



**55TH ISOCARP
WORLD PLANNING
CONGRESS**

Beyond the Metropolis

JAKARTA - BOGOR, INDONESIA
9-13 SEPTEMBER 2019

Proceedings

Proceedings of the
55th ISOCARP World Planning Congress 2019

*55th ISOCARP World Planning Congress
'Beyond the Metropolis'
Jakarta/Bogor, Indonesia
9-13 September 2019*

Editors: Martina Juvara and Slawomir Ledwon

©ISOCARP 2019
Produced and published by ISOCARP

ISBN: 9789075524628



International Society of City and Regional Planners
<https://isocarp.org/>

Introduction



Martina Juvara
General Rapporteur

“With urbanisation continuing at pace, megacities offer a different model of urban development, which is no longer the unexpected by-product of fastgrowing countries: it is a beacon to be followed for some, and for others, simply dehumanizing. The Congress will be a unique opportunity to explore what megacities can do for humanity and how we can make sure we move towards a better and fairer future: for children, for the environment and for our own identities of citizens in a globalising world. Around 250 presentations, debates, training sessions and inspirational speeches: a great way to start sharing knowledge for a better future.”

Our aim with the 55th ISOCARP World Planning Congress is to investigate the future and explore the opportunities offered by cities without limits: what makes them successful and why they are so appealing and to whom. We want to focus on their supposed inevitability but also on the possible alternatives for achieving global influence without the mega-scale.

This is our target for this year: exploring ‘planning beyond limits’. This does not mean that the work of last year at Bodø is being put behind our backs: sustainability, resilience and the role of cities in our changing planet is at the forefront of everyone’s thinking this year too. Jakarta provides the perfect context: It is the second largest agglomeration in the world (over 30 million), one of the biggest plastic waste generators (up to 2,400 tons daily) and the fastest sinking city (up to 15cm a year, with almost half the city below sea level already). Such a mega challenge, that the Government has decided to relocate its national capital functions. In addition, almost 40% of Indonesian citizens are dissatisfied with the living quality of their cities.

Environmental challenges, well-being and citizen quality of life and the role of cities are only some of the themes explored by the Congress this year. No better place to discuss them than Jakarta, a no better place to open to the whole world and gain a truly global perspective about what’s happening and what different experts are thinking from all parts of the world.

On the one hand, the global role of megacities and how scale is becoming power: what are the dynamics that lead to the emergence of megacities? Are they necessary to achieve global influence or are there alternatives? Can cities without limits be planned, nurtured and grown as a way to promote a positive future for a country and for the planet?

On the other hand, we will also explore the strategies, considered or maybe tried out, to promote liveability, well-being, exemplary sustainability, innovation and responsive governance. If megacities develop into powerful regions, they

also play an unprecedented role in shaping the social, economic and environmental evolution of our planet: megacities have the chance to lead the world and change the fate of global challenges such as climate change, security, innovation, financing and digitalisation. They can provide the test-bed and the drive to experiment with new technologies and proactive governance that respond to all scales, from global to local, and to all people from international leaders to children and the migrant poor.

It will be a very busy week: comfortable shoes and fat notepad in hand – as hundreds of researchers, professionals, government officials and international agencies will congregate in Jakarta to share knowledge and learn from each other.

It will be an opportunity to hear about the progress of the Sustainable Development Goals directly from UNHabitat, discuss the future of democratic and participatory planning, learn how to embed children friendly policies into planning and share experience about governance from all parts of the world. The role of heritage in our future identity and the challenges of water management will be explored across cultures, and different governance and resource frameworks.

The Congress will provide a true platform to share ideas and best practice across the globe: from Jakarta, Semarang, Wuhan and other cities in China, the work being done in cities of India, Africa, Australia, Europe and America. With several technical visits, panel discussions, debates and round tables, we expect no less than future orientated thinking and limitless horizons.

All this, like being among friends! It would be a great mistake not to be there, with us.

Track 1

Limitless cities and urban futures

Planning for scale



CONGRESS TEAM

Peter Newman
(Australia)

Luo Wenjing
(China)

Stephen Goldie
(United Arab Emirates)

LOCAL EXPERTS

Budi Situmorang
Khairul Rizal

Through holistic exploration, this track will provide an opportunity to discuss why megacities are emerging, how they are influencing the world (positively and otherwise) and how planners can think ahead about their future. Megacities and city-regions are challenging the notion of the traditional city and even the metropolis. Larger and more powerful than countries, they become global nodes of migration, trade, knowledge exchange and innovation that seem to be limitless. Are megacities unstoppable and the fastest way to a prosperous future?

The track also explores the needs and impacts of megacities, from infrastructure to food and waste, and the range of strategies needed, imagined or already being explored, to make them lead the way towards efficiencies of scale and innovative resource management. Are they part of a global interconnected network that can lead planetary change or a threat to life on Earth?

How best to plan for an efficient, liveable and regenerative megacity? What lessons can already be learned from the leaders in this journey?

Sessions

Session 1.1

Understanding Megacities: Scales (1/2)
How can one understand the growth of megacities? Are megacities limitless? This session discusses the scales of megacities as well as the method of controlling the growth boundary of megacities.

Session 1.2

Understanding Megacities: Linkages and Structures (1/2)
How can one understand megacities as a whole and as individual parts? This session explores the structures of megacities including linkages, relationships, disparities, synergies and connections.

Session 1.3

Understanding Megacities: Scales (2/2)
How can one understand the growth of megacities? Are megacities limitless? This session discusses the scales of megacities as well as the method of controlling the growth boundary of megacities.

Session 1.4

Understanding Megacities: Linkages and Structures (2/2)
How can one understand megacities as a whole and as individual parts? This session explores the structures of megacities including linkages, relationships, disparities, synergies and connections.

Session 1.5 (Special Session)

**How to Plan Ahead:
Wuhan Metropolis Experiences**
This session specifically focuses on Chinese megacity planning using the case study of Wuhan, located in Central China. With a population of more than 11 million and an area of more than 8,000 square kilometres, it aims to become a sustainable, efficient and liveable megacity.

Session 1.6

Planning for Megacities: Sustainability
How can one plan for a sustainable megacity? This session focuses on resource consumption, resource utilisation, and environmental preservation in planning strategies of megacities.

Session 1.7

Planning for Megacities: Efficiency
How can one plan for an efficient megacity? This session focuses on improving the efficiency of megacities, especially in the areas of transit-oriented development, smart cities and the like.

Session 1: Understanding Megacities: Scales (1/2) 1.1

10 September (Tuesday), 9:00 - 11:00

Pedro B. Ortiz

Metropolitan Management: Expansion, Governance, and Finance

Metro-Urban expansion is challenging world development. Only 3 cities in world history have been one million-plus inhabitants. Now we have 500. These Metro-Cities produce 75% of world GDP. Many are expanding at a 5% annual rate. They double their size every 14 years. Lack of a methodology for expansion is producing an uncontrolled pattern, jeopardizing development and equity. Challenges and alternatives will be discussed.

Qing Lu, Liyan Xu, Xiao Peng, Zhen Cai

The Spectrum of Metropolitan Areas across the World, and Detection of Potential Metropolitan Areas with Chinese Characteristics

The paper proposes a spectrum of MAs with respect to their inner network and interactive structures based on metropolitan development experiences in the US, Japan, and China, and identifies 32 MAs in China with a unique three-circle structure: a core circle, a commuting circle, and a functional metropolitan circle.

Ali Alraouf

The Value of Less and Small: Transforming Metropolitan Doha into Connected, Human and Resilient Urban Settlements

The paper analyses different urban planning strategies and policies adopted to shift the focus from creating a mega city with an image which resonate with typical global cities to a more sustainable, resilient, knowledge-based and decentralised urbanity. It discusses the transformation of Doha from a metropolitan exploiting the oil and gas revenues to a multi-centered model of sustainable urbanism.

Prihadi Nugroho

Bringing creative Economy to Community Resilience towards better Urban Governance: The Case of Semarang City, Indonesia

Semarang City has been transforming from a port city to a multifunctioning city, creating fragmented physical urban transformation and separate formal and informal economy. This paper aims to examine how the recent urban transformation has been fueled by creative economy activities. Results show that kampong-based creative economy is beneficial to enhancing the informal economy and urban settlement development.

Session 2: Understanding Megacities: Linkages and Structures (1/2) 1.2

10 September (Tuesday), 11:30 - 13:00

Eunice Yorgri, Leng Hong

The Role of Urban Slums in the Evolution of Megacities; A case of Nima and Old Fadama, Accra, Ghana

Accra, Ghana's capital city is progressively morphing into a mega-city. The rate of transformation is largely attributed to the influx of poor unskilled rural migrants into the city and its periphery. This assertion is a result of the increasing number of migrant slums in the city. Therefore, two migrant communities are used to justify this assertion.

Anna Katrina Karaan

Negotiating Spaces of Exception: Metro Manila's Planned Unit Developments - The Case of Eastwood City

This qualitative case study uncovers how Planned Unit Developments (PUDs), a type of urban enclave increasingly common in Metro Manila, are negotiated into legitimised spaces of exception where private interests remain dominant yet largely accepted. In exploring relations of state-society-space, the study points towards more inclusive futures for PUDs through continuously sharing the power to negotiate to all.

Ivan Rwampungu, Mishima Nobuo

Evaluation of urban form of a mountainous city from the perspective of compactness characteristics

This study aims at analysing and understanding the urban form in Kigali, capital city of Rwanda. Two dimensions of spatial organisation and spatial distribution of population were measured to objectively evaluate physical compactness. Findings reflected trend of decrease in compact form with absence of sustainable concepts. Suggestive measures were provided for future consideration in sustainable urban development of the city.

Yixuan Peng, Gerhard Bruyns, Darren Nel

Chinese Megablock Urbanism: a Tool of limitless Urbanization in an Unprecedented Speed and Scale

By studying cases in the Pearl River Delta region of south China, the paper explains how megablock urbanism shapes Chinese cities and deliver insights in terms of their impact on urbanization, urban morphology and prevalent planning strategies. The paper argues for the cultivation of an urbanization practice that needs to become systematic in its sustainable focus and outcomes.

Session 3: Understanding Megacities: Scales (2/2) 1.3

10 September (Tuesday), 14:00 - 15:30

Dushko Bogunovich

How Big Is Auckland: Planning a City-Region for Resilience and Regeneration

The authors argue that Auckland, New Zealand's largest metropolitan area, should abandon its 'compact city' model due to weak evidence to support its liveability-sustainability agenda. Instead, planning should acknowledge decentralisation and polycentric metropolisation, and support a linear, metropolitan conurbation to achieve higher levels of resilience and regenerative in the face of climate change.

Swarna Bintay Kadir, Mohammed Hamidul Hasan

Megacity - Mega Challenges: A case of Dhaka City-Capital city of Bangladesh

Bangladesh's capital Dhaka is the 7th largest megacity of the world, and by 2030 it will be the fourth biggest city in the world with 28 million inhabitants. It is facing the combination of high pressure of housing, high population density, and rapid population growth, consequences in urban growth taking place in natural hazard-prone areas.

Manuela Negrila

The role of sprawl towards the megacity. Eastern-European sprawl, the case study of Bucharest, Romania

Cities nowadays are either growing at a never-before seen rate or shrinking due to technology, globalisation and increased mobility. Some of these changes are planned but, most are not, like urban sprawl. Seeing how the forces that drive this phenomenon are in their majority economic, how can planners integrate this chaotic element into a planned and structured megacity?

Chandan Mysore Chandrashekar, Bharath Haridas, Prakash PS. Aadithyaa Jayanthi SenthilNathan

Machine learning for building extraction and Integration of Particle swarm optimization with SLEUTH for Urban growth pattern visualisation for liveable cities

Unplanned irreversible urbanisation with increasing population in the administrative boundaries of existing and upcoming megacities have developed imbalance in the system. Sustainability as prime agenda, this research article aims to understand the urban pattern and its modelling using a novel PSO based SLEUTH. This also included extraction of individual building using SVM to understand regional dynamics and energy demand.

1.4 Session 4: Understanding Megacities: Linkages and Structures (2/2)

10 September (Tuesday), 16:00 - 17:30

Shuai Li

Space of flow including capital and information shape the megacity groups: based on the example of Chengdu-Chongqing city groups in China

With globalisation, “space of flow” like capital, information and talent are moving around the world, combining separate cities into influential urban groups. This research takes Chengdu-Chongqing urban agglomeration in China as an example to analyse the information and capital networks among its 27 cities, and to argue that the role of planning is to attract these flows and enhance competitiveness.

Huihui Nan, Qian Zhao

Comparative analysis of Beijing-Tianjin-Hebei urban agglomeration, Yangtze River Delta urban agglomeration, Guangdong, Hong Kong and Macau Bay Area based on gravity model

The purpose of the study is to compare China’s three major urban agglomerations based on their economy, government management and spatial structure, to determine regional potentialities and future development direction by using gravity model as a method.

William Zuo

Multi-scale Spatial Layout Structure System: Experiences of Shanghai Mega-city Spatial Planning

This paper focuses on the spatial planning system established by the Shanghai Masterplan 2035 to reduce the negative effects of overpopulation on the emerging Shanghai megacity region. Research on the detailed planning process and Shanghai experiences are valuable for megacities facing similar challenges.

Felicia Atmadja, Dushko Bogunovich

Shaping Compact Cities with TOD for Liveability, Sustainability and Affordability: A Comparative Assessment of Jakarta and Auckland

Auckland and Jakarta have chosen the TOD strategy, incorporating vertical housing, to slow down the sprawl. But citizens are concerned about the impacts of higher density development. We make a comparative assessment of TOD’s ability to achieve liveability, affordability, and sustainability (L-A-S) in two cities - Jakarta and Auckland- while using Singapore as a benchmark for both.

1.5 Session 5: (Special Session) How to Plan Ahead: Wuhan Metropolis Experiences

11 September (Wednesday), 11:30 - 13:00

Moderators: Wenjing Luo, Frank D’hondt

Wenjing Luo

The Corridor Strategies in the Megacity development: Case Study of the Optical Valley Knowledge

Based on the Optical Valley Knowledge Mega-Corridor, the paper illustrates the use of knowledge mega-corridors as a loop for innovation systems, a boom for knowledge economies, a bundle of infrastructure axis and a mutual force for environment conservations in developing livable and efficient megacities. The paper also present challenges to implement spatial strategies lying in policymaking at the local level.

Wenjing Luo

How to Define the Boundaries of Metropolitan Areas : Case Study of Wuhan, China

Based on analyzing the current development stage of Wuhan as well as its surrounding areas, this paper attempts to define the boundary of Wuhan metropolitan area in dimensions of its urbanization, geography, transit, economics, ecology, psychology and culture. The paper concludes that Wuhan’s methodology of defining its boundaries can be applied to other metropolitan areas.

Session 6: Planning for Megacities: Sustainability 1.6

11 September (Wednesday), 14:00 - 15:30

Silvia Croce

Urban parameters analysis and visualization. A Support to planning decisions for the definition of urban surface usages

This study presents a systematic framework to support planning decisions on the use of urban surfaces based on accurate and spatially explicit information. The method, which is tested in Bolzano (Italy), implies the assembly of a spatial database of significant morphological and environmental parameters that influence the distribution of surface uses in cities and affect the priorities for their definition.

Bo Bian

The application of micro-regeneration strategy in urban renewal in Lima, Peru

Current developing strategy shows little positive impact on dealing with urban problems in Lima, Peru. This paper analyzes current situation of a typical district in northern Lima. By introducing micro-regeneration strategy, which mainly includes urban catalysts, space design and corporate mechanism construction, this paper hopes to provide a new mode for the development of the city and similar practice.

Daniel Petrovics

Integrating Vertical Farming at Scale in Urban Food Planning - Practical Considerations for Planners

Vertical Farming has been promised to potentially reduce the climate impact of urban food systems. Nevertheless a holistic perspective assessing what elements urban planners should consider whilst integrating this technology into urban food planning in a sustainable manner is missing. A number of factors are discussed in detail among them operational arrangements, policy, market, social-cultural, and built contexts.

Latifah Latifah, Dayinta Pinasthika

Smart Growth Approach in Planning Bogor City Infrastructure

While Bogor's rapid growth, as a satellite city to Jakarta, see investment in new housing development rising, urban infrastructure provision remains limited. To address this problem, the Ministry of Public Works and Housing's smart growth approach has focused on designing public transport oriented, mixed-use and compact development, with emphasis on walkability, human scale planning, and public space in Bogor's center.

Session 7: Planning for Megacities: Efficiency 1.7

12 September (Thursday), 11:30 - 13:00

Vaishali Aggarwal

Smart Cities in India- Branded or Brain-dead?

The notion of 'smart cities' is increasingly visible in discourses on the future of cities. The paper seeks to answer if 'branding of technology' can be used as a tool to create a new identity for the mobility of Delhi or 'upgrade' the existing situation. How can the context of Delhi be decoded to describe the perceptions of the people?

Mariana Reis Santos

Does the implementation of Special Zones of Social Interest (ZEIS) encourage adequate housing in precarious settlements? The case of Sapé, São Paulo

This paper evaluates to what extent the implementation of ZEIS encourages land regularisation procedures and public investments in precarious settlements. It also analyses the quality of State interventions conducted within the zoning. By focusing on qualitative aspects, the paper aimed to establish whether ZEIS has been promoting decent housing conditions to the urban poor or reinforces precarious patterns of development.

Putrikinasih Santoso

Finding Housing Affordability in MRT Jakarta TOD Areas

This paper aims to posit an exercise on the implementation of TOD concept in a built existing environment including the challenges in implementing TOD concept in such areas and possibilities for redevelopment within those TOD areas. To exemplify, several case studies will be presented, including Dukuh Atas, Cipete, and Haji Nawu TOD areas

Authors are responsible for the content of their work.

Track 2

Besides the megacity and other cities *Planning for balance*



CONGRESS TEAM

Tathagata Chatterji
(India)
Fedor Kudryavtsev
(Russia)

LOCAL EXPERTS

Ari Krisna Tarigan
Adiwan Aritenang
Harya Setyaka Dillio

This track explores alternative themes beside and beyond the megacity: one explores the paths of cities that aspire to being influential, but also aim for balance and perhaps containment (to provide an alternative model where there is less pressure and life is more balanced).

The other looks at aspects of the regions around megacities: the hinterland and its rural towns, which play an essential role supporting and providing resources to the megacity, sometimes being left behind by the economics and policies of large urbanisation, and sometimes reaping the benefits of nearby growth, prosperity and innovation.

Are megacities the only option? What would be the future role of secondary or non-global cities? Can they only be subservient or irrelevant? How to strengthen economic roles of smaller cities as counter magnets – to generate more job opportunities closer to home and reduce population pressure on megacities? How does megacity expansion transform the countryside and their own hinterlands? How can megacities and peri-urban areas develop a synergetic and maybe positive relationship? How is rural development providing spaces and resources for city dwellers? Does it make sense to invest and modernise agriculture around a megacity and reinvent the rural into a new model?

Sessions:

Session 2.1

Beyond Megacities: Key Challenges and Alternatives

Discussions under Track 2 broadly explore two key areas – the contemporary urbanisation context under which the megacities, their scale economies and their regional linkages are embedded, and what the possible alternative spatial models are. These two broad themes then lead to more detailed explorations around

seven sub-themes. This introductory session, involving keynote speakers from all the sub-themes would touch upon key challenges and alternatives in planning at a regional scale and lead to further deliberations under specific sub-topics.

Session 2.2

Megacities Backside:

Peri-urban Interface

Peri-urban interfaces of dynamic metropolitan regions are spaces which are forever in a state of flux, where land use patterns and built forms frequently undergo rapid change, where urban and rural land livelihood and lifestyle patterns coexist, often within a person's everyday routine. Hereunder this sub-theme, we not only explore some of the complexities involved in peri-urban transformation, but also seek to understand how megacities and peri-urban areas can develop a synergetic and perhaps positive relationship.

Session 2.3

Metropolitan City and Its Shadow Regions

Megacities and global metropolitan regions often tend to cloud our imagination through the sheer magnitude of their scale, their glitz and glamour, and their deprivation and squalor. Needless to say, megacities dominate and overshadow their hinterlands. Here, we seek to shed light on such shadow regions. We ask what it means to be a shadow region. Can life be good in the shadow of the megacities? How does megacity expansion transform the countryside? What are the conflict points and how are they being negotiated?

Session 2.4

Urban Expansion and Food Supply: Megacities Resiliency

Rapid expansion of urban footprints-often in unplanned chaotic ways-are harming

our ecosystems and green covers; fertile agricultural lands are shrinking; wetlands and waterbodies are depleting. This sub-theme explores how we can manage urban expansions more sustainably. We shall discuss how to implement global sustainability goals through local processes. What are the linkages between peri-urban agriculture and urban sustainability goals? Does it make sense to invest and modernise agriculture around a megacity and reinvent the rural into a new synergetic model?

Session 2.5

Managing Megacities and Hinterlands Relations – Planning at a Regional Scale
Megacity – hinterland relations are often seen as one-way traffic, where market advantages of agglomeration economies dictate flows of population and material resources. Here we question how we can bring greater balance through innovative regional planning strategies. How do we strengthen economic roles of smaller cities as counter magnets – to generate more job opportunities for rural migrants closer to

their home and reduce population pressure on megacities?

Session 2.6

Alternative Models of Spatial Development: Neither Urban nor Rural?
Here we discuss settlement typologies beyond urban-rural binaries. We try to understand what the possible alternative models of spatial development are, and which ones are neither urban nor rural. How to strengthen rural economies, culture and lifestyle, in this age of rapid urbanisation? How do newly planned cities impact existing rural settlements? How are land and environmental conflicts being mediated?

Session 2.7

Beyond Megacities: Role of Mega Infrastructure in Hinterland Development
Mega logistics hubs, such as special economic zones, container terminals, and ports; and network infrastructure, such as railway corridors and highways anchor global supply chains in megacities. But

how do such mega-infrastructure projects shape regional settlement patterns and backward linkages? How do they shape industrialisation and urbanisation processes?

Session 2.8

The future of urbanisation: decentralization of functions, dispersal of urban form?

Discussions under the theme would revolve around various alternative possibilities regarding mega-urban regions – What are national level planning strategies regarding spatial concentration or dispersal? Is it still necessary for capital and other core administrative and economic functions to be co-located in a single urban centres? Or is it possible to envision that constellation or a network of different small towns connected by smart technologies will surpass megacities of today? And why do countries still need centralized cities as it was thousand years ago despite the all-around digital maze of our times?

Session 1: Beyond Megacities: Key Challenges and Alternatives 2.1

10 September (Tuesday), 9:00 - 11:00

Jean-Claude Bolay, Eleonore Labattut

Sustainable development, planning and alleviation of poverty

Many small and medium-sized cities in the global South can be considered as poor cities and are home to half of the world's urban populations. Through case studies from Burkina Faso, Brazil, Argentina and Vietnam, this paper brings attention to these intermediary cities and argues that revitalising urban planning from these perspectives is imperative.

Ratoola Kundu

The Informal Syndicate Raj: Emerging urban governance challenges in newly incorporated villages of Bidhan Nagar Municipal Corporation, West Bengal

This paper investigates the complex governance and livelihood transformations following the State-driven merger of an existing township with the surrounding unplanned and severely underserved village and urban areas. Understanding the frictions over access to urban services and resources between erstwhile rural-urban jurisdictions reveal the hybrid forms of institutional governance, which characterises the peripheries of cities of the Global South.

Teresa Marat-Mendes, Joao Borges

The role of food on re-imagining the sustainable city: from the neighbourhood to the region.

