There can be noticeable differences in methods and tools between countries and sometimes even between regions in the same country. In addition, there are variations in attitudes about the need for regulating urban development across different countries and regions. These questions are fundamentally linked to societal values and cultures, which in turn affect the scope, power and culture of planning. The way planning is organised affects the distribution of costs and benefits of urban development to different groups in society.

In practice, shaping territorial development through spatial planning and design can be complex and controversial, even in countries with a strong and effective government. Increasing mobility, the dispersal of economic activity, competing political priorities and market-oriented objectives present obstacles to coordinated development. While few people doubt the need for some form of planning, there is constant debate about who benefits and who loses.

The course draws heavily on practice in Europe, particularly the Netherlands, but also considers some examples from around the world. In recent decades, spatial planning in many European countries has become more strategic, seeking to coordinate diverse influences on territorial development. The emphasis has been on attempts to reconcile the many competing goals for cities and regions, including economic prosperity, social cohesion and sustainable development. Spatial planning has also attempted to combine the aspirations of state, market and civil society in managing territory.

Objectives

The key objectives of the course are:

1. To address some deceptively simple questions (e.g. What is a plan? What are arguments for and against planning? How are plans made and by whom? What does participation imply? How can plans influence spatial development?)
2. To examine experience in spatial planning in Europe and other parts of the world to gain a critical understanding of planning theory and practice.
Learning Aims

After completing this course students will be able to:

- outline the main rationales of planning and explain why planning exists despite repeated challenges
- understand some of the key methodological problems involved in spatial planning
- distinguish between different styles of planning and their respective strengths and weaknesses

Content

The session topics comprise:

1. Key issues and concepts in spatial planning. Why do governments intervene?
   - Goals of spatial planning: sustainable development, economic competitiveness, social and territorial cohesion, spatial equity and justice.
5. Spatial planning responses to social and technological change. How has planning been affected by and dealt with societal and technological shifts? Examples of industrialisation, sanitation, electricity, motorisation, automation.
7. Planning cultures and policy transfer. Diversity of planning cultures and the challenge of transposing lessons from one place to another.
8. European influences on territorial development. Europeanisation of planning and the impacts of EU policies on territorial development.

Assignments

Students are required to critically evaluate the contribution of spatial planning on territorial development in a chosen case study located in a metropolitan region. The size of territory studied should have an area of between 1 and 5 km². The case study should be chosen to reflect interesting questions related to the studio. The pattern of territorial development should be evaluated in relation to the content of past and current plans.

The assignment will be assessed in the following ways:

- individual presentation in class
- illustrated report of about 2,000 words

Evaluation

The assignment will be assessed according to the following criteria:

- understanding of spatial planning in the case study
- oral communication skills and visual aids
- understanding and use of the key principles covered in the course
- critical analysis of territorial development patterns
- academic writing and expression

Key reading