In search of a new socio-ecological metabolic perspective, this paper presents the preliminary findings of a research project, which aims to identify urban planning policies to support sustainable transitions towards low-carbon cities at the regional and neighbourhood scales. The results call for a stronger integration of the food system within urban planning and new theorising of the city in sustainable transition.

TRACK KEYNOTE

Stephen Goldie

Two Thousand New, Million-Person Cities by 2050 - We Can Do It!

From North Africa to the Western Pacific the world requires cities for an additional 3 billion urban residents in the next thirty years. Equal to 3000 new, one-million person cities, 2000 of them in Third-World countries with little urban planning capability. It is feasible, at an average annual cost of US\$1.3 trillion, but we have to start now!

TRACK KEYNOTE

Esther Vlaswinkel, Minze Walvius

The City of the Future - a new paradigm, a new vocabulary

Planning 'The City of the Future' requires a new way of thinking and therefore a new vocabulary. This new conceptual framework which has been explored in the city edge of Utrecht, shows how transitions in mobility, energy, climate can be integrated in the cityscape of the future.

Zhao Chen, Chunxiao Huang

The Weak-sided Urban Fringe and the Flexible Planning Approaches: case study of Yuhuatai District, Nanjing

An uneven development of urban fringe caused the diverse of the strong-sided fringe and the weak-sided one. The weak-sided urban fringe in China is characterised with mega-project driven urbanisation mode, unbalanced infrastructure supply, the fragmented governance etc. A flexible planning methodology could be adopted including the repair of embedded structure and the action-oriented organic regeneration.

TRACK KEYNOTE

TRACK KEYNOTE

TRACK KEYNOTE

Dani Muttaqin, Soelaeman Soemawinata, Adhamaski Pangeran

Township Development by Private Sector: Lesson Learned from Jakarta Metropolitan Area

This paper describes the history and process of Township Development in Jakarta Area since the 1980s, its location and distribution, challenges and opportunities and how private sector can become vital stakeholder in minimising negative impact of urbanisation.

Soumya S Warriar

The Anti-city

Cities like Gurgaon are witness to the rise of an era of privately planned “anti-cities” that serve a select few. With an intense cauldron of activities and transformations wrapping India, how does the profession of architecture and urban design, as capacity holders, evaluate and streamline the growth of the contemporary urban landscapes of our cities?

Mirza Permana

Settlement Development Analysis of Malang City Peri Urban Area and Its Conformity with the Regional Spatial Plan

The development of Malang City, Indonesia, has consequently led to an upturn of new residential, trade and industrial centres in the suburbs area. The paper presents a research, which aims at determining the characteristics of settlements in peri-urban area; analysing conformity to the regional spatial plan (RTRW), and establishing development direction.

Sohini Maiti, Satyajit Mal

Defining the RUrban - a case of Hyderabad

It is time to redefine both Rural and Urban through a sustainable future for the secondary cities - the RUrban dream of planners and designers. To conserve the rural soul while having the urban facilities is the aim but if that is a viable possibility is the subject of discussion.

Ivana Angelova

Building moratorium as a future instrument for tackling unsustainable urban growth

To regulate the undesirable urban growth, a local government may impose a moratorium on the issuance of building permits. Meanwhile, authorities will often conduct urban surveys based on which a new satisfactory urban plan and/or updated building regulations will emerge. This research looks at a few cases using this tool, focusing on the moratorium in Skopje, North Macedonia.

Erie Sadewo, Delik Hudalah, Ibnu Syabri, Pradono Pradono

Deciding Where to Live in The Suburb: Linking Utility-Maximization and Residential Mobility in Polycentric Urban Region Context

This paper questions the extent to which residential mobility between peripheral municipalities is linked to utility-maximisation, in polycentric urban region context. The results could only validate the importance of housing cost in polycentric setting. Residential mobility within suburban areas does not seem to be motivated by lower housing or transportation cost, nor to be near to major employment districts.

Dianhong Zhao, Ding Shi

A Study on the Approach of Sustainable Development on Traditional Cultural Landscapes Surrounding Metropolitan Shanghai

This study focuses on the methodology of effectively utilising cultural landscape resources and promoting further harmonious development of urban-rural relations in Shanghai. By classifying the cultural landscapes, the paper puts forward the mode of protection and sustainable development of cultural landscape resources, thus providing a basis for heritage protection, urban and rural planning and tourism planning within Shanghai.

Yanqun Li, Hong Geng, Erpeng Shi

Response path adapted to the unbalanced shrinkage of small towns in metropolitan areas: A case study of Wuhan in China

By taking Wuhan city as an example, this paper comprehensively measures the external characteristics of “unbalanced shrinkage” of small towns in metropolitan areas, and explores the formation mechanism of “balanced shrinkage”, and puts forward the adaptive response path, so as to promote the healthy urbanisation of metropolitan areas.

2.3 Session 3: Metropolitan City and Its Shadow Regions

10 September (Tuesday), 14:00 - 15:30

TRACK KEYNOTE

Liang He

From one-way to interactivity: difficulties and strategies in the planning of adjacent areas of metropolis

This planning study combines the author’s planning practice, focusing on the adjacent area of Shanghai and Zhejiang. Analysing the functional coordination and infrastructure convergence in regional coordination from the microscopic perspective. Key issues such as administrative barriers, some planning strategies are carried out. Based on this plan, the three major difficulties in regional cross-border coordination planning are as proposed.

Tianzhu Liu, Jingsheng Li

Out-migrate Elites as Rural-Urban Link: an Innovative Pathway Toward Rural Development Around Metropolis

This paper questions what the role the Out-migrate Elites (OMEs) play in rural development. Participatory research method was employed to conduct the research. The binary nature that OMEs have was concluded: their social relations with the village are the motivation of their participation in rural affairs, while their urban life experience contributes to the significant resources that the village requires.

2.4 Session 4: Urban Expansion and Food Supply: Megacities Resiliency

10 September (Tuesday), 16:00 - 17:30

Thomas Weith, Meike Fienitz

Just Schwerin - Balanced urban-rural development?

The transdisciplinary study analyses current challenges, conflicts and approaches to solutions regarding an integrative urban-rural development, using the case of the German city Schwerin and its surroundings. The focus is on the question as to how far solutions for conflicts between city, surroundings, and rural areas can be.

Jason Hilgefort

Rural Revolution, leveraging emerging infrastructures

There is a global issue facing the rural, from Italy, USA, to SEAsia, that has left them behind rapidly expanding urban centers. Within Asia model is emerging. In key

areas, new infrastructures are being leveraged to allow for new opportunities for countryside places within the larger constellation networks of cities.

Antonella Contin, Sandy Jiyoon Kim

How to Grap the Power of the Place: The TELLme Project and Metro-dology

As a response to contemporary metropolitanisation processes, the ongoing TELLme Erasmus+ project attempts to define a holistic methodology, the Metro-dology; structure a training lab where academia and practitioners can discuss the issues, principles, and gaps of the metropolitan area; and develop mapping tools to comprehend the metropolitan complexity and support the training.

Yi Li

Analysis of the Correlation between the Establishment of Rural Land Share Cooperatives around Shanghai and the Government & Villager Satisfaction - A Case Study of Jinxi Town, Kunshan City

Cooperatives have become an important buffer for migrant workers in Shanghai's surrounding villages, increasing the employment rate, providing green agricultural products, inheriting agricultural technologies and activating local communities. Cooperatives can promote the large-scale operation for agricultural land. It is suitable for areas with deep industrialisation and urbanisation. Cooperatives need to be improved in equity distribution and agricultural production.

QiuYi Jiang, Guoquan Zhang, Xiaoyi Wen

Exploration and practice of formulating strategic planning for rural revitalisation in the Shanghai metropolitan area - take the rural revitalisation of Jinxi town in Kunshan as an example

At present, China's rural revitalisation research mainly focuses on rural theory and lacks rural research from a regional perspective. Taking Jinxi Town in Jiangnan as an example, this paper analyses the relationship between regional development and measurement and demonstration through big data relative comparison, which is expected to provide new ideas for rural revitalisation in metropolitan areas.

Zhengyin Lu, Xiaoyi Wen

The Shrinkage and revitalisation of villages in metropolitan area of mega cities

Water system and water-related activities are weakening during the rapid development of mega cities. Taking two Asian cities and their surrounding villages as examples, water's connectivity and productivity can be crucial for villages and its balance with big cities.

Session 5: Managing Megacities and Hinterlands Relations: Planning at a Regional Scale

2.5

11 September (Wednesday), 11:30 - 13:00

Dianhong Zhao

Construction and empirical study of evaluation index system of rural revitalisation in China's metropolitan areas from the perspective of social ecosystem - taking villages and towns around Shanghai as examples

This paper looks at the rural revitalisation of 20 villages around Shanghai, China, to test the feasibility and application value of the evaluation index system based

on social ecosystem perspective, and to suggest the direction of policy intervention.

Huimin Qi

Analysis on Integration Path of Urban and Rural Industries Based on Economic Data Model - A Case Study of Overall Strategy Planning of Taiyuan Rural Revitalisation

In the background of ongoing urbanisation in China and prominent, dualistic, contradiction between urban and rural areas, rural revitalisation is extremely urgent. Currently, common problems concerning industry, ecology and humanities exist in rural areas. This paper attempts to figure out the causes of differences in industrial development in rural areas on the basis of macro data analysis and industrial spatial distribution.

Tathagata Chatterji

Balanced Regional Development through District Planning - A comparative analysis of Indian and South African planning frameworks

This paper compares approaches towards balanced regional development through district planning in India and South Africa to draw policy lessons. The comparative analysis of two major transitional economies shows potential of district planning to achieve balanced regional development. It also underscores the need for the regional planning mechanism to combine features of top-down strategic approach and bottom-up participatory approach.

Xue Jiang, Tianyu Zhao

Whole-region Tourism Greenway Network Organization Mechanism Based on Gravity Model Flow Measurement

Greenway plays an important role in the integration and connection of urban and rural environment with the continuous expansion of metropolis. This research is based on the gravitational model flow measurement to constitute potential greenway network structure with comprehensive factors formed by the minimum cost path method, which improves the scientific of greenway network evaluation and organisation.

Session 6: Alternative Models of Spatial Development: Neither Urban nor Rural? +Panel Discussion

2.6

11 September (Wednesday), 14:00 - 15:30

Bin Li, Weihong Guo, Yuqing Zhang

Rural revitalisation of Batang village in Guangdong province under the background of balancing urban and rural development

Balancing urban and rural development by rural revitalisation is happening current in China. With the lack of infrastructure, unbalanced economic development, dilapidated living environment and insufficient sharing between urban and rural areas, this paper based on ReBAM theory, field survey and literature review to solve these problems in an example of Batang village from living, production, ecology and governance aspect.

Ye Liu, Xiaoyi Wen

Planning Practice in Areas Beyond Megacities under the Rural Revitalisation Strategy in China: Case Study of the New Jijiadun Village - A Concept of “Co-Creation Community for Rural Life”

This paper describes an emerging pattern of rural life in areas around Shanghai, under the background of the Chinese Rural Revitalisation Strategy. It focuses on how these planners have broken the boundaries between the urban and rural areas, taking the city dwellers back to the rural and natural life while bringing vitality to the rural areas.

Bakti Setiawan, Sita Rahmani

Global-Local Dynamics in Urbanisation: The transformation of the desa-kota in Bali and the roles of Adat institutions

This paper shows and argues that in the dynamics process of urbanisation in Bali, Indonesia, local actors and forces have play significant roles in the production of urban spaces. It argues that the existing centralised - Indonesia, formal/legal, urban policy and planning system does not fit with the existing dynamics of local-cultural variations of urbanisation.

2.7 Session 7: Beyond Megacities: Role of Mega Infrastructure in Hinterland Development

12 September (Thursday), 11:30 - 13:00

Roni Susman, Thomas Weith

Factors Influencing Land Use Conflicts in Parimban Seaport Indonesia

Our study from Patimban Indonesia explores the influencing factors of large scale land transformation for seaport development resulting in land use conflicts and options for governance in the future.

Haixuan Zhu, Sai Liu, Xiaoyu Jia

Urbanisation Mechanism Study under the Dynamics of State Capitalism: A Case Study of the Far East with the Construction of the Siberian Railway in the Early 20th Century

Due to special geopolitics in China at the end of the 19th century, focus on the construction of port and railway, become the government's top priority. This induced capital competition among China, Japan, and Russia, formed the export-orineted urbanisation mechanism, and laid the hub-railway network - hinterland cities structure, which rapidly promoted the modern urbanisation process in Northeast China.

Muhammed Ziya Pakoz, Ahmet Bas, Fatih Eren

An Analysys of the Changing Role of Istanbul as a Megacity in the World

This paper focuses on the city of Istanbul and aims to discuss the changing position of the city within the globalised world in terms of economic, social and cultural interactions, and to follow the changes in the hinterland relations and the spatial structure of the city in time.

Dwitantri Rezkiandini Lestari, Latifah Latifah

Anticipation Strategy for Urban Conurbation in Semarang - Surabaya Corridor

Semarang-Surabaya corridor is the backbone for economic growth of Central Java and East Java. Semarang-Surabaya corridor development is expected to create positive externalities, such as creating spillovers

in urban areas along the corridor. Besides creating positive externalities, the development of semarang-surabaya corridor is expected to create uncontrolled urban conurbation, as it happened in Jakarta - Cikampek corridor.

2.8 Session 8: The Future of Urbanisation: Decentralization of Functions, Dispersal of Urban Form?

12 September (Thursday), 14:00 - 15:30

Paramita Rahayu, Fadjar Mardiansjah, Deden Rukmana

Urban Population Growth and the Growth of Towns and Cities in Indonesia: the challenge of non-statutory town development

This study examines the emergence of new tendencies in the current Indonesian urbanisation process that face the development of non-statutory towns in many urbanised Kabupaten (non-urban districts). These towns also bring significant challenges in urban future in Indonesia since they play significant roles in the future urbanisation process still they lack capacities in managing urban development.

Pietro Elisei, Elena Batunova, Miruna Draghia

The CRISALIDE Project: When innovative planning processes re-balance urban development and create new quality of life using the opportunities provided by the rise of the digital city.

CRISALIDE, a collaborative project involving EU and Russian researchers, is experimenting with the creation of a digital innovative platform aimed at facilitating the renewal and regeneration of brownfields in Rostov on Don. By creating a user-friendly tool, this project supports strategic, smart and integrated urban management to promote stable growth and effective processes of innovation based on participatory planning.

Derry O'Connell

The Smaller Town as Component of an Urban Settlement Cluster

The development of fast sustainable transport has introduced the concept of complementary settlement clusters as an alternative to the large city. Recent research in a number of towns in Ireland examines how the typical small town is adjusting to this.

David Green, Sulaiman Al Rashad, Paul Knight, Nicole Cammelli

A 21st Century National Ordinance

This paper explains the theoretical foundations of the National Ordinance in Kuwait and provide a series of case studies across scales that describe the operational aspects of the Ordinance for both spatial structuring for new and existing development, and projecting and tracking sectoral development. It also discusses the universality of this system and its application in the USA and the UK.

Authors are responsible for the content of their work.

Track 3

Liveable places and healthy cities

Planning for people



CONGRESS TEAM

Jens Aerts
(Belgium/ USA)
Mahak Agrawal
(India)

LOCAL EXPERTS

Aji Pamungkas
Irwan Prasetyo

Migration, unplanned urbanisation and urban inequities affect the well-being of city dwellers on an individual and collective scale across the world. Cities expand more rapidly than can be sustained by infrastructure and services, and the cost of living is rising far more rapidly than wages. Lack of basic services affect a sizeable part of the population. In addition, the physical urban environment introduces new types of vulnerabilities that require a systematic approach through urban planning: obesity, mental diseases and the decrease of play and physical activity, multiple forms of exposure to pollutions and unsafe public spaces. These challenges come with a high cost for the weakest but also for the community, leading to high public health costs, social unrest, fragmentation, urban violence and terrorism, ethnic tensions and more.

Planning for and with people is at the core of creating a viable future: Improving the quality of life together, planning safe spaces and clean infrastructure, promoting child-responsive and multi-generational environments. Engaging communities in the process of planning will spark innovation, improve knowledge and decision making for the best solutions, accelerate change and ensure citizens adopt sustainable behaviours from early age on.

Is liveability a luxury or a human right? How can it be defined and measured? Can we plan for it? Are there universal principles or different ones depending on culture?

Sessions:

Session 3.1 (Special Session)

UNICEF Opening Session: Children and Cities, Planning for the Future
Discussions under track 3 highlight the complex relation between urban health issues, spatial inequity and environmental

challenges. Especially in large and fragmented urban contexts, this requires a focus on equity and people-centred urban planning approaches, to ensure urban development and upgrading translates in healthy, safe and inclusive spaces. Analysing the evidence, successful initiatives, strategies and projects, this opening session, organised by UNICEF and supported by a panel of experts, will highlight priorities for action in order to build and plan healthy cities for children and their communities.

Session 3.2

Planning and Design for Collective Space and Transport for Children and Communities

Public space networks are the backbone of many planned cities and allow access to the city on various scales and in all its meanings: as a functional place to undertake a journey, but also to meet, play,

learn and grow up to become a citizen, to build the community for all generations. If all children have access to public space, cities are successful for everyone. This session shows how crucial planning and placemaking approaches for collective spaces and safe mobility are for children and communities.

Session 3.3

Participatory Planning and Multi-generational Well-being

Community-led planning is more and more recognised as a sustainable approach to address urbanisation challenges, in absence of or as a complement and alternative to formal planning. Various examples show that participatory planning ensures inclusion in decision making and fosters community development on a neighbourhood level, as fundamental building stone of any size of city.

Session 3.4 (Special Session)

Planning Sustainable Urban Childhoods for the Youngest

Planning and designing a city to better meet the needs of babies, toddlers and the people who care for them is one of the best investments a city can make. Growing evidence from neuroscience, public health, education and economics makes it clear: Experience shapes the developing brain. One of the best ways to ensure good experiences is to support the people who care for babies and toddlers, beginning in pregnancy. City planners have a big role to play: If you could experience a city from 95cm – the height of a 3-year-old – what would you change?

Session 3.5

Sustainable Mobility and Streets for People

Despite the potential of urbanisation to reduce distances, increase density of activities and enhance walking, biking and mass transit, transportation planning seems to prioritise individual car use. This leads to clogged street spaces, traffic injuries and polluted air. This session explores sustainable urban mobility strategies that prioritise the well-being of people and looks for inclusive solutions for all (gender, ages).

Session 3.6

Data, Indicators and New Paradigms for Public Health

Data is key for sustainable urban planning: to collect it, to use it for decisions making, to evaluate initiatives and to monitor progress. There is quantitative and qualitative data, to be collected with new technologies, but also through social innovation, as this allows communities to engage and to share knowledge. This session explores the sense of open data, indicators, evaluations methods and mapping tools that foster community engagement, to support better planning of healthy and just cities.

Session 3.7

Public Space, Public Life

Public spaces are the core of cities. They can be formally planned, but the public life can be informal at the edges and make unexpected spaces more inclusive and welcoming for specific vulnerable groups such as migrants and women. This session explores the relation between urban form, liveability and values of public spaces and how the latter is also about the daily process of making meaningful places from neutral spaces.

Session 3.8

The Right to Housing and Livelihoods

Housing is more than four walls equipped with basic services of water, sanitation, drainage or electricity. Housing is a human right, strongly interlinked to livelihood, and a critical part in redressing the complex multi-dimensional challenges of poverty, inequalities, inequities and exclusion. The sub-track discusses and reflects upon lessons learnt from housing plans, schemes and projects in different parts of the world. It also explores varied perceptions to housing and livelihoods across various generations in diverse geographies and the feasibility of select tools and techniques that can tackle housing issues.

3.1 Session 1: (Special Session) UNICEF Opening Session: Children and Cities, Planning for the Future

10 September (Tuesday), 9:00 - 11:00

TRACK KEYNOTE

Jens Aerts, Thomas George

Panel Discussion on Children and Cities

The growth of safe and sustainable cities in East and Southeast Asia are inextricably linked to the well-being of the region's children. The panel session offers insight from panel experts on challenges for children in cities and how urban planning can be a support to ensure children get the urban childhood they deserve in accordance with UNICEF's recommendations.

Lynn Tang, Vivian Pun, Ririn Radiawati

Importance of air quality management for public health and development progress in Jakarta, Indonesia

This talk highlights approaches to combining strategic use of innovations in air pollution monitoring, emissions estimation and source apportionment modeling to inform near-term control measures for priority sources at a local and regional level in Jakarta.

3.2 Session 2: Planning and Design for Collective Space and Transport for Children and Communities

10 September (Tuesday), 11:30 - 13:00

TRACK KEYNOTE

Gregor Mews

Realising the potentials of a design-dividend towards a loveable urban future

Urban living in the early part of the 21st century has not been good for children and young people. The contribution shares valuable insights on challenges associated with the need for a paradigm shift that takes a design-dividend into consideration and enables better health outcomes in urban developments.

Dhea Andriani, Indarti Komala Dewi, Janthy Trilusianthy Hidayat

The Implementation of Children Friendly City in DKI Jakarta through Assesment of Child-Friendly Integrated Public Space (RPTRA). (Case Study: Kecamatan Kemayoran, Jakarta Pusat)

Child-Friendly Integrated Public Space is an integrated public space for several ages, functions as green open space, child development facilities, and community empowerment. DKI Jakarta built 6 RPTRA in Kemayoran subdistrict. RPTRA characteristics depends on facilities, activities, location, and land area. Two RPTRA, namely Mutiara Sumur Batu and Harapan Mulya, have met the policy standards of DKI Jakarta government.

Ran Guo

Outdoor Public Space Activities Characteristics of Children and Their Inter-generational Parents and Design Strategies from the health perspective: a case study in Harbin, China

Taking care of children by their grandparents has become one of the most important forms in the current Chinese urban families. To design and build appropriate outdoor public space (OPS), this paper studies the connection between OPS, space comfort, facilities arrangement, the social attribute of children and their inter-generational parents and healthy activities.

Shuai Li

Children-friendly design of Urban public space: based on the study of Shanghai, China

With SP method, this paper found the factors in spatial traffic and social aspects influencing children's safe path in high-density urban environment. Among them, the path space factor and the path traffic factor have more significant influence. Recreation of places, dangerous places, and crossing the street without any help are the top three influential factors.

Session 3: Participatory planning and Multi-generational Well-being 3.3

10 September (Tuesday), 14:00 - 15:30

Xuhui Liu, Yu Yifan, Xin Sui

Neighborhood Environment and the Elderly's Subject Well-being

This paper analysed the relationship between neighbourhood built environment and the elderly's subjective well-being in Shanghai. The results show that under the control of socio-economic variables, neighbourhood built environment can significantly affect the subjective well-being of the elderly. Per capita green space area, road network density, location, and housing construction area are the significant environmental elements.

Mengqi Zhong, Yuanyi Shen, Yifan Yu

Association between Neighbourhood Built Environment and Body Mass Index among Chinese Adults: Hierarchical Linear Model

This paper examines the association of built environment and body mass index based on the data from 29 provinces in China. The paper concludes that living in walkable neighbourhoods is associated with more physical activity and lower overweight/obesity, while adults in higher-income neighbourhoods have lower BMI and higher mental condition. These findings have implications for urban planning which are presented.

Constant Cap

The Importance of Participation and Inclusion in Developing Livable and Affordable of Housing, Transport and Social Services in Kenya

The paper looks at the importance of proper communication, participation and inclusion in urban development. It lays some focus on how they have impacted the eventual outcomes of some of the recent housing and transport projects that various African Governments and Development Partners have undertaken as a response to the ever increasing challenges within urban centres.

Poeti Akbar Jurian Edelenbos

Temporal and Regular Place-making in Indonesian Kampung: Creating Urban Spaces that Enhance Local Empowerment

This study aims to examine the impact of place-making through 'regular' everyday life and 'temporal' art-cultural festivals on the local capacity of Indonesian kampung. In order to achieve a better quality of place-making, the enhancement of relational resources across age group is necessary. Challenges on the viability of place-making were noted as well.

Slawomir Ledwon

Health and the city: creating built form and planning for the physically active

This study explores the relation between the city, built form and citizens' physical activity, in order to maintain a healthy population. Taking running as the main case study, it shows the examples of best practices encouraging exercise in urban areas, while mitigating obstacles and introduces the runnability concept.

Session 4: (Special Session) Planning Sustainable Urban Childhoods for the Youngest 3.4

10 September (Tuesday), 16:00 - 17:30

Speaker: Rushda Majeed

Planning and designing a city to better meet the needs of babies, toddlers and the people who care for them is one of the best investments a city can make. Growing evidence from neuroscience, public health, education and economics makes it clear: experience shapes the developing brain. One of the best ways to ensure good experiences is to support the people who care for babies and toddlers, beginning in pregnancy. City planners have a big role to play. Clean air and water. Walkable neighbourhoods that cater for the basics a young family needs. Multi-generational public spaces close to home that allow small children to explore safely. Safe routes and reliable transport that make it easy for caregivers traveling with small children to get to healthcare, childcare and healthy food. Such urban amenities help lay a crucial foundation in the early years of life for good health and learning into adulthood. And they make cities better for people of all ages. Yet babies, toddlers and the people who care for them can be invisible to city leaders and planners as a group with specific needs. That's why the Bernard van Leer Foundation's Urban95 initiative supports cities worldwide to ask and answer a bold but simple question: if you could experience a city from 95cm—the height of a 3-year-old—what would you change?

This workshop will take participants through India's Infant, Toddler and Caregiver Friendly planning, policy and design guidelines developed for and at the request of India's Smart Cities Mission by a team convened by the Bernard van Leer Foundation's Urban95 initiative. The workshop will also feature presentations by the World Resources Institute (WRI), Indonesia on safe routes to schools for young children and their caregivers and the Institute of Transportation and Development Policy (ITDP), Indonesia on its kampung project to improve accessibility and provide public spaces in consultation with communities and with input from children and women. The workshop will be hosted by the Bernard van Leer Foundation.

3.5 Session 5: Sustainable Mobility and Streets for People

11 September (Wednesday), 11:30 - 13:00

Yang Ye

Residents -Perceptions of Walkability Attributes in Cold Region Chinese Cities: Reliability and Validity

This study tries to develop a model , NEWS-CRC , to reflect the characteristics of cold region Chinese city built environment in residential areas and people's behaviour mode, and prove the model could illustrate residents' perceptions of walkability attributes in cold region Chinese cities and could be use in other Chinese urban attributes studies related to walking.

Cheng Peng, Jingsheng Li

Research on the built of Healthy Walking System for Urban Central Business District: A Case Study of Jiangbeizui CBD in Chongqing, China

Jiangbeizui CBD in Chongqing, China, is facing sub-healthy conditions: the urban space is fragmented in mobility system, service system and landscape due to topography and construction. The paper proposes three hierarchies of healthy demands in walking system design together with spatial strategies to help build a continuous pedestrian system for CBD's benign circulation in both space and society.

Fenita Indrasari

In between luxury of housing and affordability of transportation: Exploring automobile dependency of housing estate residents and kampung dwellers in suburban Bandung, Indonesia

Housing estates in Indonesia are built similar to gated communities where residents are forced to be automobile dependent. However, it can be reduced by providing public access points which contribute to a more active travel.

Laksmi Tungga Dewi Jaya Wisnu Wardani, Natalia Tanan

The Pedestrians' Stories: Towards Walkable Cities in Indonesia

The paper discusses the process of providing walkable pedestrian facilities in three cities in Indonesia which is considered lacking due to the limited number and poor quality. Through identifying problems and recommendations to improve the quality of pedestrian facilities, the findings aid policy development on pedestrian facilities and green planning at the Ministry of Public Works and Housing.

Sebastien Goethals

Planning Transit-Oriented Development (TOD) in an African City Facing Rapid and Informal Urban Growth: the Case of the Urban Mobility Plan of Conakry, Guinea

Responding to the lack of urban governance and planning culture, in particular to the lack of urban development strategy and land use control, in Conakry, Guinea, the article illustrates the methodology of the capital's Urban Mobility Plan as an operational decision-making tool, and a strategic investment plan to build people-oriented urban infrastructure and healthy mobility.

Fernando Caetano, Jeronimo Meira, Suzi Rodrigues

The definition of accessible routes on sidewalks: a new challenge for Brazilian cities

The purpose of this paper is to present a method (virtual audit) to support Brazilian local administrations, in particular of small cities, to define accessible routes on

sidewalks. It is expected that this method encourages local administrations to audit sidewalks situation aiming to include walkability's improvement in their investment agendas; and to define public policies towards urban environment qualification.

3.6 Session 6: Data, Indicators and New Paradigms for Public Health

11 September (Wednesday), 14:00 - 15:30

David Green

Health Districts: Creating Healthy Cities

The paper examines several specific cases across the globe that problematise scientific research that informs methods of urban and city design and argue for protocols to frame a scientific method for planning and urban design at a consistent, international level.

Daniel Mambo Tampi, Linda Darmajanti, Irene Sondang Fitrinitia

Sustainable Urban Development: Building Healthy Cities in Indonesia

In 2045, the projection results show 61.7% of Indonesia's population will live in urban areas. The purposes of this paper is to find out actors, factors, and top healthy cities in Indonesia. The analytical method in this study is log frame analysis. The result is building healthy cities with closely related to aspects of life in urban areas: health services, environmental, and socioeconomic aspects.

Chengcheng Liu

Strategies on Healthy Urban Planning & Construction for Challenges of Rapid Urbanisation in China

This paper studies how to achieve the equalisation of medical and health services and the sustainability of urban environment in China through four strategies of healthy city. China has formulated a national plan for healthy cities, reformed its territorial and spatial plans, formulated local plans for the distribution of health care facilities, and carried out urban repair and ecological restoration

Gabriela De Souza Tenorio

Better places for a liveable - and lively - city: a method of Post-Occupancy Evaluation of public spaces.

This paper brings together the knowledge and repertoire available on public spaces' design, translates, complements and structures them into a method of Post-Occupancy Evaluation of public spaces. It is offered as a tool to support those who deal with public spaces at different levels - from academic studies to municipal management.

Dayinta Pinasthika, Puteri Rizqi Amelia, Elkana Catur

Hardiansah, Adriadi Dimastanto

IAP Indonesia's Most Livable City Index (MLCI): A Perception-Based Survey to Measure City Liveability Index

The Indonesian Association of Planners (IAP) developed the "Most Livable City Index"; (MLCI), surveying city liveability based on citizen's perceptions. It has been conducted since 2009 and was last held in early 2017. The indexing measurement was based on 28 assessment criteria, which were conducted in 26 cities throughout Indonesia. The result showed the most and the worst cities in terms of best liveability.

Authors are responsible for the content of their work.

Raeesa Ghoor, Keneilwe Pholo, Karishma Busgeeth

Developing a Spatial Transformation Scoring Tool to Monitor South African Catalytic Housing Projects

The Spatial Transformation Scoring Tool (STST), developed by the Monitoring and Evaluation, Knowledge Management and Research Planning unit in the Housing Development Agency is currently being used to assess housing projects classified as catalytic projects. This presentation intends to explore the challenges, opportunities and lessons learnt of the STST in monitoring housing projects in South Africa

Session 7: Public Space, Public Life 3.7

12 September (Thursday), 11:30 - 13:00

Hang Sui, Dongfeng Yang

Analysing the perceptions of the elderly on space vitality and related environmental factors based on residential community

Taking Dalian, China as the research range, this paper identified the potential environmental factors which related to the perceived level- and actual satisfaction- of the elderly offered by the “space vitality” of the residential community, and put forward the environmental optimisation strategies promoting mental health for the elderly.

Juan Li, Anrong Dang

Empirical study on the evaluation of publicness of public space: taking Chinese megacity as the case

This study proposes a pragmatic model to evaluate the publicness of public space and come up with a systematic framework based on the Chinese context. It has been applied to a community within Beijing to find out how public the public spaces are in the Chinese megacity. The empirical study will provide suggestions for urban planning and governance.

Matej Niksic

Liveable and just public space - Conceptual approach to urban walkability on the case of Ljubljana, Slovenia

The research aims to point out the power and responsibility of urban planning as a discipline in providing the urban walkability conditions within the just city agendas. It points out the need for the planners in the transitional socio-economic contexts to develop new skills and competences to assure social and spatial cohesion as a precondition for the truly liveable places.

Apostolos Kyriazis

Urban morphology and behavior mapping in Abu Dhabi's public spaces: informality as an interaction of cultural context and urban form.

This paper presents findings for a link between the design, use and the surrounding morphologies within the diverse sociocultural context of Abu Dhabi. Fourteen public spaces were examined in terms of their typology, functions, social profile, urban context and connectivity. The program amplifies the importance of informality as an indicator of urban health, programming, social cohesion and inclusivity.

Adriadi Dimastanto, Rachmatika Fitri Insani Tanjung, Tri Saptiwi

Improving the Quality of Public Space in Bogor City Through CSR Founding Scheme

This paper aims to explain one of Bogor's park development projects using the corporate social responsibility (CSR) fund scheme. The municipality's budget available for improving the quality of public spaces, especially to build

city parks, were limited. However, by inviting the private sector, the city government could innovate the provision of city parks and set an example in Indonesia.

Session 8: The Right to Housing and Livelihoods 3.8

12 September (Thursday), 14:00 - 15:30

Akino Tahir, Risye Dwiyani, Saut Sagala, Nino Viartasiwi

Secondary cities and forced migration: accommodating refugees and asylum seeker in Indonesia

Secondary cities are impacted by forced migration trend around the world. Such cities attract forcibly displaced migrants who view them as more accessible and “friendly” compared to primary cities. The study explores the capacity of secondary cities in Indonesia in accommodating the influx of displaced people. By understanding the system, we hope to identify improvement to the city resilience.

Mengqi Zhong, Yifan Yu

The Spatio-temporal Disparities in Healthy Food Accessibility: A Case Study of Shanghai, China

This paper examines the spatio-temporal disparities of health food accessibility through a case study of Shanghai communities. Based on the disparities, we use the spatial autocorrelation to analyze the spatial patterns of healthy food accessibility and propose the corresponding improvement strategy.

Fujun Xia

Discussion on the Fairness in the Planning of Relocation Community - Taking the Constructive Detailed Planning of Longhai Community as an Example

Through the research on the constructive detailed planning of Longhai South District, the strategies for community planning of demolition and resettlement under the background of urbanization in China are proposed, which are to strengthen public participation, innovate organizational management system, consider the future livelihood of residents and fairness and homogeneity.

Mahak Agrawal

A Dream of open defecation free India? Decolonise and innovate urban sanitation to reach those left behind

There is no delicate way of describing matters of shit. Through evidence, urban narratives from India, the project reflects upon the less spoken dimensions of sanitation deprivation in India and most importantly why and where we are going wrong, and what we can do to truly achieve an Open Defecation Free India- as there is no one ‘right way’.

Rouve Bingle

Hunger in revered spaces: Exploring the impact of planning on the university campus food system in South Africa

This exploratory study examines how campus planning and its spaces affect the food security of students. The study is conducted on the campus of the University of the Free State in South Africa and uses a mixed methods approach which includes an online survey, qualitative interviews and a site inspections.

Track 4

Knowledge economies and identity Planning for culture



CONGRESS TEAM

Nasim Iranmanesh
(Iran)
Piotr Lorens
(Poland)

LOCAL EXPERTS

M. Faisal
Dias Budiati Prasetyamartati
Ratna Sri Widyastuti

Culture and heritage are both taking globalising cities forward and being put at risk by them. Relentless pressures of urbanisation and 'urban marketing' initiatives sometimes promote an image of the city that hides or even removes local diversity and 'unwanted pasts'. Yet culture and heritage are essential to retain cohesion and create local identity in a megacity, which would otherwise be faceless.

Within the themed sessions the interrelations between locality, local identity and megacities will be explored, focusing on the four key sub-topics:

- Historic cities, local identities and city branding
- Design for urban regeneration
- Culture-sensitive approaches to city planning
- Culture, heritage and sustainable development.

In addition, a special session dealing with culture as urban renewal resource will become an introduction to the entire track. Accompanied by keynote speeches, all sessions will build a vast picture of contemporary issues associated with 'planning for culture'.

As a result, it will be possible to discuss how local identities and modern approaches towards dealing with heritage can be reconciled with global marketing of city and globalising urban models. Also, the issues associated with shaping the planning strategies for culture and identity different in a megacity will be dealt with. These shall allow reflection on the role of cultural development and creative industries in contemporary city planning and development along with redefining the approaches to mass tourism and its role in preservation of the local identities. At the same time, within the sessions it will be possible to discuss the reverse questions:

How can cities and megacities promote their culture and local identity to establish a dynamic knowledge economy, capable of shaping locally sensitive urban solutions?

Each of the track sessions will start with the pre-selected keynote presentation. This will be followed by a discussion panel, during which each of the presenters will be asked by both track coordinators questions regarding the most important messages associated with their papers. Afterwards, a more general discussion with active participation of all session participants will follow. Such a structure shall allow focusing on key messages delivered within the papers submitted and-at the same time-drafting clear conclusions regarding the sessions' topics.

Sessions:

Session 4.1

Cool Planner in South East Asia: City Resilience Design

Understanding urban conditions of our cities in a new way – embracing informality, reconsidering built environment policies, and encouraging formation of new public landscapes – is at the very base of climate change resilience. What is the role of designers and planners in this process, in the Asian context?

At this year's World Planning Congress in Jakarta, ISOCARP continues with its interactive Cool Planner Talks, tackling the challenges, the thrills and the responsibilities planning profession faces in the context of climate change. The

upcoming Cool Planner Session focuses on South East Asia and examines the profile and the design skills Cool Planner needs in this region, in order to help cities become more resilient. As the first Cool Planner Session during 2018 ISOCARP's 54th World Planning Congress in Bodø, (Norway) has shown, the profession of urban planning is no longer limited to urban space. It has expanded to other fields and merged with other expertise. The aim of this year's Cool Planner Session is to showcase and discuss examples and challenges of "designing for resilience". Can we frame the main ingredients of the City Resilience Design? How can we further develop and promote it? What is the role of technology and what do planners need to know and learn in this field? How can design help make realistic, bankable climate resilience projects for neighbourhoods and districts? The Session will host four short talks from invited speakers and a peer-to-peer experts' panel. The talks will highlight projects, best practices, and experiences from urban professionals across many fields of climate change resilience, with relevance to Asian, South Asian and particularly Indonesian context. Guests and speakers at this year's Cool Planner SEA Session are experts from international planning practices, financial institutions, academia, cities governances and governmental planning institution

Session 4.2

Culture-sensitive Approaches in City Planning

The scope of the topics associated with this session will include a vast array of issues associated with city planning in culture-sensitive areas. Both the tangible and intangible cultural assets and issues will be dealt with. At the same time the issues associated with minority cultures and specific manifestations of cultural activities and heritage will be discussed. On this basis the specific concepts and solutions for diversified places, cities and regions will be presented, with the special focus on "non-traditional" heritage sites. The cases analysed will include location in Europe and Asia, with interesting presentations

from – among others – Germany, China and Indonesia.

Session 4.3

Historic Cities, Local Identities, and City Branding

Within this session the issues associated with managing local identities will be discussed. Topics dealt with will include both reinventing heritage as notions of local identities as well as development of interrelations between heritage and city branding. A number of issues will be discussed, including the "shared heritage" (e.g., colonial cities), non-traditional types of heritage (e.g., hydraulic infrastructure or underground built heritage) as well as interrelations between heritage and socioeconomic development. Also, the ways of using the new technologies and concepts for the purpose of shaping the modern urban development strategies will be part of the session discussion. The cases analysed will cover a wide range of locations, including China, Dubai, Indonesia, Central Asia, Iran and others.

Session 4.4 (Special Session)

Beyond Heritage: Culture as Urban Renewal Resource

The Beyond Heritage: Culture as Urban Renewal Resource Session focuses on the contemporary approaches in using cultural heritage as a tool for urban renewal. Based on the results of the recent two very different UPAT workshops in China – Suzhou's "Panmen-Shantang Street in the Grand Canal National Culture Park" and Wuhan's "New Hangzheng Avenue" – the Session will look beyond the layers of history, and examine how to use heritage as a motor to promote cultural values, restore social cohesion, foster sustainable economic growth and revive public spaces.

Session 4.5

Design for Urban Regeneration

This sub-theme will include a number of papers / presentations associated with new approaches toward design for transformation of cities. Both general concepts and particular tools will be

discussed, including the real-life cases. These will span from regional to very local scales and include the discussion of both analytical and decision-making tools and instruments. In addition, a number of concepts associated with urban regeneration, such as resilient planning and healthy cities will be discussed. The cases analysed will cover mostly Asian locations, although a strong set of references to other parts of the world will be made.

Session 4.6

Culture, Heritage and Sustainable Development

The main purpose of this session is to discuss the culture and heritage issues in the wider context of the sustainable development concept and practice. In particular, the interrelations between urban form, socioeconomic issues, environmental concerns as well as heritage and identity aspects of urban transformation will be put in the centre of this debate. On that basis, more specific issues will be dealt with, such as roles of various types of development and economies as well as emerging and re-established knowledge hubs in the process of sustaining urban and regional development. Furthermore, social problems associated with gentrification and social exclusion will be debated on. The cases analysed will include both (but not exclusively) Asian and African cases, including South African, Nigerian, Indonesian and Chinese ones.

In addition, a special session dealing with culture as urban renewal resource will be organised. Accompanied by keynote speeches, all sessions will build a vast picture of contemporary issues associated with 'planning for culture'.

Session 4.7

Panel Session on Culture-led regeneration: Issues and challenges for planning and development processes

Session 1: (Special Session) Cool Planner in South East Asia: City Resilience Design 4.1

10 September (Tuesday), 9:00 - 11:00

Moderators: *Milena Ivkovic*

Speakers: *Dushko Bogunovich, Rogier van den Berg, Beverley Salmon, Bert Smolders*

Understanding urban conditions of our cities in a new way – embracing informality, reconsidering built environment policies, and encouraging formation of

new public landscapes – is at the very base of climate change resilience. What is the role of designers and planners in this process, in the Asian context?

Panel leading questions:

- What are the main ingredients to City Resilience Design, from planning, but also societal point of view?
- What do planners need to learn and be aware of when they have to make climate resilient "bankable projects" in the SEA context
- How can design help make realistic climate resilience projects working together with the local communities? How to maintain dialogue throughout the project design and implementation process?

4.2 Session 2: Culture-sensitive Approaches in City Planning

10 September (Tuesday), 11:30 - 13:00

Ehsan Ranjbar

The Power of Culture in Creative Placemaking for Future Urban Economy; Evidence from Contemporary Iranian Urban Spaces

Based on socio-economic changes of cities in 21st century, urban design as an interdisciplinary science which concentrates on public domain needs to introduce new lens to improve quality of contemporary urban life. This presentation emphasizes on cultural approach to urban design and reviews the European cities experiences and analyses Iranian cities efforts using the cultural approach.

Benjamin Scheerbarth

An Awkward Dance: Nightlife and Urban Development (Lessons from Berlin)

Berlin, like few other cities, exemplifies the productive synergies between alternative culture, identity, and the emergent knowledge economy. While history created a testbed for cultural diversity, today's planning administration threatens its existence; while politicians begin to recognize the value of vibrant nightlife, resourceful actors of the subcultural scene turn to urban development themselves - join in the awkward dance.

Vicky Ariyanti

Cultural sensitive approach in water management for a volcanic river basin of Yogyakarta Metropolitan Area

In the literature on integrated water resources management and multilevel governance of water, less attention is given on how and why cultural values contribute to the integration level of its implementation. This paper examines how cultural ecological knowledge impacts current water management practices in Opak sub-basin, Yogyakarta, which is threatened by the volcanic activities of Mt. Merapi in its upstream.

Lin Chen

Inheritance and Development of Traditional Minority Culture in Southwest China: A Case Study of Miao, Dong and Dai Nationalities

This paper introduces the inheritance and development of traditional cultural changes in Guizhou, Yunnan Province in Southwest China from the perspective of anthropology. Government, media and Miao, Dong, Dai minorities not only retain the essence of culture, but also inherit and develop traditional culture in the new era by encouraging tourism, increasing cultural and tourism projects, publicising intangible cultural heritage.

Haixuan Zhu, Sai Liu, Xiaoyu Jia

Study on Urban Morphology Optimization Based on the Construction of Urban Memory Structure - Take Dazhi Street in Harbin as an example

"In order to cope with the lack of urban characteristics in the process of rapid urbanisation in China, this paper takes Dazhi Street in Harbin as the research object, through the construction of urban memory structure, puts forward the optimisation strategy of urban morphology, hoping to provide reference for other cities.

Dian Zhang, Suning Xu

Research on Humanistic Technology of Urban Design of Historical Blocks in Harbin

This paper analyzes the status and problems of conservation planning of two historical blocks in Harbin from the perspective of humanism, and attempts to propose humanistic technology including human and culture aspects as the research foundation of urban design, emphasizes the importance of humanistic care in planning and design.

4.3 Session 3: Historic Cities, Local Identities, and City Branding

10 September (Tuesday), 14:00 - 15:30

Peter Starr

Old Deira, Dubai: The Role of Culture, Identity and Planning in a Global City

"How do we plan for multi-cultural cities? Dubai's Old Deira district may have an answer. From colonial outpost to global trade hub, via petrodollar wealth and neo-liberal urbanism, Deira is now one of the world's transnational capitals. As such, this paper reflects on the organic growth of cities and ponders the success of Old Deira and Dubai.

Giuseppe Pace

Underground Built Heritage as catalyzer for Community Valorization (Underground4value)

This paper tells the story of how a well-motivated group of people can transform a network activity, with a little budget, the COST Action CA18110 "Underground Built Heritage as catalyser for Community Valorisation", in a research and on field project and how such a network can provide innovative tools for engaging and empowering local communities.

Citra Persada, Yunita Kesuma, Fadhillah Rusmiati

A City Branding Framework in Planning: The Case Study of Pringsewu Lampung, Indonesia

City branding is not about slogans and logos but it has to be a practical program framework of the local development planning. The three branding strategies elements for Pringsewu case study: 1) involving and strengthening branding in planning and strategies, 2) infrastructure revitalisation, and 3) community empowerment. The city branding can represent the community entity, geographical wideness, and potential local comodities.

Nasim Iranmanesh

Improving the identity of historic city by considering hydraulic infrastructure (the case study: Qazvin city)

The water of most cities of Iran mostly harvested from underground water by a technic which is called Qanat which irrigate city and farms. Water supplement in urban fabric and locating the hydraulic structure in cities had an important effect in forming the city whose impact should not be ignored in reparation or rehabilitation of their urban fabric.

TRACK KEYNOTE

TRACK KEYNOTE

TRACK KEYNOTE

Roman Pomazan, Alexandr Khvan

Culture capital of the Turkic World

Presenting the masterplan strategy for urban transformation of Turkistan, one of the oldest cities in Kazakhstan. Responding to the Kazakhstan state authorities' key objectives to create a new administrative center and culture capital of Central Asia and the Turkic World, the team of Urban Sustain Architecture and Frame Art presents its core strategy to meet these objectives.

Luni Shen

The activation and revitalisation of Yihe, Nanjing

Based on the revival planning of Yihe, Nanjing, this paper emphasizes the importance of culture to the metropolis, explores the alignment of new formats and historical spaces, and generalises several strategies of historical space activation on the respects of culture revitalisation, industry innovation and space activation.

globalising world, an emphasis is on industrial heritage and the effect of its recycling on a local urban area.

Ferdous Farhana Huq, Imzamam Ul Khan Shuvo, Nidalia Islam

Essence of Urban form and its Relationship with Urban Aesthetics: A case from Rajshahi City, Bangladesh

This research explores the weaknesses of current building codes regarding the compatibility of the design of the building elements as well as the relationship between building and street which leads to degrade the urban aesthetics. The research findings suggest some strategic and design solutions with a view to improving the look of the urban form of Rajshahi city.

Xiaoxiao Deng, Dihao Zhang, Shuang Yan

Revitalising historic urban quarters by Cityscape Control Plan: The case of Xi'an, China

Taking the historic urban quarters around the Daming Palace National Heritage Park as an example, the Cityscape Control Plan is researched as a method to preserve and optimise the cityscape in the historic area during the process of urban regeneration.

Zhiqing Zhao, Jie Zhang

Regeneration of Railway Industrial Heritage-Protection, Renovation and Development of Hengdaohezi Town

Hengdaohezi Town is the railway industrial heritage in the period of Russia building railways by borrowing land in Northeast China. Taking Hengdaohezi Town Conservation Project as an example, this paper introduces the measures of protective development at three levels buildings, areas and town. Then through the questionnaire survey to evaluate the satisfaction of the protection status quo.

Małgorzata Hanzl, Lia Maria Bezerra

Healthy City versus Resilient Planning paradigm

The study addresses healthy and resilient cities paradigm and focuses on physical structures. For this, we use a qualitative assessment and typo- morphological approach. The evaluation uses health indexes and looks for healthy lifestyles and climate-resilient development. The case study applies the method to the city centre of Lodz, Poland.

Weisi Zhou, Wei Xiong, Qi Hong

The Road Of Rebirth - Place making in Bidur from the Perspective of Cultural Landscape

As the Nepal history capital, Bidur has prosperous historical and cultural resources with unique landscape, but developed slowly due to the limitation of natural conditions. This paper sets Bidur as example, from the perspectives of cultural landscape, putting forward the place making strategies of 'Promotion with Protecting, Form with Function' to explore the developing country urbanisation path.

Session 4: (Special Session) UPAT Session Beyond Heritage: Culture as Urban Renewal

4.4

10 September (Tuesday), 16:00 - 17:30

Moderators: Milena Ivkovic

Speakers: Xiuli Yao, Zichao Liu, Emilie Roell, Matt Benson, Su Hong, Keith Davis,

The Beyond Heritage: Culture as Urban Renewal Resource Session focuses on the contemporary approaches in using cultural heritage as a tool for urban renewal. Based on the results of the recent two very different UPAT workshops in China – Suzhou’s “Panmen-Shantang Street in the Grand Canal National Culture Park” and Wuhan’s “New Hangzheng Avenue” - the Session will look beyond the layers of history, and examine how to use heritage as a motor to promote cultural values, restore social cohesion, foster sustainable economic growth and revive public spaces.

Panel leading questions:

- How to plan within preservation and conservation rules in a complex, dynamic urban environment?
- How to define unique, place, culture and community responsive approaches?
- What can be the applicable recommendations for adapting the heritage to the modern tourism-and-culture consumers demands?

Session 5: Design for Urban Regeneration

4.5

11 September (Wednesday), 11:30 - 13:00

Milan Sijakovic, Ana Peric

Recycling of industrial heritage: promoting local diversity and cohesion in globalising cities

Global capitalism, network society and multiculturalism impose spatial patterns that lack distinctiveness: continuous change of urban layers lead to the loss of readability, local diversity, and identity of a place. To tackle the issue of preserving local identity in a

TRACK KEYNOTE

4.6 Session 6: Culture, Heritage and Sustainable Redevelopment

11 September (Wednesday), 14:00 - 15:30

TRACK KEYNOTE

Natasa Zivaljevic Luxor, Petar Mitovic

Forever frenemies: built heritage, megacities and new technologies

Having on one side heritage experts who value their legacy according to success in preserving heritage, on the other side planners facing new economic and societal challenges due to historic growth of urban population and, in addition, new technologies, which develop faster than our capacity to apply them adequately, we discuss approach which may lead to desired outcome.

Qinglian Wang, Zhiqing Zhao, Bocheng Zhang

Cultural Heritage Conservation and the Sustainability of City's Orderly Development: identification, conservation and construction of historic space

Chinese Eastern Railway is the most well-conserved linear cultural heritage in China in the 20th century. In this paper, Hengdaohezi Town, a station-located town along Chinese Eastern Railway, is taken as an example to explore its conservation of cultural heritage and sustainable ways for the city's orderly development from the view of historical space.

Harini Septiana, Noora Al Naema, Amna Khalid J A Al-Jaber, Fatma Al Bader, Lolwa M. Alfaya Al Khaldi

Forward Thinking on Culturally Urban Imprint in the Contemporary Era Rejuvenating the Traditional Neighbourhood Values and Characters: An Urban Morphology Review on Qatari Cities

Qatari cities and towns have adopted the globalised language of urbanism, which overshadows the country's historic blend of maritime, rural and urban culture. This paper examines the morphology of traditional neighbourhoods that are still intact in Doha and elsewhere and seeks to capture their principal characters to inspire modern spatial layout that fits the Qatari context.

Qi Shen

Informal entrepreneurs in old districts in central city Shanghai

This paper focuses on the informal sectors in old districts in Shanghai, including family-owned retail shops, street vendors, recycling, delivery, which plays a significant role in the current economic structure and offers enormous work opportunities for migrant labour. The discussion asks how strategies can integrate native community and migrant workers into the process of urban development.

Tubagus Furqon Sofhani, Fikri Zul Fahmi, Dika Fajri Fiisabilillah, Brigitta Sadnya Wulandari

Community capacity for creativity-based rural development in a developing country: Case studies from Indonesia

This paper aims to investigate the extent to which a rural community develops a capacity to support the establishment of a local creative economy despite various limitations. This study employs qualitative research methods in examining two villages in Indonesia. The findings show that the community capacity and actor networks potentially spark the development of rural economies.

Yang Yang, Jilong Zhao, Qian Sun

Research on Online Public Participation and Platform Construction of Historical Block Protection in Data Age

The issue of public participation has become an essential issue in the process of urban renewal in China. This article discusses (1) the method and mechanism of public participation in the protection of urban historical blocks and (2) the content and structures of public participation platforms for historical districts.

4.7 Session 7: Panel Session on Culture-led Regeneration: Issues and Challenges for Planning and Development Processes

12 September (Thursday), 11:30 - 13:00

Moderators: *Michael Stott*

Speakers: *Ana Peric, Tubagus Furqon Sofhani, Peter Starr, Ehsan Ranjbar, Natasa Zivaljevic Luxor,*

Panel leading questions:

- How to plan within preservation and conservation rules in a complex, dynamic urban environment?
- How to define unique, place, culture and community responsive approaches?
- What can be the applicable recommendations for adapting the heritage to the modern tourism-and-culture consumers demands?

Track 5

Smart futures and sustainability *Planning for innovation*



CONGRESS TEAM

**Dorota
Kamrowska-Zaluska**
(Poland)
Awais Piracha
(Australia)

LOCAL EXPERTS

Abdullah Kamarzuki
Melyana Frederica

Smart cities are appearing everywhere and are sometimes a little more than marketing devices for new towns. Yet there is no doubt that all cities are moving towards automatised and data-driven provision of services. In addition, it is thought that smart technologies will drive cities' economic capacity and global position in future. Within this frenzy of change, we need a pause to explore critical theories and successful case studies on smart cities, smart regions and smart communities. We need to understand how virtual worlds (and our data alter egos) will interact and shape the real one; and how disruptive technologies (block-chain, crypto-money, robotisation of production, drones, hyperloop, autonomous mobility) will change the management and planning of cities and urban life. How will it change the urban form and public space? What will be the habits and behaviours of urban citizens?

What kind of policy is needed so that smart technologies answer citizens' needs and promote equitable solutions? How to encourage co-creation in the post-digital era? How to protect people from disruptive virtual worlds?

Sessions:

Session 5.1

Mobility in Smart Cities

Case studies in this track explore how smartness can assist in improving mobility. The topics in this area range from electric vehicles, smart mobility, promotion of non-motorised transport, freight analysis to autonomous vehicles and underlying themes in this sub-area.

Session 5.2

Knowledge Economy and Innovation Milieu

Papers in this session explore how new knowledge and innovation can lead to

enhanced smartness and sustainability in the city. Some of the topics explored in this session are Green Heritage Tourist Circuit Design, transforming Indonesian petroleum cities into innovative green economies, improving space structure of traditional resources-based cities in China, and building energy efficiency in urban planning.

Session 5.3

Cities of Future - User-oriented Services

This session looks into how user-oriented services can be provided in cities using big data and other smart technologies. Use of big data such as mobile phone, smart travel card and other large data in planning is fast emerging as a very promising area of study. Papers in this track present case studies of big data use for providing user-oriented services for improving various planning related issues such as land use, housing provision, mega projects, commercial activities and more.

Session 5.4

Co-design and Participation in Smart Cities

Papers in this session present case studies which discuss how to ensure participation of citizens/beneficiaries in planning projects. Research in this session grapples with the following questions: Are citizens able to participate in co-creation or at least consultations related to shaping smart polices and solutions? Are their voices being heard? What are the instruments ensuring that quest for smartness does engage with the marginalised? Or is smartness leaving sections of society even further behind?

Session 5.5

Smart City Strategies in Urban Planning and Design

Along with the positives that come with densely populated cities in terms of human capital and increased productivity, there also arises the need to tackle increasing challenges such as traffic management,

management. The focus of this session is to examine how urban planning and urban design professionals are responding to these challenges within an ICT-led smart city framework.

Session 5.6

Smart Public Spaces

Papers in this session discuss how public spaces can be made to interact and inform public in matters that are useful and easy

to understand for the public. In particular, how can planning and design professionals engage design strategies in conjunction with the new ICT technologies to make outdoor public spaces smart?

Session 5.7 (Special Session)

Cities and Digitisation: Perspectives and Challenges of the Smart City Technologies on Urban Planning and Design

The session will be chaired by Southeast

University of China, based on the outcomes of the ISOCARP-SEU International Digital Urban Design Week that happened in June 2019 in Nanjing, China. The perspectives, impacts and future challenges of urban studies, planning and design disciplines will be discussed under the angle of digitization, big data, Internet of Things and blockchain communities, with practical illustrations.

5.1 Session 1: Mobility in Smart Cities

10 September (Tuesday), 9:00 - 11:00

TRACK KEYNOTE

Ozge Celik, Ozhan Ertekin

Re-thinking the city: Başakşehir Living Lab (Case of Istanbul)

Aim of the paper is to understand the challenges and potentials of new ICT technologies and its applications in an urban setting while surveying urban innovation units and living labs. While presenting the Basakşehir Living Lab, the research put focus on how planning practice advances smart planning and projects that contribute to the local development.

Daniele Vettorato, Adriano Bisello

Stardust Smart City Project in Trento

STARDUST is an EU H2020 Smart Cities project, which brings together advanced European cities in a holistic approach to transform the carbon-based cities to smart, highly efficient, intelligent and citizen-oriented cities, and define a new Urban Metabolism. The project presents its results from city of Trento, Italy.

Alloysius Joko Purwanto, Dian Lutfiana

Future Urban Mobility Development Framework to Maximize Benefits of Plug-in Electric Vehicle Penetration in ASEAN Countries

This study identifies the importance of electrification of the transport sector for future urban mobility development, especially in the ASEAN region. Electricity supply and demand have to be analyzed carefully to avoid additional stress on urban electricity grid systems. This study aims to provide insights on which factors have to be considered in penetrating electric vehicle in this region.

Andrey Borisov

Presenting the prospects for Ropeway Implementation as a Public Transport Mode, the case of Moscow

The paper analyses international ropeway commissioning experience as a mass transit component used in urban environments. We suggest factors can influence decision making in favour of aerial cableways as a form of public transport in Moscow. Within the proposed approach, we identify adjacent districts pairs where cableways could be sufficient as an element of an intermodal transit system.

5.2 Session 2: Knowledge Economy and Innovation Milieu

10 September (Tuesday), 11:30 - 13:00

Yu Sun, Hong Leng, Wei Tian

The Framework Research on building energy efficiency in urban planning : Integrated Visioning Based on Agent-based modelling and Spatial Analysis approach

The research is a preliminary study, in 12 districts of Harbin in China, on an integrated energy model approach with a standard bottom-up model and an Agent-Based behavior Model that interact with geospatial parameters, building design and operations. The findings contribute to understanding the link between energy consumption patterns and buildings at the district scale.

Mariana Fiuza, Gabriela Uchoa, Flavia Maia

The Goldilocks Zone for the public sector innovation: Teresina 2030 towards resilience to climate change in the developing world

The term Goldilocks Zone refers to the habitable zone around a star where the conditions are just right for liquid water to exist on the surface of a planet. Just like in astronomical science, there is evidence of a public sector Goldilocks Zone, where the conditions are perfect to find thriving innovation in the public sector.

Dianhong Zhao

Improving Space Structure of Traditional Resources-Based Cities Transformation in a Background of Supply-Side reform: a Case Study of Yantai City of Shandong Province

China's resource-dependent urban transformation not only faces the threat of 'urban disease', but also faces the 'resource curse'. This report takes the reconstruction of resource-based urban space as the starting point, and proposes to establish a compact spatial structure optimization model. Taking Yantai as an example, this paper discusses the spatial structure optimization model of resource-based cities.

Session 3: Cities of Future - User-oriented Services 5.3

10 September (Tuesday), 14:00 - 15:30

TRACK KEYNOTE

Jianxiang Huang

Data Empowering Planners: Sensors, Simulation and Machine Learning

Emerging smart technologies provide new opportunities for planners to tackle urban issues of growing complexity. Examples are drawn from Hong Kong, in which academic researchers work side-by-side with practitioners to improve community environment and the quality of lives. People-centric values, combined with the power of data are the keys.

Ming-Chun Lee

People, Places, Memories and Mobile Apps: Understanding the Potential of Augmented Reality in Public Participation and Community Development

Augmented Reality goes beyond the dichotomy of passive methods of engagement with the public. It offers an interactive method to expand visualisation techniques in participatory planning. This paper discusses three mobile apps developed to support community events aimed at increasing overall public participation and civic engagement with a goal of increasing awareness of community history through data visualisation and stories.

Qinglai Zhang, Jiatian Bu, Yifan Yu

Measuring Visual Quality of Street Space Based on Deep Learning and Street View Picture: Pilot in The Linong Area in Shanghai

Built environment indicates that street space quality have been carried out in a profound influence on the image of city, human behavior and public health. We attempts to measure subjective qualities of the Lilong environment comprehensively and objectively in Shanghai with the method of image semantic segmentation techniques and Street View Picture dataset.

Dian Hasanuddin

Smart Cities and The People: Urban Planning Collectives in Indonesian Cities

In the past decade, urban planning collectives have been growing organically, attracting a new generation of young, energetic, and critical urban professionals. These collectives demonstrate the civic and democratic aspects of city initiatives, one without government support, and put forward another vision for being 'smart' which extends into horizontal learning in between the intellectual elite and general citizenry in Indonesian cities.

Daniele Vettorato, Adriano Bisello

The next generation of EU smart city projects: turning "clean energy for all" into "clear benefits for all"

This paper discusses the results of ongoing research on multiple benefits of EU smart city projects. It suggests the steps to analyse the multiple benefits in a coherent framework, in order to make them an effective communication tool or even including them among the KPIs to be used in the assessment phase of the smart city projects all around the world.

Session 4: Co-design and Participation in Smart Cities 5.4

10 September (Tuesday), 16:00 - 17:30

TRACK KEYNOTE

Amandus Jong Tallo

Why We Need Participatory Mapping ?

By using participatory action research method for mapping boundaries of forest management area, the method addresses the spatial challenges of land tenure rights, land history, spatial layout, and sustainable village development in Mensuai, a village in rural Indonesia. More than a map, the outcome is a collective, village product that reveals the lack of food security of the local community.

Tian Qin

Comprehensive Evaluation and Dynamic Evolution Analysis of Shanghai's Urban Vulnerability

This paper takes Shanghai as an example, using the comprehensive evaluation system which includes natural resource, eco-environment, economic and social aspects. From 2002 to 2017, Shanghai's comprehensive urban vulnerability has been declining and has changed from a dominant eco-environment vulnerability to a more balanced one, while declining co-environment vulnerability has still been the dominant factor.

Huiyi Xia, Nankai Xia

Urban living environment assessment index system based on psychological security

With the development of urbanisation and the continuous development, construction and renewal of the city, the living environment of human beings has also undergone tremendous changes, such as residential community environment and service facilities, urban roads and street spaces, and urban public service formats.

Xuhui Liu, Xin Sui, Yu Yifan

Measurement of spatial equity : a case study of nursing institution

The results of accessibility measured by 2SFCA of nursing facilities are used to find the degree of the inequity about getting this service among elderly in Shanghai caused by this location pattern. Results of the study help the urban planners to further arrange the nursing facilities and improve the equity of public service facilities caused by location.

Silja Tillner, Eva Maria Kuehn

Habitat 5.0 - Towards affordable and sustainable housing in the developing world: A pattern- and block chain-based approach

The need for affordable housing leads to the surge in informal settlements. The approach Habitat 5.0 to upgrade informal settlements in situ uses 'disruptive innovations' to build communities by following urban design patterns for sustainable settlements. Blockchain guarantees the secure transfer of qualified know-how that enables residents to build their houses with ecological materials - safer, cheaper, faster.

5.5 Session 5: Smart City Strategies in Urban Planning and Design

11 September (Wednesday), 11:30 - 13:00

Thibault Pilsudski, Si Ying Tan, Devisari Tunas, Fabien Clavier, Andrew Stokols, Araz Taeihagh

Smart planning in Southeast Asian cities: the role of urban governance and knowledge transfer

This paper analyses how smart city planning and urban governance inform each other and how these are translated and adopted by cities in Indonesia. It is part of an ongoing research; its final output will be an analytical framework that can be used by technology producers, city authorities and funders, to help them strategise and plan for better smart cities.

Dorota Kamrowska-Zaluska

Smart city and regenerative city – complementary or contradictory approaches

The aim of the study is to recognise relation between smartness and regenerative sustainability in contemporary cities. There is a need to determine how new technologies affect the development of cities and wellbeing of their inhabitants.

Hanna Obracht-Prondzyńska

Big data based assessment on metropolisation processes in Poland

Due to new determinants influencing and shaping urban and regional structures and new analytical possibilities, the aim of the research is to assess the impact of the metropolisation processes on the small towns' development in Pomeranian Province in Poland. A two-phase model allows to study the impact on both functional and spatial development of the regional settlement networks.

Fadhilah Rusmiati, Citra Persada, Dini Hardilla

The Tourism Concept of Emergency Shelter: A Strategies For Community Resilience In The Coastal Area of South Lampung

This paper aims to provide a new perspective and strategies on developing emergency shelters not only for evacuating residents and improving disaster preparedness infrastructure in South Lampung, Indonesia. It also aims to explore their potential for community-based tourism planning in vulnerable areas.

Jassim Al-Sorour, Noor Alamri

How can cities succeed and boom in the long run? CASE IN QATAR

As technology is advancing, the places we live in need to be adapted as well. In the modern times, we are bombarded with many gadgets and gizmos that are making life easier and enabling us to do more in less time. How can cities succeed and boom in the long run?

5.6 Session 6: Smart Public Spaces

11 September (Wednesday), 14:00 - 15:30

Mennatullah Hendawy

Urban Planning in a Mediatized World , case of Egypt

While urban planning in Egypt still follows a centralised, large scale, top-down and entrepreneurial approach,

demands for democratic and communicative planning practices are growing. In the context of digital and information revolution, the research explores how media structures the way planning is communicated and how, in turn, this is reflected in planning decisions.

Mayank Dubey

Smart signals and corresponding challenges in heterogeneous traffic conditions

Smart signals dynamically optimise the signal phases by analysing trend and real time data to increase the throughput at intersections. But in mixed traffic conditions where neither the traffic flow parameters nor the corridor specifications and hierarchy are uniform, the efficacy of such signals gets questioned. This study attempts to answer some questions around smart signals in India.

Le Dong, Chen Xu, Baolu Chen

Investigation about tourism image optimisation of Lugu lake scenic area based on internet reviews

The utilisation of online information becomes an important way to explore the scenic areas image and improve tourist's satisfaction. This essay takes Lugu lake scenic area as an example, firstly focus on comments extraction about tourism resources, infrastructures and service, then deals with the analysis of tourists' behaviors and perceptions. Lastly, this paper proposes the optimisation strategy.

Vaishali Aggarwal

Spaces of becoming- Space shapes public and public (re)shapes their own spaces

This paper looks at the social production of space, inspired by the right to the city movement, in Delhi, India. In particular, the question is raised if cinema and digital technology can be used to empower a new citizenry who is not a mere user of the city but a participant in creating and interpreting the space which is actively produced.

5.7 Session 7: (Special Session) Cities and Digitisation: Perspectives and Challenges of the Smart City Technologies on Urban Planning and Design

12 September (Thursday), 11:30 - 13:00

Moderators: *Yi Zheng*

Speakers: *Sebastien Goethals, Fedor Kudryavtsev, Junyan Yang*

The session will be chaired by Southeast University of China, based on the outcomes of the ISOCARP-SEU International Digital Urban Design Week that happened in June 2019 in Nanjing, China. The perspectives, impacts and future challenges of urban studies, planning and design disciplines will be discussed under the angle of digitisation, big data, Internet of Things and blockchain communities, with practical illustrations.

Track 6

Changing environment and risks *Planning for resilience*



CONGRESS TEAM

Markus Appenzeller
(The Netherlands)
Juanee Cilliers
(South Africa)

LOCAL EXPERTS

Mangapul Rudy
Saut Sagala

Continuing the conversation from last Congress in Bodø and the need to urgently address disaster prevention and adaptation to the consequences of climate change: Jakarta and other megacities are showing dangerous vulnerabilities to extreme pollution, sea level rise, salt-water intrusion and water shortages. This is, however, matched by steadily decreasing poverty that runs in parallel to the increasing urbanisation. If cities with their consumerist nature are part of the solution to poverty, what models can they use to minimise their impact on the environment and become leaders in the fight to respond to climate change? What is already being done and what are the outcomes?

Food, water, transport and energy systems need resilience to climate change to avert catastrophic events and to cope with a further increase of global and urban populations. Pollution and waste demand the urgent understanding of urban metabolism to achieve better social justice and to safeguard the balance of the planet. What are cities doing to transition their urban economies to achieve improved well-being and environmental justice and to transform dependence on non-renewable materials to resource-efficient and renewable flows and better management of ecosystems? What role should planning/planners play in developing resilient plans, designs, buildings and infrastructures?

Sessions:

Session 6.1

General Introduction: Climate Change - Globally

Climate change is probably the biggest man-made global threat we are currently facing. This comes in a time where our cities are growing in an unprecedented way – often in areas that are affected the most by climate change. This session wants to give a general introduction to the topic, outline

its main fields of impact and evaluate what we can do to steer measures globally.

Session 6.2

The Currencies of Climate Change: Water

Water is the currency of climate change. It is the impact of too much or too little water that will have the biggest impact on human lives. This session will evaluate the scale of impact and how water can and ideally should be dealt with in different urban conditions.

Session 6.3 (Special Session)

Planning for Climate Change

Session 6.4

The Currencies of Climate Change: Heat

One of the main consequences of climate change is global warming. In the future we will not only see higher overall temperatures but also more extreme

heat. Without measures, this can very well lead to places, especially cities becoming uninhabitable. The session will look at planning tools and approaches that help mitigate the effects of heat, especially in those global regions that will be affected most.

Session 6.5

Climate Change and Operating Cities - Metabolism

The biggest indirect-and therefore a lot less directly mitigatable - impact climate change has on mankind is through the changes in the ecosystems. This puts our food base at risk, and it threatens other species. This session will investigate the order of challenge and identify possible ways forward.

Session 6.6 (Special Session)

Building Unique Cities: An Imperative for Sustainability and Liveability in the Global South

Session 6.7

Climate Change and Operating Cities - People

Climate change affects the lives of people. At the same time, it is those very people that have to be the agents to limit climate change and to implement measures for its mitigation. Planning that involves local communities is imperative in achieving the goals set out. This session investigates means and processes to involve the local residents in climate change mitigation.

Session 6.8

Climate change and Urbanism: Planning Tools

Next to all other players, we as urban planners, designers and policy makers need to take responsibility for the effects of climate change. This session looks at our own tools, the tools of the planner and how they (can) accommodate this responsibility.

Session 6.9

Planning - Looking Forward

In this session we want to summarize the findings of the previous days and we want to define a set of planning measures, paradigms, policy proposals for planning for more resilient cities from now on.

6.1 Session 1: General Introduction: Climate Change - Globally

10 September (Tuesday), 9:00 - 11:00

Natalie Rosales Pérez

Expanding an understanding of urban resilience in the realm of adaptation planning

By using the case study of Mexico City's Climate Action Programme, this work contests the way in which resilience has been embedded in urban adaptation planning. This descriptive research incorporates urban-regional metabolism dynamics and environmental data such as carrying capacity, into the climate change scenarios and vulnerability analysis matrix.

Mattias Vansteenwegen, Etienne Drouet

360cityscan: integrated solutions to face urban challenges

Tractebel has developed the 360 city scan, a methodology to assess cities and guide them according to their needs and priorities. Based on this scan, we offer integrated and tailor-made approaches to our clients using our urban engineering expertise.

Juaneé Cilliers

Trans-disciplinary planning approaches towards resilience

In South Africa, like elsewhere, the depletion of natural resource, including green spaces, are leading to cities that are far removed from the safe, clean, and liveable environments, as envisioned in planning theory. Resilience thinking could pose solutions in this regard, drawing on trans-disciplinary planning approaches to manage change and steer Spatial Planning towards the era of transurbanism.

Ramya Sakkeri, Devadas V

Systems' approach: Climate change, glacier melt and development planning of the Himalayan region

A gradual increase in global temperatures coupled with erratic precipitation patterns has a serious impact on the socio-ecological system. Therefore, in this paper, authors developed a methodology to effectively understand the dynamic inter-linkage and interdependence of the complex systems and sub-systems in a region by using system dynamics technique.

Priyanjali Prabhakaran, Suja Kartha

Flood resilience planning for Disaster prone Panchayaths. A case of Karumalloor Panchayath in Ernakulam District, Kerala

Karumalloor panchayat, a rural area in Ernakulam district of Kerala in South India was one of the severely affected areas in one of the worst floods in a century in August 2018. The aim of this paper is to explore the issues in such panchayats and to identify the need and strategies.

Tanaya Sarmah, Sutapa Das

Determining urban flood vulnerability using an indicator-based approach and HAZUS-MH

Urban flood (UF) is becoming frequent and intense in terms of death and building damage. This study aims to develop a UF vulnerability index (UFVI) for Guwahati, India by combining human and building vulnerability indices. It gives a theoretical explanation of the method to be incorporated. The UFVI will help to improve resilience of the population and buildings against UF.

Theresa Audrey Esteban

Living with water: how memory and experience help build community resilience in Dordrecht

In Dordrecht those who experience flooding more frequently have more built in memory and knowledge. This memory-based disaster experience can be a starting point in building knowledge on disasters.

6.2 Session 2: The Currencies of Climate Change: Water

10 September (Tuesday), 11:30 - 13:00

Matej Niksic, Jernej Cervek

Changed precipitation patterns and the need for a novel approach to building plot planning: The lessons learnt in the sub-alpine climate zone of Slovenia

Developed by the Urban Planning Institute of the Republic of Slovenia, the paper presents a tool to reform the urban planning system in the face of challenges posed by climate change. To respond to heavy rainfalls, urban design criteria for building plots planning is under revision to allow for rainfall penetration into the ground.

Session 3: (Special Session) Planning for Climate Change **6.3**

10 September (Tuesday), 14:00 - 15:30

Travis Bunt

Sinking, growing, resilient: a multidisciplinary approach to climate adaptation in Semarang, Indonesia

2018, the Netherlands Enterprise Agency kicked off Water as Leverage, a program aiming to bring water-based solutions to address climate and urban risk in three Southeast Asian cities: Chennai, Khulna, and Semarang. The 'ONE Resilient Semarang' team - a group of designers, engineers, economists, ecologists, art activists, and academics - was tasked with developing design-driven, bankable project ideas following an initial phase of research, analysis, stakeholder engagement, and on-the-ground coalition-building with agencies and institutions. In this presentation, members of four partnered organizations on ONE Resilient Team (One Architecture & Urbanism, Kota Kita, Deltares, and Wetlands International) will bring multidisciplinary perspectives to Semarang's current catch-22: it is a city economically dependent on the same extractive coastal industries that exacerbate its subsidence and flood risk, projected for even more drastic urban densification and economic expansion in the coming years. Instead of developing one-off infrastructure proposals for the city, ONE Resilient Team instead chose a more holistic approach centered around a widespread reorientation of water use across the entire city, from coast to upland, from Kendal to Demak - altogether comprised of potentially hundreds of projects. The embedded goal is to address challenges in a programmatic manner, potentially sparking transformational, bottom-up and top-down change in processes and governance. With the combined disciplines of urban design, community-based planning, water / coastal engineering, and ecological restoration, ONE Resilient Team's conceptual proposal aims to find integrated solutions to the combined water related risks of climate change and socio-economic growth by drawing from expertise across sectors and backgrounds from across the globe. This presentation will seek to address these issues through the prism of four disciplines among many more represented within the team, asking how resilience can operate beyond an individual project as a guiding development principle for climate-vulnerable cities and landscapes.

Session 4: The Currencies of Climate Change: Heat **6.4**

10 September (Tuesday), 16:00 - 17:30

Shuo Zhang

Research on the Spatial Effect of Urban Construction on Heat Island Effect in Shanghai Based on Remote Sensing Data

Taking Shanghai as a typical case, this paper concentrates on the urban heat island effect under the influence of urban construction by Landsat-7 ETM+ remote sensing image data. We analyse the spatiotemporal distribution of land surface temperature and summarises the evolution characteristics of urban heat island effect, analysing the spatial impact of urban construction related factors.

Olufemi Ojo-Fajuru, Sijekula Mbangwa

Green Landscaping - an Interventionist Approach to Build Cool, Healthy and Liveable Future African City: The Case of Ado-Ekiti, Nigeria

Rapid urbanisation and population explosion account for urban socio-economic and environmental challenges in the developing countries of the world as evident in Ado-Ekiti, Nigeria. The study examines the extent of public space contestation, effects on urban environment and liveability, and intervention with green landscaping techniques to re-naturalise the cityscape towards building a green, liveable and sustainable environment.

Ferdous Farhana Huq, Nidalia Islam, Sakib Zubayer, Nessar Uddin Ahmed

Green Roof: An Approach to Repair the Climate of Dhaka City

This study employs satellite and GIS technology to identify the buildings with and without the green roof in Dhaka, Bangladesh, and present the hardscape to softscape ratio of the city. Findings suggest a gap between the user and the government on green roof perspective and recommends measures to make this approach successful.

Adinarayanane Ramamurthy, Anusha Roy

Green and Blue Infrastructure to Regulate Thermal Comfort in High Density City Planning: a Case of Navi Mumbai, India

This Research work is an attempt to understand how urban climate maps can be operational to arrive at plausible decisions in high density city planning, thereby undertaking measures to regulate thermal comfort in the city through green and blue infrastructure.

Session 5: Climate Change and Operating Cities - Metabolism **6.5**

11 September (Wednesday), 11:30 - 13:00

David Mathewson

Effects of ongoing infrastructure improvements in relation to planning policy for flood resilience and historic urban morphological development in Jakarta

This paper explores historic institutional responses to flooding and the influences of such planning policies on the spatial development of Jakarta within the context of pressures from severe flooding and rapid urban development. Next to the local and city scales, where new flood defense and mitigation measures are being implemented, the article's scope extends to a wider city-regional perspective.

Shivangi Singh Parmar, Joy Sen, Arkopal Goswami

An assessment and delineation of Socio-economic Resilience Landscapes of the Region based on the inherent latent factors of vulnerabilities

The socio-economic resilience of the region is the capacity to absorb or adapt shocks caused by external forces and inherent latent weak conditions of the regional system. The present paper contributes to delineate the socio-economic resilient landscape by measuring arrivals and departures of socio-economic resilience to the degree of socio-economic vulnerabilities of the region.

Natalie Rosales Pérez

Relict ecosystems in urbanised contexts. Challenges and opportunities to renature cities, ecological restoration, and biodiversity enhancement through planning for sustainability.

How can planning assist cities to transit from natural resources into natural spaces that enables ecological processes that support life, sustains flora and fauna, enhance biodiversity, and promote sustainable development? Comprehensive planning strategies can promote regional and urban environmental development as illustrated by a case study in Morelos, in Mexico.

Wiwandari Handayani, Barry Beagen, Santy Paulla Dewi

Promoting Water Resilience in Semarang: Building a Coalition through the Water as Leverage (WaL) Program

Semarang is chosen as one of the three cities in Asia for the Water as Leverage program initiated by the Government of Netherlands in 2018. This study documents and examines the Water as Leverage program as an opportunity to build a coalition amongst stakeholders to promote water resilience in Semarang.

Thai Son Pham

Identifying climate resilience challenges in Vietnamese cities: case studies of Can Tho and Da Nang

This paper aims to discuss major issues regarding urban climate resilience in urban areas in Vietnam, through an investigation on Can Tho and Da Nang cities. Resilience challenges from natural conditions, urbanisation patterns, climate change conditions and risks are identified. Besides, resilience capacity is limited with weak coordination mechanism and plans and community resilience are not sufficiently addressed.

Aishwarya Talluri

Spatial planning and design for food security ; Building Positive Rural-urban Linkages

The Agenda 21 Document strongly advocates for urban-rural continuum and food security, this paper is an attempt to translate the ideas into spatial guidelines, as it is observed, that often the spirit and intentions of the project is lost in translation from text to space: with cultural resilience and ecology as a prime focus.

Dani Muttaqin

Earthquake Post-Disaster Relocation Identification in Meuredu Pidie Jaya Nangroe Aceh Darussalam

Through micro zonation mapping of earthquake-prone areas, the Indonesian Government aims to reduce the impact of earthquake risk and restrict the development of settlements around active fault lines. Identifying suitable locations, in line with spatial regulations and land requirements, for relocation is central to this process and carried out by GIS analysis.

Sani Nuraini, Imam Indratno

Embodied Carbon Emission Analysis of Industrial Sector Based on Input-Output Analysis : Case Study in Bitung City, Indonesia.

Bitung City has experienced environmental degradation, even though economic growth continued to increase. This study aims to build a model of environment-economy linkages through Input-Output (I-O) Environment and to calculate the impacts of the economic sector in Bitung City. The paper presents the conceptual and analytical framework of the Input-Output approach of the Bitung City.

Raka Suryandaru

How to Plan in a Volcano-related Disaster Prone Area? Lesson Learned from Adaptive Spatial Planning in Dieng Plateau, Central Java

Located in the Asia Pacific's Ring of Fire as well as has one of the longest shorelines in the world, Indonesia is prone to various kind of disasters. Over the past few years, Indonesia has made headlines around the world due to devastating natural disasters that resulted in environmental damage and thousands of casualties. The result obtained from this project is an adaptive spatial planning that is tailored to the region's disaster risk profile and aimed at achieving a higher standard of living.

6.6 Session 6: (Special Session) Building Unique Cities: An Imperative for Sustainability and Liveability in the Global South

11 September (Wednesday), 14:00 - 15:30

Olga Chepelianskaia

Cities face an unprecedented urbanization pressure, which led cities of the Global South to building infrastructure hurriedly, compromising on their natural ecosystems, cultural distinctiveness, human scale, wellbeing and liveability. As a result, many cities in developing countries are characterized by overcrowded, poor quality and insufficient infrastructure services, low-quality building stock and a uniform cityscape. Negative consequences related to building uniform go far beyond a cultural loss and severely compromise urban sustainability, economic vibrancy and quality of life.

6.7 Session 7: Climate Change and Operating Cities - People

11 September (Wednesday), 16:00 - 17:30

Rolf Schuett

Building Dignity: A participatory concept for climate change-impacts mitigation in informal settlements in North Jakarta

Analysis of current challenges of Jakarta, including overpopulation, sprawl, environmental stress, social inequality and poor mobility. The concept of gotong royong or communal cooperation is introduced as an opportunity to inspire participation in tackling these issues, including physical implementation to incorporate these approaches in informal settlements in Pandemangan, North Jakarta.

Priyanjali Prabhakaran, Suja Kartha

Role of Women Self Help Groups in Disaster Resilience and Livelihood Regeneration: Post Flood Experience from Kerala

A study of one of the worst affected villages after the 2018 floods in Kerala was conducted. Community level women self-help groups called 'Kudumbashree' units came forward in post flood reconstruction and livelihood restoration through collective farming on leased land, poultry rearing and homestead farming which proves to be a successful model in disaster resilience.

Andie Arif Wicaksono

Participatory and Good Governance: The role of stakeholders in increasing the adaptive capacity of the poor to cope the impact of climate change. Case studies: Surakarta and Yogyakarta, Indonesia

The collaboration of government and riverside resident's community-based organisations (CBOs) in Yogyakarta and Surakarta illustrates how pro-poor planning approach can build the adaptive capacity of the urban poor to climate change-induced flooding. Findings indicates that stakeholders have a critical role in maintaining active collaboration for this adaptation strategy to become successful.

Niken Prilandita, Saut Sagala, Jeeten Kumar, Teresa Retno Arsanti

The Stakeholders & Stakeholder Network - Role in Sustaining the Renewable Energy System in Sumba Island

Indonesian government, through the Sumba Iconic Island program, attempts to increase the electrification rate to 100% in 2020 and also encourage the implementation of more renewable energy systems. There are various stakeholders involved in this program, and this research aims to examine and evaluate the stakeholders' role in sustaining the renewable energy system in Sumba Island.

Anastasia Widyarningsih

Community responses to displacement threats in flood prone areas. The case of Ciliwung River, Jakarta

This study deals with displacement phenomena occurring around the Jakarta Urgent Flood Mitigation Project during the period 2013-2017 and explores the emergence of social innovation in the affected communities by taking Bukit Duri and Kampung Tongkol as the case studies. It reveals how the crisis become a moment of change and an opportunity for Jakarta to co-produce a resilient city.

Session 8: Climate change and Urbanism: Planning Tools 6.8

12 September (Thursday), 11:30 - 13:00

Peijun Lu, Yimin Sun, Bilin Chen, Sheng Xia

Urban Design Study of Resilient City in Guangdong-Hong Kong-Macao Greater Bay Area

Based on theory of resilient city, this paper discussed the resilience of Greater Bay Area due to the contradiction between the vulnerable natural conditions and rapid urbanisation and developed three resilient urban design principles and a research-design-feedback loop pattern, which apply into various urban design stage in Pazhou, one of the more resilient areas in Greater Bay Area.

Shuang Zheng, Xiaowen Huang

Resilient Infrastructure Framework of China Coastal Cities

Taking Binhaiwan Bay Area as an example, this paper combines infrastructure framework with resilient city theory, then analyse the strategies of some world-class coastal cities coping with the problems of urban public security, and deduces the resilient infrastructure strategies for coastal cities, so as to provide references for the further study of the resilient coastal cities.

Muhammad Shamsuzzaman

Challenge of planning the Coastal Cities of Bangladesh: A Case for Chalna.

This paper studies spatial planning challenges of Chalna, a coastal town of Bangladesh following the Structured Geospatial Analytic Process. Identified challenges are primarily in the process of planning and decision making rather than lacking in technical know-how, such as weakness in the regional planning framework, undermining values of environmental/public goods, defying rule/regulations, and not accounting public opinions.

Cong Cao, Suning Xu

Research on Strategies of Low-impact Urban Design in China

This paper aims to provide theoretical method support and practical experience for creating environment friendly urban space in China by low-impact urban design methods, and discussed on two aspects of theory and practice.

Session 9: Planning - Looking Forward 6.9

12 September (Thursday), 14:00 - 15:30

TRACK KEYNOTE

Theresa Audrey Esteban

Mind the gap: Stakeholders perspective on resilience building in the City of Rotterdam

The study seeks to investigate the institutional and community actors perspective on resilience and the environmental threats in the City of Rotterdam. The research assumes that knowledge and experience on Rotterdam's environmental vulnerabilities and threats lead to better collaboration between and among stakeholders in making the city resilient

Rahul V

Reimagining Pamba; Sustainable design strategies for Sabarimala Pilgrimage.

As a pilgrimage centre with more than five million pilgrims, Sabarimala holds a special attention due to natural setting. Due to the ephemeral activities and recent devastating climate changes in the state, its necessary to study and redesign the whole pilgrimage architecturally and non architecturally in order to conserve the natural heritage of the state.

Tuan Manh, Julia Babcock, Hien Bui, Thi Khanh Nguy

Capacity and Trade: Alliance for Green Actions

As nations shift planning around the reality of climate change there is an opportunity to redefine incentives across industries that promote clean energy and lower emissions in building, transportation and land use. In turn, workforce training and education across a broad international network can help ensure a just distribution of benefits as markets transition.

Track 7

Urban governance and planning profession *Planning for future*



CONGRESS TEAM

Eric Huybrechts
(France)
Jennilee Kohima
(Namibia)

LOCAL EXPERTS

Teti A. Argo
Deden Rukmanaty

Large cities and megacities are a main feature of human settlement in the 21st century. The level of complexity of large cities requires new governance systems that are different from traditional urban and municipal administration. Soft power is necessary to mobilise actors from different levels of government, sectors, and territories. Multifunctional management across sectors and issues (water, economy, environment, mobility, housing etc.) need to share visions, strategies and policies with the support of technical bodies, political platforms and a variety of actors. Building the structures of a functioning megacity is an iterative process, which ranges from the very local to the regional and metropolitan scales. New methodologies are emerging, and this will be an opportunity to share the experiences of building large scale governance and consider the consequences on planning. People participation is different in a megacity, with more complex relations between local communities, local governments, and metropolitan governance. Informal dynamics also represent a bottom-up approach to the expansion drive of the city.

Urban governance and planning are some of the cross-cutting themes at this year's congress with an element of it visible in each of the other tracks. But within Track 7 these two themes will be explored and discussed in greater detail owing to the wide range of abstracts accepted for presentation in different forms, such as papers, case studies, research projects and special sessions. This track received close to 100 abstract submissions with rich and interesting content around megacity governance and planning from all parts of the world. As governance requires both top-down and bottom-up interaction in various forms between many different actors in the quest of planning, the importance of this track cannot be overemphasized. Planning for the future by exploring urban governance and

planning in seven fully packed sessions of which two are special sessions will bring forth approaches, strategies and best practices for congress attendees. The sub-themes for the track include cross-border governance, territorial planning, regional cooperation, metropolis management, local leadership, metro-hub, democratic urbanism and metropolitan governance.

Sessions:

Session 7.1

Cross-border Governance

Megacities and large metropolis are expanding out of the national or regional limits. The different spatial management systems in each country should be articulated to better manage these megapolises. How to manage functional metropolitan areas located on several national or regional jurisdictions with

contradictory laws, standards and management systems? The coordination tools are crucial for managing spatial and social dynamics, offer cross-border infrastructures and services. How should these multi-actor and multi-level spaces ensure effective cooperation and collaboration?

Session 7.2

Territorial Planning

Territorial planning covers different scales with strategic documents and regulations. The articulation is crucial to make policies a reality at the local level, to face huge challenges as climate change, social and spatial inequalities, heritage protection or limitation of urban sprawl. Territorial planning needs specific bodies to develop policies and strategies, to feed the public debates and to monitor the spatial development. Well-coordinated planning across different scales should speak governance.

Session 7.3

Local Leaderships

Building a metropolitan governance requires a flexible system of decision making with local authorities, with the support of State government. What are the processes to build the metropolitan governance? How can one make efficient decision making with a large number of actors? How to manage the different scales and sectors to deliver public services and invest in infrastructures? How to foster economic development efficiency through city marketing? How to ensure social and spatial equity in metropolitan areas? Local leadership is the key to manage metropolitan areas.

Session 7.4

Metropolis Management

Metropolises, as they expand, cover several jurisdictions. Infrastructures and public services are managed on different areas. The share of competencies between the different administration levels (State, regions, local authorities) is complex. The metropolis management requires specific tool for coordinating sectors, territories and communities. The international experiences on metropolitan management offer innovation on governance and innovation mechanisms for the well-being on communities.

Session 7.5 (Special Session)

Democratic Urbanism

Democratic Urbanism is a method of city-building that integrates democratic ideals

into the urban design process and applies broader shared governance models to the implementation of community aspirations, creating places of deep meaning that are broadly “owned” in the civic mindset. This interactive session will include a number of case studies, short films and exercises demonstrating the value of democratic approaches to city-building, highlighting communities that have applied democratic urbanism to achieve remarkable transformations across a variety of contexts. These demonstrate our civic capacity to overcome the stark challenges of the 21st century and reinvent our communities, illustrate the advantages of a democratic method for city-building that is broader than conventional practice, one based in a collaborative approach to governance that offers guidance to local leaders across the world working on the front lines of change today.

Session 7.6 (Special Session)

Using Metro-Hub

Metropolitan areas have a key role in achieving the 2030 Agenda for Sustainable Development and the New Urban Agenda. Despite being innovation and opportunities hubs, they encounter many challenges in governance, planning and financing. To support integrated approach to metropolitan development, UN-Habitat and its partners have developed the MetroHUB approach that embraces different aspects of metropolitan development and management including planning, governance and finance, that

aims to foster capacity of metropolitan stakeholders on how to address and better manage urbanisation challenges at a metropolitan scale. It provides a vital pool of resources, tools and expertise for developing institutional and human capacity, directly contributing to the New Urban Agenda objective of leaving no one and no place behind.

Session 7.7 Metropolitan Governance

Metropolises, as expanding, are covering several jurisdictions. Infrastructures and public services are managed on different areas. The share of competencies between the different administration levels (State, Regions, local authorities) is complex. The metropolis management require specific tool for coordinating sectors, territories and communities. The international experiences on Metropolitan management offer innovation on governance and innovation mechanisms for the well-being on communities.

Session 7.8

Debate: Governing the Metropolis

This session is devoted to a general discussion on governing the metropolis, deliver key messages for the conference regarding governance and the role of planners and to fix recommendations for the final declaration of the conference. The discussion will have 4 steps: keynote; debate; synthesis; recommendations for Isocarp and the final declaration

Session 1: Cross-border Governance **7.1**

10 September (Tuesday), 9:00 - 11:00

Sindi Haxhija, Karina Carius De Barros

Breaking through rigid administrative boundaries - synergies in ‘soft’ spaces of cooperation

Through case studies at the Dutch-German and the Finnish-Russian border areas, the paper explores the institutional and cultural challenges of ‘soft’ territorial cooperation. Challenging conventional regional or urban governance regimes, cross-border cooperation demonstrates a need for soft and more flexible decision-making powers, to mobilise stakeholders across various levels of governance, sectors and territories in the interest of functional territorial cooperation.

Khaled Abdellatif

Integrated Metropolitan Governance Framework for the GCC Future Metropolis

Due to gap between the current Gulf Cooperation Council (GCC) country’s urban governance systems and the future of its newly born metropolitan areas, this paper examines and tackles various patterns, problems and challenges of the current urban governance system, to reach to the optimum scenarios for governing the future GCC metropolis in an integrated metropolitan governance framework.

Zivile Simkute

Practical point of view: preparation of the National Urban Policy Framework

The proposal for the National Urban Policy Framework for Lithuania is an attempt to restart the urban planning tradition and culture in a country that historically has a difficult relationship with it. The case presentation will review the preparation process, structure and the content of the document with questions raised about the necessity of such a policy in other countries.

Daniel O’Hare

Towards effective planning of transborder city regions: three Australian case studies

Polycentric city regions are expanding worldwide, often crossing national or state borders. Using literature review and document research, comparative case studies of regional planning of Australia’s emerging internal trans-border city regions are presented. Evidence is provided that effective trans-border planning of city regions depends on overcoming differing levels of commitment to trans-border planning by the state jurisdictions involved.

Serin Geambazu

Dynamics of public urban waterfront regeneration in Istanbul, the case of Halic Shipyard Conservation

The global embrace of waterfront regeneration is widely recognized, however it is incompletely understood in planning theory due to dominance of North American and European case studies. The analysis of the Halic Shipyard Conservation project in Istanbul offers an opportunity to challenge this theoretical bias, and reevaluate the governance and planning process of urban waterfront regeneration in developing countries.

7.3 Session 3: Local Leadership 10 September (Tuesday), 14:00 - 15:30

TRACK KEYNOTE

Ery Supriyadi Rustidja, Teti Argo

The Role of Local Leadership in Fragmented Urban Development : the Case of Higher Education Town - Jatinangor, West Jawa, Indonesia

The Higher Education Town HET is a campus area, park of cultural technology science and an urban center. As a part of metropolitan, HET faces deterioration environment and urban space problems. The local leadership role in managing urban strategy and must have strong networks in quadruple helix context. Leadership behaviour and capability of local leaders determine performance of urban planning .

7.2 Session 2: Territorial Planning 10 September (Tuesday), 11:30 - 13:00

TRACK KEYNOTE

Huihui Nan

Planning and Management Experiences of Global Metropolitan Area - Lesson of New York Metropolitan Area, Tokyo Metropolitan Area, Paris Metropolitan Area, and London Metropolitan Area

New York metropolitan area, London metropolitan area, Tokyo metropolitan area, and Paris metropolitan area are internationally recognised as the four major metropolitan areas around the world. After reviewing their development process, some factors, including urban functions, regional division of labor, transportation, social equality and environment protection, necessary for the success of urban development were discovered.

Serin Geambazu

The New Istanbul: the expansion of a metropolis

As global capital proliferates, new spatial patterns emerge among which megaprojects denotes the biggest investment boom in recent times. Megaprojects are examples of new governance styles and policy targets, and this study looks at how the development of the new Istanbul Airport distinguishes itself from other build-operate-transfer megaprojects.

Slawomir Ledwon, Fatma Al Bader, Noora Al-Suwaidi

Developing the regulations for rapid urban growth: the new centres of the Doha metropolis, Qatar

Qatar's capital Doha has developed rapidly from a town a metropolis in a short time, being boosted by winning hosting FIFA 2022 World Cup and oriented around the new metro system. This presentation discusses how the regulations of a young planning system have evolved to introduce new urban centres and TODs, including the rationale for such changes and their applicability.

Xiangyi Meng, Taofang Yu

Infrastructure Imbalance, Financial Investment and AIIB's Role: Non-state Actor in Regional Governance

The Asian Infrastructure Investment Bank (AIIB) is an emerging force to solve the problem of infrastructure imbalance in Asian developing countries. Based on the economic geographical framework of density, distance and division, the paper analyzes traditional governance phenomena and the AIIB's role in spatial governance. Cases indicate the infrastructure-led development will widen differential rent gaps and bring agglomeration economies.

Thai Son Pham

Organising urban governance in Vietnam: an investigation on housing development in Ho Chi Minh City

This paper investigates the governance of urban housing development in Ho Chi Minh City (HCMC) in Vietnam. By focusing on capacity, finance, diversity, security and authority dimensions of governance, the paper concludes that current configuration of urban governance in HCMC is not sufficient to address housing as cross-cutting and multi-faceted issue and proposes integrated approaches towards a good governance system.

Olga Chepelianskaia

Fostering Local Leadership for Climate Resilience in Asian Cities

Ecosystem based climate resilience has been globally recognised as viable, cost-effective and generating multiple co-benefits for cities. However, it requires a transparent and supportive local governance and leadership, which remains a critical challenge in Asia. The paper looks at potential solutions to overcome these challenges and foster local leadership, as exemplified by Tri Rismaharini, the Mayor of Surabaya.

Tathabrata Bhattacharya

Fixing the wrongs against 'rights' in Kalyani (India): slum sanitation, land tenure, a municipality and the state

Working on a participatory slum sanitation programme, Kalyani Municipality (West Bengal) utilised people's participation to negotiate urban land governance by triggering voluntary habitat improvement by slum-dwellers. The paper explores the manner in which a municipality can impact the established land administration system that limits its constitutional powers and transform the perception of land tenure in two slums.

Session 4: Metropolis Management 7.4

10 September (Tuesday), 16:00 - 17:30

Eric Huybrechts

Urban planning agencies: a key support for metropolitan governance

Metropolitan governance is facing technical high complexity and several shape regarding scales, sectors and political changes. Permanent technical bodies are essential to provide scientific knowledge, prepare policies and strategies and support the public debates. Decision makers find in several shapes of territorial planning agencies the interdisciplinary tools to help them to define visions, prepare strategic decisions and manage metropolitan areas.

Mennatullah Hendawy

Visual Communication and the Mediatized City: From Billboards to Offices of Urban Planning in Cairo

Today, by simply walking in the streets of Cairo or opening one of the national TV channels, one get captured by hundreds of real estate ads. To what extent these dominant narratives and visuals impact/construct the professional planning practice, is interrogated in this paper through adapting an assemblage ontology and employing Actor- Network-Theory starting from street billboards.

Ana Peric, Theodora Papamichail

Informal planning: a tool towards adaptive urban governance

By using the example of a 'test planning' procedure that links both formal and informal planning, and observed through the lens of collaborative rationality as a theoretical background, the paper elucidates the following pillars of adaptive (collaborative) urban governance: 1) flexible and agile institutional arrangements, 2) proactive and imaginative planners, and 3) inclusion of numerous stakeholders.

Marc Wolfram

Un-planning the metropolis: Urban transformative capacity as a transdisciplinary heuristic and disruptive sustainability strategy

The concept of urban transformative capacity offers novel perspectives for addressing the metropolitan sustainability crisis: It focuses on dismantling path dependencies and supporting emergence for reconfiguring urban systems across scales domains.

Haward Wells, Frank D'hondt

Beyond the Plan: Building In-House Capacity to Plan, Design and Implement Territorial Transformations, Case of 'Castries Vision 2030'

Written by practitioners who were involved in drafting of the 'Castries Vision 2030' in Saint Lucia, the article testifies their experience with in-house and rapid planning to address pressing challenges related to depopulation of the core-city, informal housing, urban crime, environmental degradation, traffic congestion and imminent threats triggered by climate change in the context of insufficient and ineffective planning capacities.

Session 5: (Special Session) Democratic Urbanism : A Method for City-building 7.5

11 September (Wednesday), 11:30 - 13:00

Moderators: *Erin Simmons, Joel Mills*

When urban democracy expands, cities flourish. Democratic urbanism is a method of city-building that integrates democratic ideals into the urban design process and applies broader shared governance models to the implementation of community aspirations, creating places of deep meaning that are broadly "owned" in the civic mindset.

Session 6: (Special Session) Using Metro-Hub 7.6

11 September (Wednesday), 14:00 - 15:30

Maria Del Pilar Tellez Soler, Michael Kinyanjui

By adopting the NUA (Paragraphs 90, 91, 95, 96, 130 and 131 mainly), Member States of the United Nations committed to support the strengthening of the capacity of subnational and local governments to implement: Metropolitan governance, planning and financing. To do so, renewed metropolitan management that incorporates new capacities, competences and new ways of managing cities and urban agglomeration is needed. Therefore, in collaboration with different Partners, UN-Habitat has developed the "MetroHUB" initiatives. MetroHUB focuses on innovative capacity development for key-actors on metropolitan management. This novel approach to plan, govern and finance the urban and territorial development is gaining momentum. The event will showcase one of the innovative tools within the MetroHUB: "The Pyramid of Metropolitan Management". The tool demonstrates how 12 metropolitan management topics can be effectively talked to support the achievement of the NUA on "Leaving no one and no place behind". The tool is highly relevant for those interested in metropolitan development, because it identifies which are the fundamental topics facing a metropolitan area and then find pathways to simultaneously unleash, integrate and articulate the pyramid of governance, planning and financing. One of the key results of that the Pyramid of the Metropolitan Management Tool is to enable an integrated and holistic approach to manage multi-governance planning and financing of metropolitan areas.

7.7 Session 7: Metropolitan Governance

12 September (Thursday), 11:30 - 13:00

Ananya Ramesh, Nirupama M Vidyarthi

Decentralisation and Devolution in Growing Megacities: Case of Bangalore, India

Unpacking decentralisation and devolution in megacities, an element of 'disconnectedness' emerges; between parts affecting the whole, embodied as intents and outcomes. How do we then retain decision-making within the democratic realm and strengthen the role of local bodies. This is critical across megacities globally, as cities continue to seek autonomy in functioning, identity and influence, within networks of global flows.

Ali Alraouf

Towards a New Paradigm in City Branding and Marketing: The Case of Doha, Qatar

The paper articulates a model for Doha city branding which is based on a balanced approach. It considers traditional assets and includes contemporary and innovative assets resulting from the last decade's unprecedented investments in the sectors of education, research and culture. The paper suggests holistic approach to city branding which would balance between social equity, economic prosperity and ecological integrity.

José Álvaro Antunes Ferreira, Joana Almeida, Pedro Pinto

Metropolitan governance in Southern Europe: working across sectors and boundaries

This comparative study of governance structures across southern European metropolitan areas ask how inter-sectoral cooperation and coordination, and multi-jurisdictional collaboration is best achieved. The analysis focuses on the scope of their mandates, and management and legislative authority, and highlights best practices.

Arif Gandapurnama, Irene Sondang, Ahmad Zubair, Nala Hutasoit

Mapping institutions and actors in urban coastal management of Jakarta's Bay

This research has a comprehensive understanding of governance on Jakarta's bay. Having a mixed method methodology through content analysis and actor mapping tools, this paper describes a network of interactions between state and non-state actors regulating the planning process until implementation in the coastal development of Jakarta.

Jyoti Vijayan Nair

Making TOD Implementable in Indian Megacities : From theory to practice

India's unprecedented economic growth and urbanisation require innovative solutions over traditional planning practices. Transit-Oriented development(TOD)- widely acknowledged as a solution to sprawl, has been a popular buzzword in Indian urban policies for a decade, yet the first fully implemented TOD is still awaited. This paper examines key TOD projects to develop a framework for feasibility analysis of future TODs.

Papers

TRACK1: Limitless cities and urban futures:
planning for scale

TRACK 2: Besides the megacity and other cities:
planning for balance

TRACK 3: Liveable places and healthy cities:
planning for people

TRACK 4: Knowledge economies and identity:
planning for culture

TRACK 5: Smart futures and sustainability:
planning for innovation

TRACK 6: Changing environment and risks:
planning for resilience

TRACK 7: Urban governance and planning profession:
planning for future

Authors are responsible for the content of the short outlines and the full papers which are listed in the order of their presentations in each track.

Index

Track 1

AGGARWAL Vaishali, Smart Cities in India- Branded or Brain-dead?

ALRAOUF Ali, The Value of Less and Small: Transforming Metropolitan Doha into Connected, Human and Resilient Urban Settlements

ATMADJA Felicia, BOGUNOVICH Dushko, Shaping Compact Cities with TOD for Liveability, Sustainability and Affordability: A Comparative Assessment of Jakarta and Auckland

BIAN Bo, The application of micro-regeneration strategy in urban renewal in Lima, Peru

BOGUNOVICH Dushko, How Big Is Auckland: Planning a City-Region for Resilience and Regeneration

CHANDRASHEKAR Chandan Mysore, HARIDAS Bharath, PS Prakash, SENTHILNATHAN Aadithyaa Jayanthi, Machine learning for building extraction and Integration of Particle swarm optimization with SLEUTH for Urban growth pattern visualisation for livable cities

CROCE Silvia, VETTORATO Daniele, Urban parameters analysis and visualization. A Support to planning decisions for the definition of urban surface usages

KADIR Swarna Bintay, HASAN Mohammed Hamidul, Megacity & Mega Challenges: A case of Dhaka City - Capital city of Bangladesh

KARAAN Anna Katrina, Negotiating Spaces of Exception: Metro Manila's Planned Unit Developments - The Case of Eastwood City

LATIFAH Latifah, PINASTHIKA Dayinta, SMART GROWTH APPROACH IN PLANNING BOGOR CITY INFRASTRUCTURE

LI Shuai, Space of flow including capital and information shape the megacity groups: based on the example of Chengdu-Chongqing city groups in China

LU Qing, XU Liyan, PENG Xiao, CAI Zhen, The Spectrum of Metropolitan Areas across the World, and Detection of Potential Metropolitan Areas with Chinese Characteristics

LUO Wenjing, How to Define the Boundaries of Metropolitan Areas: Case Study of Wuhan, China

LUO Wenjing, The Corridor Strategies in the Megacity development: Case Study of the Optical Valley Knowledge

LUO Wenjing, How to Plan Ahead for an Efficient and Livable Metropolis: Wuhan Experiences

NAN Huihui, LU Qing, ZHAO Qian, Comparative analysis of Beijing-Tianjin-Hebei urban agglomeration, Yangtze River Delta urban agglomeration, Guangdong, Hong Kong and Macau Bay Area based on gravity model

NEGRILA Manuela, The role of sprawl towards the megacity. Eastern-European sprawl, the case study of Bucharest, Romania

NUGROHO Prihadi, Bringing creative Economy to Community Resilience towards better Urban Governance: The Case of Semarang City, Indonesia

ORTIZ Pedro, Metropolitan Management: Expansion, Governance, and Finance

PENG Yixuan, BRUYNS Gerhard, NEL Darren, Chinese Megablock Urbanism: a Tool of limitless Urbanization in an Unprecedented Speed and Scale

PETROVICS Daniel, Integrating Vertical Farming at Scale in Urban Food Planning - Practical Considerations for Planners

REIS SANTOS Mariana, Does the implementation of Special Zones of Social Interest (ZEIS) encourage adequate housing in precarious settlements? The case of Sapa, Sao Paulo

RWAMPUNGU Ivan, NOBUO Mishima, Evaluation of urban form of a mountainous city from the perspective of compactness characteristics

SANTOSO Putrikinasih, Finding Housing Affordability in MRT Jakarta TOD Areas

YORGRI Eunice, HONG Leng, The Role of Urban Slums in the Evolution of Megacities; A case of Nima and Old Fadama, Accra, Ghana

ZUO William, Multi-scale Spatial Layout Structure System: Experiences of Shanghai Mega-city Spatial Planning

Track 2

ANGELOVA Ivana, Building moratorium as a future instrument for tackling unsustainable urban growth

BOLAY Jean-Claude, LABATTUT Eleonore, Sustainable development, planning and alleviation of poverty

CHATTERJI Tathagata, Balanced Regional Development through District Planning - A comparative analysis of Indian and South African planning frameworks

CHEN Zhao, HUANG Chunxiao, The Weak-sided Urban Fringe and the Flexible Planning Approaches - a case study of Yuhuatai District, Nanjing

CONTIN Antonella, KIM Sandy Jiyeon, HOW TO GRASP THE POWER OF THE PLACE: The TELLme Project and Metro-dology

ELISEI Pietro, BATUNOVA Elena, DRAGHIA Miruna, The CRISALIDE Project: When innovative planning processes re-balance urban development and create new quality of life using the opportunities provided by the rise of the digital city.

GAN Zhengkun, LONG China Lingege, ZHANG Dayu, Research of Traditional Village Conservation and Development Planning in the Perspective of “Multiple-planning”

GOLDIE Stephen, Two Thousand New, Million-Person Cities by 2050 - We Can Do It!

GREEN David, AL RASHAD Sulaiman, KNIGHT Paul, CAMMELLI Nicole, A 21st Century National Ordinance

HE Liang, From one-way to interactivity - difficulties and strategies in the planning of adjacent areas of metropolis

HILGEFORT Jason, Rural Revolution, leveraging emerging infrastructures

JIANG Xue, ZHAO Tianyu, Whole-region Tourism Greenway Network Organization Mechanism Based on Gravity Model Flow Measurement

KUNDU Raroola, The Informal Syndicate Raj: Emerging urban governance challenges in newly incorporated villages of Bidhan Nagar Municipal Corporation, West Bengal

LESTARI Dwitanti Rezkiandini, LATIFAH Latifah, Anticipation Strategy for Urban Conurbation in Semarang - Surabaya Corridor

LI Yanqun, GENG Hong, SHI Erpeng, Response path adapted to the unbalanced shrinkage of small towns in metropolitan areas: A case study of Wuhan in China

LI Bin, GUO Weihong, ZHANG Yuqing, Rural revitalization of Batang village in Guangdong province under the background of balancing urban and rural development

LI Yi, ZHU Xihua, Analysis of the Correlation between the Establishment of Rural Land Share Cooperatives around Shanghai and the Government & Villager Satisfaction - A Case Study of Jinxi Town, Kunshan City

LIU Tianzhu, LI Jingsheng, Out-migrate Elites as Rural-Urban Link: an Innovative Pathway Toward Rural Development Around Metropolis

LU Zhengyin, WEN Xiaoyi, The Shrinkage and revitalization of villages in metropolitan area of mega cities

MAITI Sohini, MAL Satyajit, Defining the RUrban - a case of Hyderabad

MARAT-MENDES Teresa, BORGES Joao, The role of food on re-imagining the sustainable city: from the neighbourhood to the region.

MARDIANSJAH Fadjar, RAHAYU Paramita, RUKMANA Deden, Urban Population Growth and the Growth of Towns and Cities in Indonesia: the challenge of non-statutory town development

O'CONNELL Derry, The Smaller Town as Component of an Urban Settlement Cluster

PAKOZ Muhammed Ziya, BAS Ahmet, EREN Fatih, AN ANALYSIS OF THE CHANGING ROLE OF ISTANBUL AS A MEGACITY IN THE WORLD

PERMANA Mirza, SETTLEMENT DEVELOPMENT ANALYSIS OF MALANG CITY PERI URBAN AREA and ITS CONFORMITY WITH THE REGIONAL SPATIAL PLAN

QI Huimin, Analysis on Integration Path of Urban and Rural Industries Based on Economic Data Model - A Case Study of Overall Strategy Planning of Taiyuan Rural Revitalization

SADEWO Erie, HUDALAH Delik, SYABRI Ibnu, PRADONO Pradono, Deciding Where to Live in The Suburb: Linking Utility-Maximization and Residential Mobility in Polycentric Urban Region Context

SETIAWAN Bakti, RAHMANI Sita, Global-Local Dynamics in Urbanization: The transformation of the desa-kota in Bali and the roles of adat institutions

SHI Ding, ZHAO Dianhong, A Study on the Approach of Sustainable Development on Traditional Cultural Landscapes Surrounding Metropolitan Shanghai

SOEMAWINATA Soelaeman, MUTTAQIN Dani, PANGERAN Adhamaski, Township Development by Private Sector: Lesson Learned from Jakarta Megapolitan Area

SUSMAN Roni, WEITH Thomas, FACTORS INFLUENCING OF LAND USE CONFLICTS IN PATIMBAN SEAPORT INDONESIA

VLASWINKEL Esther, WALVIUS Minze, The City of the Future, a new paradigm, a new vocabulary

WARRIER Soumya S, The Anti-city

WEITH Thomas, FIENITZ Meike, Just Schwerin: Balanced urban-rural development?

WEN Xiaoyi, LIU Ye, Planning Practice in Areas Beyond Megacities under the Rural Revitalisation Strategy in China: Case Study of the New Jijiadun Village - A Concept of 'Co-Creation Community for Rural Life'

WEN Xiaoyi, ZHANG Guoquan, JIANG Qiuyi, Exploration and practice of formulating strategic planning for rural revitalization in the Shanghai metropolitan area

ZHAO Dianhong, Construction and empirical study of evaluation index system of rural revitalization in China's metropolitan areas from the perspective of social ecosystem -- taking villages and towns around Shanghai as examples

ZHU Haixuan, LIU Sai, JIA Xiaoyu, Urbanization Mechanism Study under the Dynamics of State Capitalism: A Case Study of the Far East with the Construction of the Siberian Railway in the Early of 20th Century

Track 3

AERTS Jens, Training session on child-responsive urban planningw

AGRAWAL Mahak, A Dream of open defecation free India? Decolonise and innovate urban sanitation to reach those left behind

AKBAR Poeti, EDELENBOS Jurian , Temporal and Regular Place-making in Indonesian Kampung: Creating Urban Spaces that Enhance Local Empowerment

ANDRIANI Dhea, DEWI Indarti Komala, HIDAYAT Janthy Trilusianthy, The Implementation of Children Friendly City in DKI Jakarta through Assesment of Child-Friendly Integrated Public Space (RPTRA). (case study : Kecamatan Kemayoran, Jakarta Pusat)

BINGLE Rouve, Hunger in revered spaces: Exploring the impact of planning on the university campus food system in South Africa

CAETANO Fernando, MEIRA Jeronimo, RODRIGUES Suzi, The definition of accessible routes on sidewalks: a new challenge for Brazilian cities

CAP Constant, The Importance of Participation and Inclusion in Developing Livable and Affordable of Housing, Transport and Social Services in Kenya

DIMASTANTO Adriadi, INSANI TANJUNG Rachmatika Fitri, SAPTIWI Tri, IMPROVING THE QUALITY OF PUBLIC SPACE IN BOGOR CITY THROUGH CSR FUNDING SCHEME

GHOOR Raesa, PHOLO Keneilwe, BUSGEETH Karishma, Developing a Spatial Transformation Scoring Tool to Monitor South African Catalytic Housing Projects

GOETHALS Sebastien, Planning Transit-Oriented Development (TOD) in an African City Facing Rapid and Informal Urban Growth: the Case of the Urban Mobility Plan of Conakry, Guinea

GREEN David, Health Districts: Creating Healthy Cities

INDRASARI Fenita, In between luxury of housing and affordability of transportation: Exploring automobile dependency of housing estate residents and kampung dwellers in suburban Bandung, Indonesia

KYRIAZIS Apostolos, Urban morphology and behaviour mapping in Abu Dhabi's public spaces: informality as an interaction of cultural context and urban form

LEDWON Slawomir, Health and the city: creating built form and planning for the physically active

LI Juan, DANG Anrong, Empirical study on the evaluation of publicness of public space: taking Chinese megacity as the case

LI Shuai, Children-friendly design of Urban public space: based on the study of Shanghai, China

LIU Xuhui, YIFAN Yu, SUI Xin, Neighborhood Environment and the Elderly's Subject Well-being

LIU Chengcheng , Strategies on Healthy Urban Planning & Construction for Challenges of Rapid Urbanization in China

MAJEED Rushda, WATANATADA Patrin, BUILDING INDIAN NEIGHBOURHOODS TO THRIVE IN: GUIDELINES FOR PLANNING, DESIGN & POLICY FOR INFANTS, TODDLERS + THEIR CAREGIVERS IN INDIA

MEWS Gregor, Realising the potentials of a design-dividend towards a lovable urban future

NIKSIC Matiej, Liveable and just public space - Conceptual approach to urban walkability on the case of Ljubljana, Slovenia

PENG Cheng, LI Jingsheng, Research on the build of Healthy Walking System for Urban Central Business District: A Case Study of Jiangbeizui CBD in Chongqing, China

PINASTHIKA Dayinta, AMELIA Puteri Rizqi, HARDIANSAH Elkana Catur, DIMASTANTO Adriadi, IAP's Indonesia Most Livable City Index (MLCI): A Perception-Based Survey to Measure City Livability Index

SUI Hang, YANG Dongfeng , Analysing the perceptions of the elderly on space vitality and related environmental factors based on residential community

TAHIR Akino, DWIYANI Risye, SAGALA Saut, VIARTASIWI Nino, Secondary cities and forced migration: accommodating refugees and asylum seeker in Indonesia

TAMPI Daniel Mambo, DARMAJANTI Linda, FITRINITIA Irene Sondang, Sustainable Urban Development: Building Healthy Cities in Indonesia

TANAN Natalia, Laksmi Tungga Dewi Jaya WISNU WARDANI, The Pedestrians' Stories: Towards Walkable Cities in Indonesia

TANG Lynn, PUN Vivian, RADIAWATI Ririn, Importance of air quality management for public health and development progress in Jakarta, Indonesia

TENORIO Gabriela De Souza, Better places for a liveable - and lively - city: a method of Post-Occupancy Evaluation of public spaces.

XIA Fujun, Discussion on the Fairness in the Planning of Relocation Community - Taking the Constructive Detailed Planning of Longhai Community as an Example

YE Yang, Residents' Perceptions of Walkability Attributes in Cold Region Chinese Cities: Reliability and Validity

YUAN Qing, GUO Ran, Outdoor Public Space Activities Characteristics of Children and Their Inter-generational Parents and Design Strategies from the health perspective: a case study in Harbin, China

ZHONG Mengqi, SHEN Yuanyi, YU Yifan, Association between Neighborhood Built Environment and Body Mass Index among Chinese Adults: Hierarchical Linear Model

ZHONG Mengqi , YU Yifan , The Spatio-temporal Disparities in Healthy Food Accessibility: A Case Study of Shanghai, China

Track 4

ARIYANTI Vicky, Cultural sensitive approach in water management for a volcanic river basin of Yogyakarta Metropolitan Area

CHEN Lin, Inheritance and Development of Traditional Minority Culture in Southwest China: A Case Study of Miao, Dong and Dai Nationalities

DENG Xiaoxiao, ZHANG Dihao, YAN Shuang, Revitalizing historic urban quarters by Cityscape Control Plan: The case of Xi'an , China

HANZL Małgorzata, BEZERRA Lia Maria, Healthy City versus Resilient Planning paradigm

HUQ Ferdous Farhana, SHUVO Imzamam Ul Khan, ISLAM Nidalia, Essence of Urban form and its Relationship with Urban Aesthetics: A case from Rajshahi City, Bangladesh

IRANMANESH Nasim, Improving the identity of historic city by considering hydraulic infrastructure (the case study: Qazvin city)

LIU Sai, ZHU Haizuan, JIA Xiaoyu, Study on Urban Morphology Optimization Based on the Construction of Urban Memory Structure - Take Dazhi Street in Harbin as an example

PACE Giuseppe, Underground Built Heritage as catalyser for Community Valorisation (Underground4value)

PERSADA Citra, KESUMA Yunita, RUSMIATI Fadhilah, A City Branding Framework in Planning: The Case Study of Pringsewu Lampung, Indonesia

POMAZAN Roman, KHVAN Alexandr, Culture capital of the Turkic World

RANJBAR Ehsan, The Power of Culture in Creative Placemaking for Future Urban Economy; Evidence from Contemporary Iranian Urban Spaces

SCHEERBARTH Benjamin, An Awkward Dance: Nightlife and Urban Development (Lessons from Berlin)

SEPTIANA Harini, AL NAEMA Noora, AL-JABER Amna Khalid J, AL BADER Fatma, AL KHALDI Lolwa M. Alfaya, Forward Thinking on Culturally Urban Imprint in the Contemporary Era Rejuvenating the Traditional Neighbourhood Values and Characters: An Urban Morphology Review on Qatari Cities

SHEN Qi, Informal entrepreneurs in old districts in central city Shanghai

SHEN Luni, The activation and revitalization of Yihe, Nanjing

SIJAKOVIC Milan, PERIC Ana, Recycling of industrial heritage: promoting local diversity and cohesion in globalising cities

SOFHANI Tubagus Furqon, FAHMI Fikri Zul, FIISABIILILLAH Dika Fajri, WULANDARI Brigitta Sadnya, Community capacity for creativity-based rural development in a developing country: Case studies from Indonesia

STARR Peter, Old Deira, Dubai: The Role of Culture, Identity and Planning in a Global City

WANG Qinglian, ZHAO Zhiqing, ZHANG Bocheng, Cultural Heritage Conservation and the Sustainability of City's Orderly Development: identification, conservation and construction of historic space

YANG Yang, ZHAO Jilong, SUN Qian, Research on Online Public Participation and Platform Construction of Historical Block Protection in Data Age

ZHANG Dian, XU Suning, Research on Humanistic Technology of Urban Design of Historical Blocks in Harbin

ZHANG Jie, ZHAO Zhiqing, Regeneration of Railway Industrial Heritage- Protection, Renovation and Development of Hengdaohezi Town

ZHOU Weisi, XIONG Wei, HONG Qi, The Road Of Rebirth, Place making in Bidur from the Perspective of Cultural Landscape

ZIVALJEVIC-LUXOR Natasa, MITOVIC Petar, Forever frenemies: built heritage, megacities and new technologies

Track 5

AGGARWAL Vaishali, Spaces of becoming- Space shapes public and public (re)shapes their own spaces

AL-SOROUR Jassim, ALAMRI Noor, How can cities succeed and boom in the long run? CASE IN QATAR

BISELLO Adriano, VETTORATO Daniele, Startdust Smart City Project in Trento

BISELLO Adriano, VETTORATO Daniele, The next generation of EU smart city projects: turning "clean energy for all" into "clear benefits for all".

BORISOV Andrey, Presenting the prospects for Ropeway Implementation as a Public Transport Mode, the case of Moscow

CELIK Ozge, ERTEKIN Ozhan, Re-thinking the city: Basaksehir Living Lab (Case of Istanbul)

DONG Le, XU Chen, CHEN Baolu, Investigation about tourism image optimization of Lugu lake scenic area based on internet reviews

DUBEY Mayank, Smart signals and corresponding challenges in heterogeneous traffic conditions

FIUZA Mariana, UCHOA Gabriela, MAIA Flavia, The Goldilocks Zone for the public sector innovation: Teresina 2030 towards resilience to climate change in the developing world

HASANUDDIN Dian, Smart Cities and The People: Urban Planning Collectives in Indonesian Cities

HENDAWY Mennatullah, Urban Planning in a Mediatized World , case of Egypt

KAMROWSKA-ZALUSKA Dorota, Smart city and regenerative city – complementary or contradictory approaches

LEE Ming-Chun, People, Places, Memories and Mobile Apps: Understanding the Potential of Augmented Reality in Public Participation and Community Development

OBRACHT-PRONDZYŃSKA Hanna, Big data based assessment on metropolisation processes in Poland

PAL Sugandha, THAKUR Palak, Switching to a sustainable auto-rickshaw system (Namma Auto Project)

PILSUDSKI Thibault, TAN Si Ying, TUNAS Devisari, CLAVIER

Fabien, STOKOLS Andrew, TAEIHAGH Araz, Smart planning in Southeast Asian cities: the role of urban governance and knowledge transfer

PURWANTO Alloysius Joko, LUTFIANA Dian, Future Urban Mobility Development Framework to Maximize Benefits of Plug-in Electric Vehicle Penetration in ASEAN Countries

QIN Tian, Comprehensive Evaluation and Dynamic Evolution Analysis of Shanghai's Urban Vulnerability

SANTOSO Putrikinasih, Reinventing the City Centre: Implementation Strategies for TOD Concept in Existing Built Environment in Jakarta

SUI Xin, LIU Xuhui, YIFAN Yu, Measurement of spatial equity: a case study of nursing institution

SUN Yu, LENG Hong, TIAN Wei, The Framework Research on building energy efficiency in urban planning : Integrated Visioning Based on Agent-based modelling and Spatial Analysis approach

TALLO Amandus Jong, Why We Need Participatory Mapping?

TILLNER Silja, KUEHN Eva Maria, Habitat 5.0 - Towards affordable and sustainable housing in the developing world: A pattern- and block chain-based approach

XIA Huiyi Xia, XIA Nankai, Urban living environment assessment index system based on psychological security

YANG Junyan, ZHENG Yi, MARVIN Simon, Cities and Digitization: Perspectives and Challenges of the Smart City Technologies on Urban Planning and Design

ZHANG Qinglai, BU Jiatian, YU Yifan, Measuring Visual Quality of Street Space Based on Deep Learning and Street View Picture: Pilot in The Linong Area in Shanghai

ZHAO Dianhong, Improving Space Structure of Traditional Resources-Based Cities Transformation in a Background of Supply-Side reform: a Case Study of Yantai City of Shandong Province

Track 6

ARIF WICAKSONO Andie, Participatory and Good Governance: The role of stakeholders in increasing the adaptive capacity of the poor to cope the impact of climate change. Case studies: Surakarta and Yogyakarta, Indonesia

BUI Hien, MANH Tuan, BABCOCK Julia, NGUY Thi Khanh, Capacity and Trade: Alliance for Green Actions

CAO Cong, XU Suning, Research on Strategies of Low-impact Urban Design in China

CHEPELIANSKAIA Olga, Building Unique Cities: an Imperative for Sustainability and Liveability in the Global South

CILLIERS Juane, Trans-disciplinary planning approaches towards resilience

ESTEBAN Theresa Audrey, Mind the gap: Stakeholders perspective on resilience building in the City of Rotterdam

ESTEBAN Theresa Audrey, Living with water: how memory and experience help build community resilience in Dordrecht

HANDAYANI Wiwandari, BEAGEN Barry, DEWI Santy Paulla, Promoting Water Resilience in Semarang: Building a Coalition through the Water as Leverage (WaL) Program

HUQ Ferdous Farhana, ISLAM Nidalia, ZUBAYER Sakib, AHMED Nessar Uddin, Green Roof: An Approach to Repair the Climate of Dhaka City

LU Peijun, SUN Yimin, CHEN Bilin, XIA Sheng, Urban Design Study of Resilient City in Guangdong-Hong Kong-Macao Greater Bay Area

MATHEWSON David, Effects of ongoing infrastructure improvements in relation to planning policy for flood resilience and historic urban morphological development in Jakarta

MUTTAQIN Dani, EARTHQUAKE POST-DISASTER RELOCATION IDENTIFICATION IN MEUREDU PIDIE JAYA NANGROE ACEH DARUSSALAM

NIKSIC Matej, CERVEK Jernej, Changed precipitation patterns and the need for a novel approach to building plot planning: The lessons learnt in the sub-alpine climate zone of Slovenia

NURAINI Sani, INDRATNO Imam, Embodied Carbon Emission Analysis of Industrial Sector Based on Input-Output Analysis : Case Study in Bitung City, Indonesia.

PARMAR Shivangi Singh, SEN Joy, GOSWAMI Arkopal, An assessment and delineation of Socio-economic Resilience Landscapes of the Region based on the inherent latent factors of vulnerabilities

PHAM Thai Son, Identifying climate resilience challenges in Vietnamese cities: case studies of Can Tho and Da Nang

PRABHAKARAN Priyanjali, KARTHA Suja, Role of Women Self Help Groups in Disaster Resilience and Livelihood Regeneration: Post Flood Experience from Kerala

PRABHAKARAN Priyanjali, KARTHA Suja, Flood resilience planning for Disaster prone Panchayaths. A case of Karumaaloor Panchayath in Ernakulam District, Kerala

PRILANDITA Niken, SAGALA Saut, KUMAR Jeeten, RETNO ARSANTI Teresa, The Stakeholders & Stakeholder Network' Role in Sustaining the Renewable Energy System in Sumba Island

RAMAMURTHY Adinarayanane, ROY Anusha, GREEN AND BLUE INFRASTRUCTURE TO REGULATE THERMAL COMFORT IN HIGH DENSITY CITY PLANNING: A CASE OF NAVI MUMBAI, INDIA

ROLLINGS Jackson, BUNT Travis, HIDAYANI Rizqa, LETITRE Peter, CARPAIJ Sander, THOMA Despo, Sinking, growing, resilient: a multidisciplinary approach to climate adaptation in Semarang, Indonesia

5. Conclusion

As the macro environment enters the “new normal”, strategic planning is also facing transformation and upgrading. Starting from Yuhuatai, we seem to see a new paradigm that differs from traditional strategic planning. Is our goal to create a new paradigm to replace the old paradigm? Not exactly. Paradigm can be seen as a possible approach or solution under a certain period of time or contexts, and the reason why strong-sided fringe development well in the past 40 years is not because of some certain paradigm, but because the paradigm chosen best met the modernization 1.0 context. Therefore, when faced with the macro-transformation of modernization 2.0, the pursuit of good planning and correct knowledge is the only possible eternal paradigm of strategic planning.

6. References

- Albrechts, L. (2004). Strategic (spatial) planning reexamined. *Environment and Planning B: Planning and design*, 31(5), 743-758.
- Harvey, D. (2007). *A brief history of neoliberalism*. Oxford, UK, the Oxford University Press.
- Healey, P., & Underwood, J. (1978). Professional ideals and planning practice: a report on research into planners' ideas in practice in London Borough planning Yeh, A. G. O., & Wu, F. (1999). The transformation of the urban planning system in China from a centrally-planned to transitional economy. *Progress in planning*, 51(3), 167-252.
- Innes, J. E. (1995). Planning theory's emerging paradigm: Communicative action and interactive practice. *Journal of planning education and research*, 14(3), 183-189.
- Leaf, M. (1998). Urban planning and urban reality under Chinese economic reforms. *Journal of Planning Education and Research*, 18(2), 145-153.
- departments. *Progress in planning*, 9, 73-127.
- Wu, F., & Zhang, J. (2007). Planning the competitive city-region: The emergence of strategic development plan in China. *Urban Affairs Review*, 42(5), 714-740.

Research Paper

HOW TO GRASP THE POWER OF THE PLACE:

The TELLme Project and Metro-dology

Antonella CONTIN, Politecnico di Milano; Italy

Sandy Jiyeon KIM, Politecnico di Milano; South Korea

Abstract

Metropolitanisation processes caused by unplanned urban growth have generated an enormous demand for infrastructure and services, as well as impacts on the environment that can lead to imbalances in social development. In order to promote sustainable growth, it is necessary to plan a fair distribution of services throughout the development of the city with efficient infrastructure system. Our answer is a proactive project, which holds the social and ecological function of the city that restores safe environmental conditions. In the ongoing TELLme Erasmus+ project, we attempt to define a holistic methodology, the Metro-dology; structure a training lab where academia and practitioners can discuss the issues, principles, and gaps of the metropolitan area; and develop mapping tools to comprehend the metropolitan complexity and support the training. We are looking for new relations among the parts of the city through first, mobility project to transform the times of the city; second, identification of suitable places for the production of a modern and clean circular economy; and finally selection of areas for urban regeneration to rediscover and renew the identity of the metropolitan city.

Keywords

metropolis, TELLme, metropolitan complexity, metro-dology

1. The Complexity of Contemporary Metropolitan Issues

1.1. Contemporary Debates on Metropolitan Issues

Rapid urbanisation has been one of the urgent issues across the globe in the past few decades. As a consequence, more and more cities are now becoming part of larger metropolitan areas. As the growth and the environment resemble nothing of the past events, it is essential to distinguish the new metropolis and understand the difference from a traditional city.

In the early 20th century, to describe the extensive urban scale change triggered by the industrial revolution, the word 'metropolis' reappeared in the Western world with more modern meaning. It described the urban expansion that had been occurring at different times in different locations around the world over the past two centuries. In this context, the use of the term metropolis emphasised the size of the city that had changed. Otto Wagner and Ludwig Hilberseimer were amongst the first scholars who raised the issue of the Großstadt,

that is the “big city”, in reference to the change of measure and scale of the urban settlements in the wake of the industrialisation in the western world.

The phenomenon of the contemporary metropolis, however, differs from the modern industrial “big city”. The unrestricted urban growth we are experiencing nowadays has exceeded the timeframe of planning. The nowadays concept of the metropolis is related to a measure and scale which is not associated with human dimensions or commensurate with the urban fabric and the density parameters represented in the concept of proximity. “Metropolitan” as a category is related to a context of mass mobility of people and goods, which implies a different relationship between individuals and groups. The technological utopia, embodied through the spreading of metropolitan infrastructure networks and the overlapping natural universe, has erased previous continuous geographical traces and has disarticulated agricultural and urban historical topological patches. As a result, we may notice a sense of loss of productive and symbolic connotations of the cultivated land.

Moreover, the main drivers of urban development in the past two centuries were not the physical shape of the city but external logic such as economic models, political agenda, and technological optimisation. These growth models focusing on the efficiency of growth demonstrated their limits in addressing the quality of the well-being of the citizens. The prevailing inequality has escalated the conflict amongst groups of people around the globe where existing urban spaces have not been able to accommodate the incoming population. Unplanned occupancy in areas such as main water basins that serve the entire city became a risk for all inhabitants, only exacerbated by the effect of global climate change. The colonial past, on the other hand, has cast long shadows over many of the developing countries to struggle with not only the physical, social, and economic difficulties but also with the cultural identity of the population.

These backgrounds of extreme urbanisation leave us with the big question of how to deal with the metropolitan complexity to realise sustainable growth to reach the well-being of the population in the post-colonial, Anthropocene era. Metropolitan Complexity refers to the issues of the contemporary metropolitan system. Social and economic inequality, the fragility of environmental eco-systems in relation to the global climate change, the emergence of the political idea of the metropolitan dweller as a global citizen, the preservation of cultural heritage; the post-colonial identity, and the governance and policy issues are only a few of these issues framing the Metropolitan Complexity. These issues cannot be addressed with a single, static, and traditional disciplinary approach, but needs a comprehensive and multidisciplinary vision to understand them.

1.2. The TELLme Project and the Metropolitan Approach to Complexity

The TELLme (Training for Education, Learning and Leadership towards a new METropolitan discipline) is a three-year Erasmus+ project started in 2017 where the cooperation for innovation and the exchange of good practices are the key actions. The project addresses the urban and architectural disciplines at the higher education level, based on the assumption that cities in the 21st century are the crucial field of complex issues derived by the extreme urbanisation and the HEIs have a social responsibility in providing solutions.

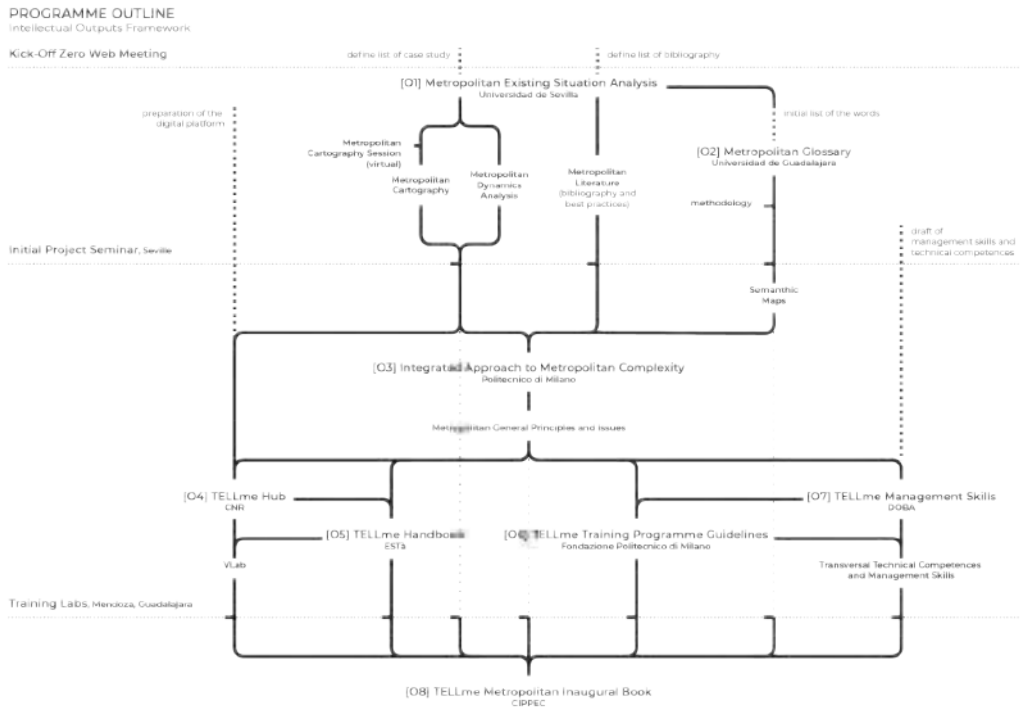


Figure 1 TELLme Intellectual Output Framework

Ten partners and four associate partners from Europe (Italy, Spain, Slovenia) and Latin America (Mexico, Argentina) are working on developing the theoretical framework, methodology, and tools to address the metropolitan complexity holistically. The eight outputs range widely from the theoretical studies to practical training guidelines, yet closely linked to one another through framework and methodology of the Metropolitan Discipline. (Figure 1)

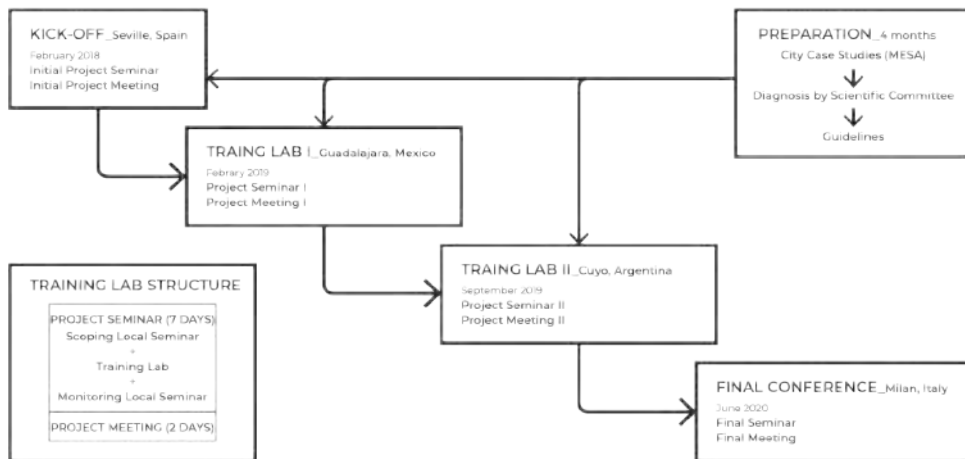


Figure 2 TELLme Training Schedule

In particular, there are two training labs where we test the methodology with actual case studies involving local government and stakeholders. (Figure 2) During the training lab, besides identifying the urgent metropolitan issues of the location, all participants provide feedback and discuss further project developments. The expected impacts of the TELLme project are:

- A multidisciplinary and trans-national collaboration, sharing knowledge, skills and best practises, developing new tools will directly improve the involved HEIs in their capacity to address the Metropolitan Discipline
- Building a community of practice of the discipline amongst higher education institutions through technological innovations that interact with local governments, NGOs

In order to define the metropolitan approach, it is crucial to recognise the paradigm shift from the urban to the metropolitan scale, thus seeing the contemporary metropolis as a “net-city”. According to D. G. Shane, the Net City is “a multi-centred network system” emerged “to handle the apparently chaotic flows of diverse participants in an increasingly global network.” The Net City is essentially a system of cities of different sizes functioning as a whole throughout a network of physical and virtual infrastructures. (Figure 3)

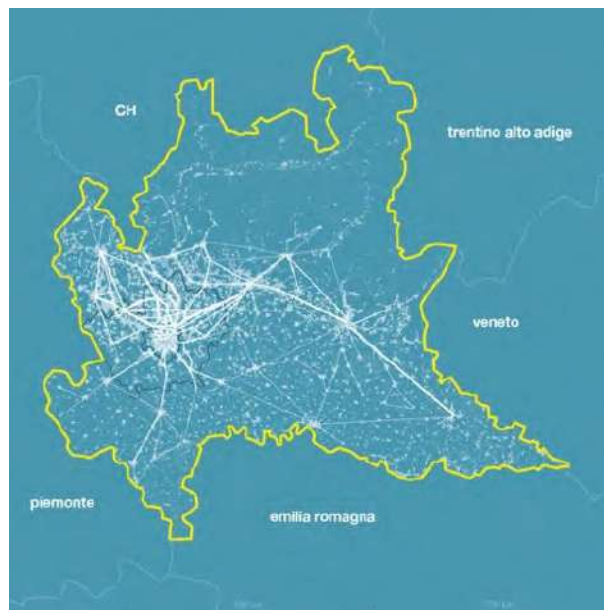


Figure 3 Milan PGT, Metrogramma, 2007

In this polycentric system, however, we are not only dealing with the nodes and edges of the network. According to authors such as Terry McGee, Edward Soja, Neil Brenner, and many more, we are facing a hybrid territory where urban and rural scales define a seamless heterogeneous landscape. This space in-between the network is called “body space”, where the continuity and the connection with the previous system are lost due to metropolitan infrastructure systems. The Body Space needs to be reconceptualised with new meaning and new image in the metropolitan era.

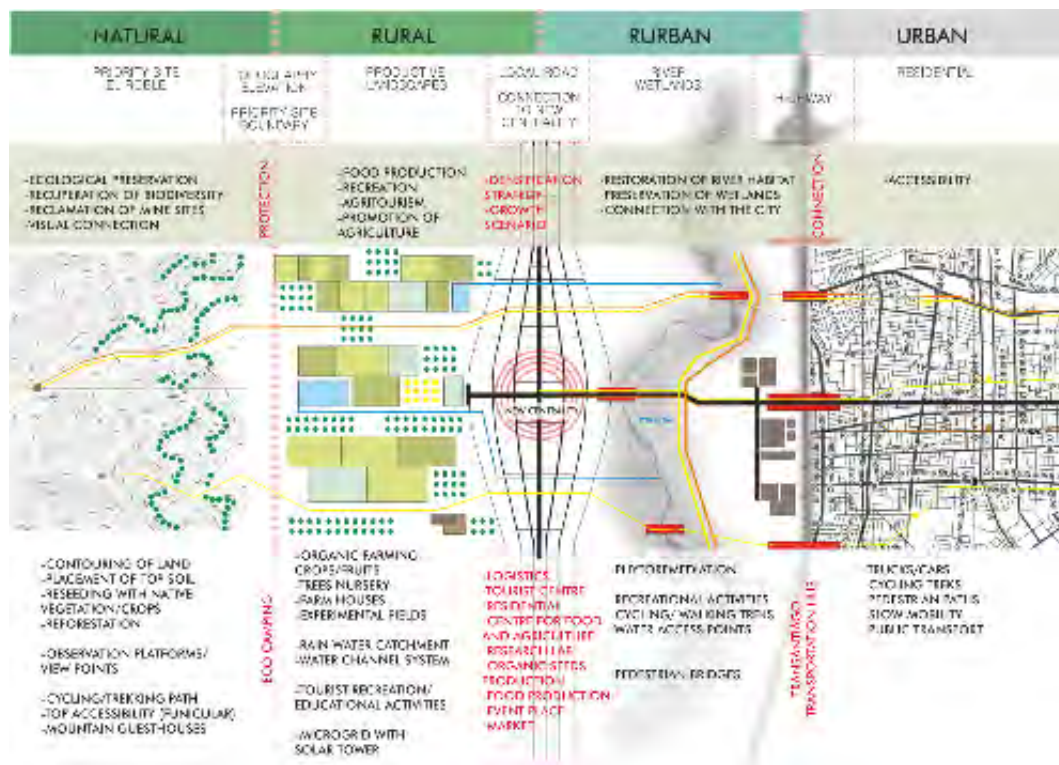


Figure 4 Urban-Rural Linkage Pattern Study, MS Lab 2018

The recognition of “body-space” allowed us to discover new patterns of settlements that are beyond the dichotomy of urban and rural patterns. (Figure 4) It opened the whole new possibilities of shifting between different scales and time that require new spatial practices, social behaviours, and organisational structures. This change also fostered engagements of new spatial agencies such as private and public organisations, universities, families in the interactions amongst global and local forces challenging fixed administrative boundaries at different scales and requiring innovative forms of institutional organisation, and planning.

The necessity of a comprehensive and multidisciplinary approach to the study and practice of metropolis became a common ground for our academic exchange in the past years. The metropolis spatial structure needs a Metropolitan Discipline able to support its construction with organisational, technical expertise, and a big project of urbanity based on a physical and virtual network between the new city shape and the new forms of conviviality. The metropolitan vision will lead to the improvement of the Practice of the Metropolitan Discipline (figure 5) with new competencies.

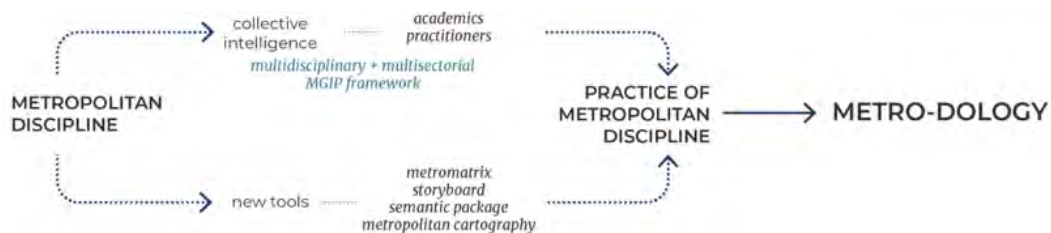


Figure 5 Practice of Metropolitan Discipline

2. The methodology for the Practice of Metropolitan Discipline

2.1. Metropolitan General Issues and Principle (MGIP)

The aim of the Metropolitan General Issues and Principle (MGIP) framework is to create a feedback mechanism where practical experience is reflected in the theoretical work of the Metropolitan Discipline, taking the local environment, community, wealth, governance, and culture dimensions into consideration. Within this basic structure, the collaboration of the collective intelligence yields holistic solutions addressing all dimensions of the metropolis.

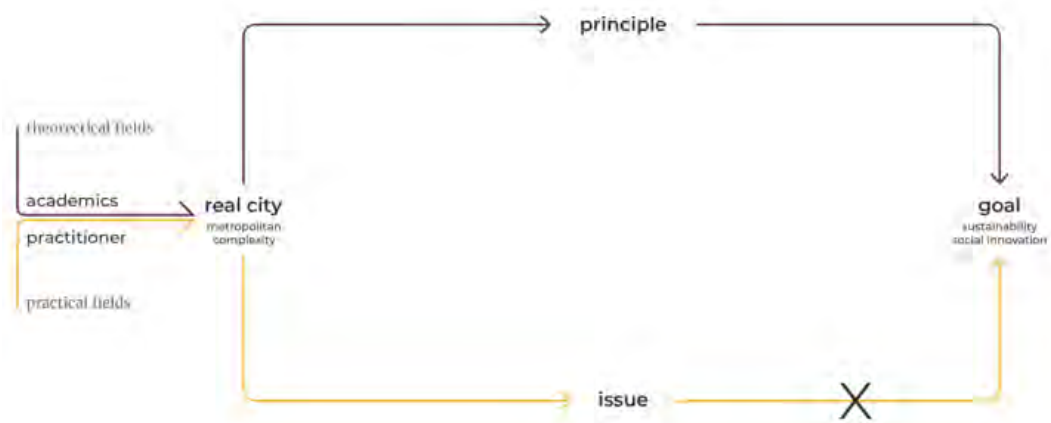


Figure 6 Current Situation in the Metropolitan Practice

The reality indicates the existing situation of a built metropolis. It is the starting point of acknowledging the issues to address, and the principles ruling the specific context. The goal is the ideal objective of a metropolis, which is ultimately the sustainability of the metropolis for the wellbeing of its citizens. From the literature and the case studies, academics set the principles that define what to achieve, how, and why for reaching the goal. On the other hand, practitioners face the issues, which are the undesired outcome of a metropolitan dynamic and often act as a hindrance for meeting a metropolis expectation. (Figure 6)

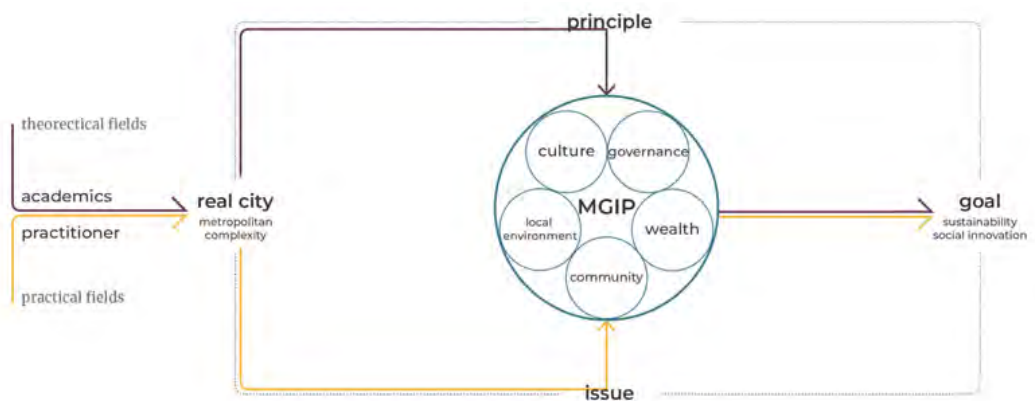


Figure 7 The Proposal of Metropolitan General Issues and Principle (MGIP) Framework

The reconnection of the ideal city with the real built city in the MGIP framework (Figure 7) comes through the process of operator and operation that bring the principles and issues together for finding how to transform, develop, or maintain the existing situation and reach

the goal of sustainability. From this perspective, both the theoretical field of academic knowledge and the practical field of the governance and management of a metropolis are equally acknowledged. The framework attempts to merge the field experience with the theoretical issues of the complex process in Metropolitan Projects by translating the general and theoretical point of view into the more specific practical operations in the metropolitan construction.

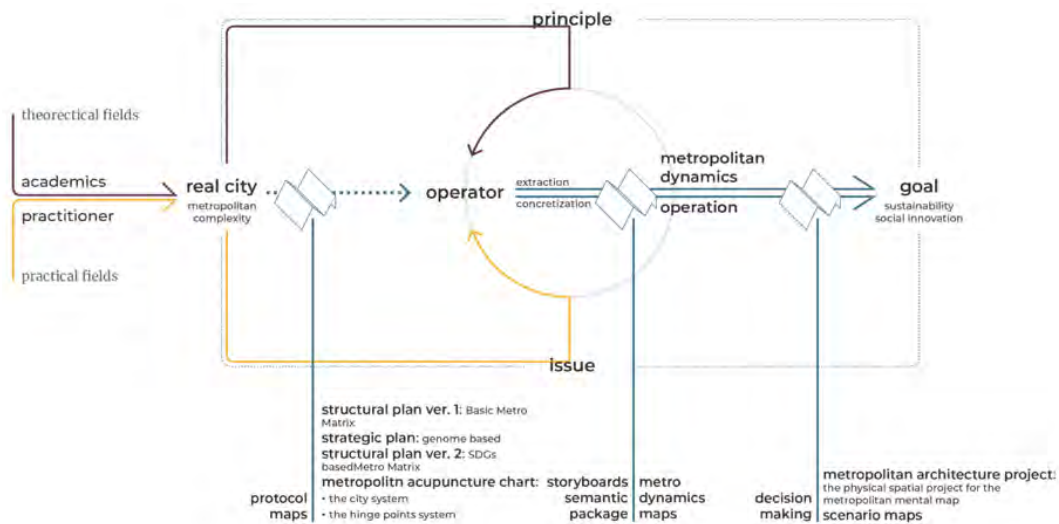


Figure 8 The Tools used in each step of the MGIP Framework

Each step of the framework requires specific tools as part of the methodology and the framework to bridge the gap between the theory and the practice. (Figure 8) Narrative and mapping tools that allow the study of the metropolitan phenomena with a multi-disciplinary and multi-sectoral stakeholder becomes another main pillar of the discipline.

A feedback mechanism follows after the initial establishment of the MGIP framework, where practical experience will be reflected in the theoretical body of the Metropolitan Discipline, taking into consideration the local environment, community, wealth, governance and culture dimension. These categories seek to understand the metropolitan question from a holistic standpoint, in contrary to the traditional methods that have a vision that comes from the sectors in the way which academy and local governments are organized. This gathering of knowledge is the fertile soil that gives place to Metropolitanism: the capacity to give a comprehensive solution rather than a sectoral answer to the problems related to the management of large metropolitan areas.

2.2. Metro-dology

Metro-dology is the collective design process of the Metropolitan Architecture projects based on the MGIP framework. (Figure 9) It is a sequence of phases implemented with specific tools that support the decision-making process of the physical transformations of a metropolis through the building of a metropolitan narrative. The result is a metropolitan narrative, which is not meant to be a linear process, but consists of different phases that relate to each other through a feedback mechanism: Narrative, Interpretation/Diagnosis (Protocol Maps & Metro

Matrix (Ortiz, 2013)), Dynamics, Storyboard, Glossary, Metropolitan acupuncture chart and Metropolitan Project.

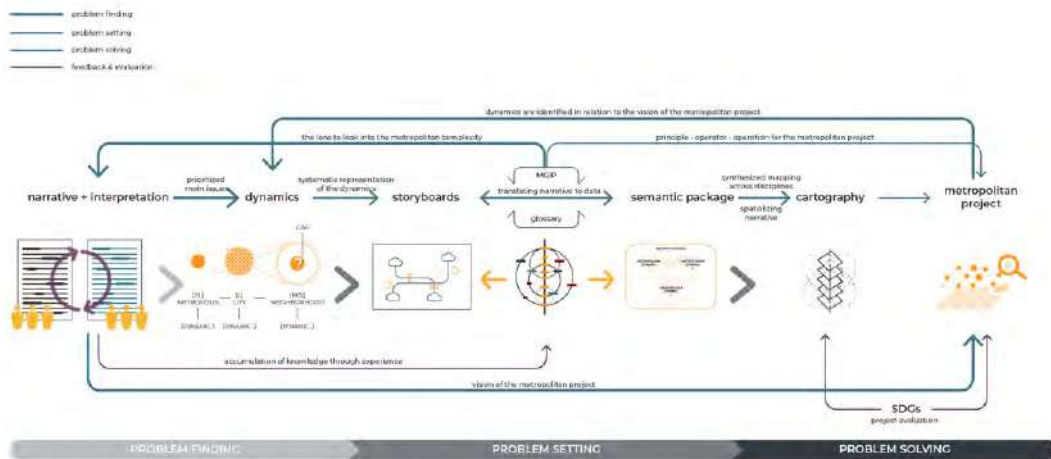


Figure 9 The Metro-dology

The Metro-dology is applied to metropolitan contexts that are a territorial assemblage of rural and urban patterns of settlements; infrastructural networks merging with the natural elements; and the historical traces of places and producing hybrid landscapes that are the new living environment for billions of metropolitan citizens. In order to build a multi-dimensional and multi-scalar narrative of these territories, it is essential to investigate the complexity of a metropolis.

Following the definition of a stakeholder’s map, through a workshop dedicated to this phase, we first set up a comparison between a pool of experiences of the different actors of the metropolitan city (Issues) and a reference to principles of general sustainability (Principles) expressed through words and key concepts. Throughout the process, the cartography tool spatially highlights the data that are the premises for orienting metropolitan planning.

Problem Finding

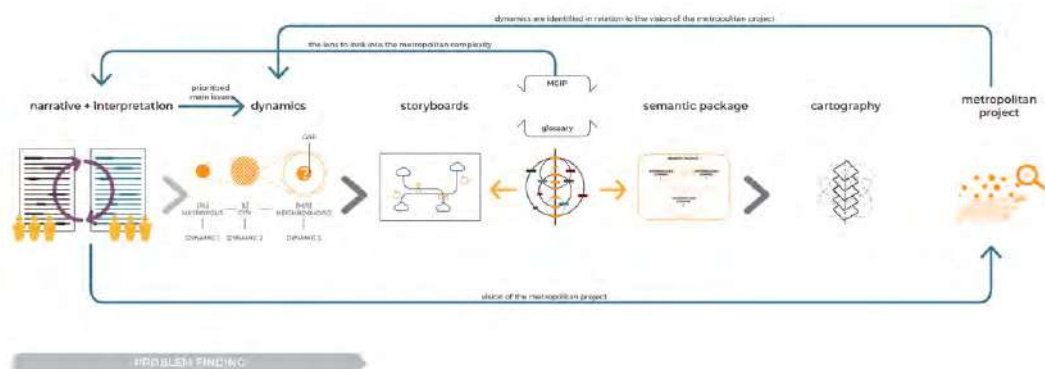


Figure 10 Metro-dology: Problem Finding Phase

Problem or Fact-finding is the first phase of the Metro-dology. (Figure 10) It starts with the narrative of internal experts, namely local decision-makers and civil servants of a metropolis.

They describe the problems, needs, and expectations of their metropolis and the tools available to address them. Metropolitan experts, who are external experts, analyse the storytelling in a constant dialogue with local authorities and have an insight into the problems of the metropolis and of the processes that may produce them.

Simultaneously, a primary study of the metropolis is conducted. By using the global data set, the Metropolitan Cartography tool generates a set of Protocol Maps that become a base for discussions. Protocol Maps are a set of maps showing the fundamental relationship amongst elements constructing the metropolitan system. They reveal the metropolitan structure by layering physical aspects of geographic, historical, and geometrical data. All metropolises have the same set of comparable maps.

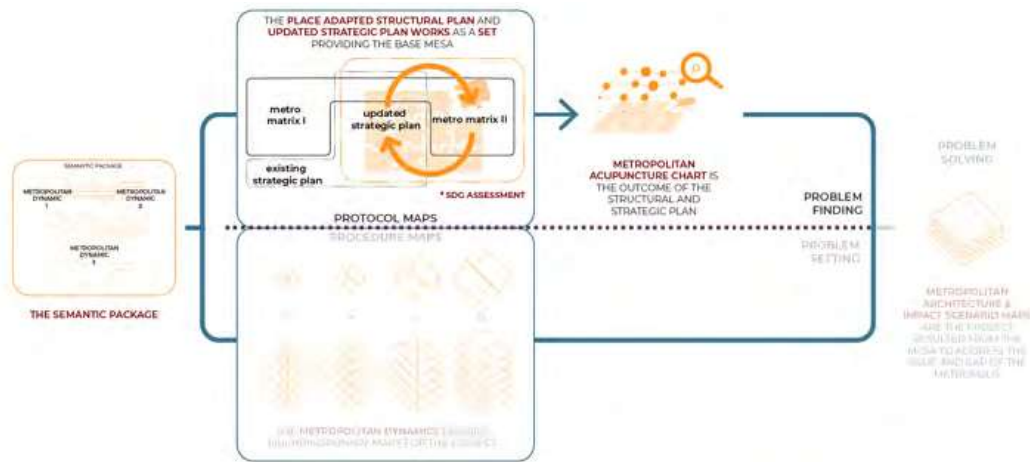


Figure 11 Protocol Maps, Metro-Matrix, and Metropolitan Acupuncture Chart

From the Protocol Maps, the Metro-Matrix is produced. It is a reticular system of axes: few structural geographical axes and some penetrative artificial ones, which first, determine the development of the centre along lines and, second, define hinge points of densification. The matrix assumes its value through the definition of the logic of settlement-distribution, which makes possible the localisation of interchange nodes in peripheral areas. (Figure 11)

Problem Setting

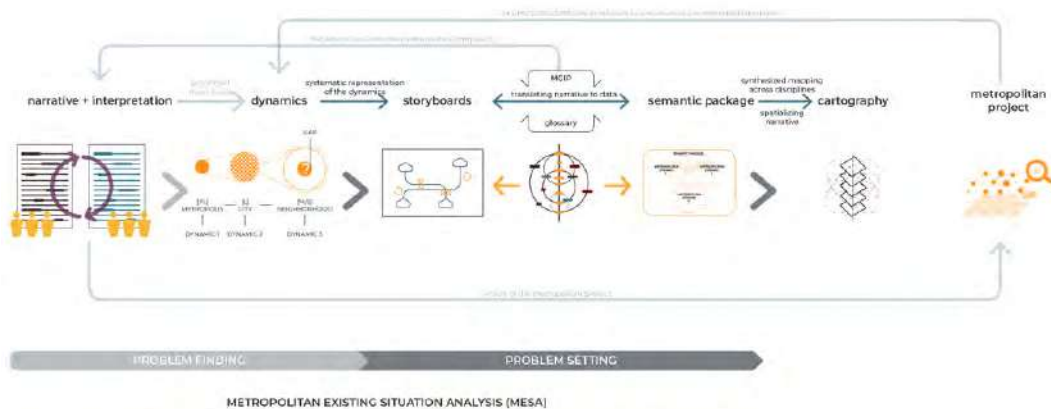


Figure 12 Metro-dology: Problem Setting Phase

The subject of the problem setting is the metropolitan city and its dynamics. (Figure 12) The local actors selected based on their actual involvement in decision-making of a metropolitan area, have chosen a metropolitan transformation, report verbally on the issues (challenges, strengths and weaknesses, gaps and tools used) that affect the expectations of their city and their limits.

The objective of the narrative is to create a complex of observation plane conditions in which data provided exclusively by the local subject are integrated with spatialized data and presented through open source maps. All the data, therefore, are initially observation data, analysed by the metropolitan expert through the general principles agreed upon based on the Metropolitan Genome (Ortiz, 2013).

Once the observation data have been collected, then, through the dialogue conducted in working tables, the process of correlation and interpretation takes place. The metropolitan experts describe the dynamics through a synthesis scheme called a storyboard, an interpretation of the process of the cause of the issue that emerged during the discussion. The storyboard represents the big picture of the issues of a given metropolis and of the dynamics that produce them.

Based on the storyboard and the semantic package, procedure maps are produced. Procedure Maps are a set of maps representing the spatial impact of the process of ongoing metropolitan dynamics identified during problem finding phase. They operate at a large scale and aim at highlighting the dynamics and defining strategies for promoting the sustainable development of the metropolis.

The result of Problem Setting phase is the verification of the hypothesis of the metropolitan dynamics produced with the tools of the TELLme project and identification of further metropolitan project themes and its development hypotheses.

Problem Solving

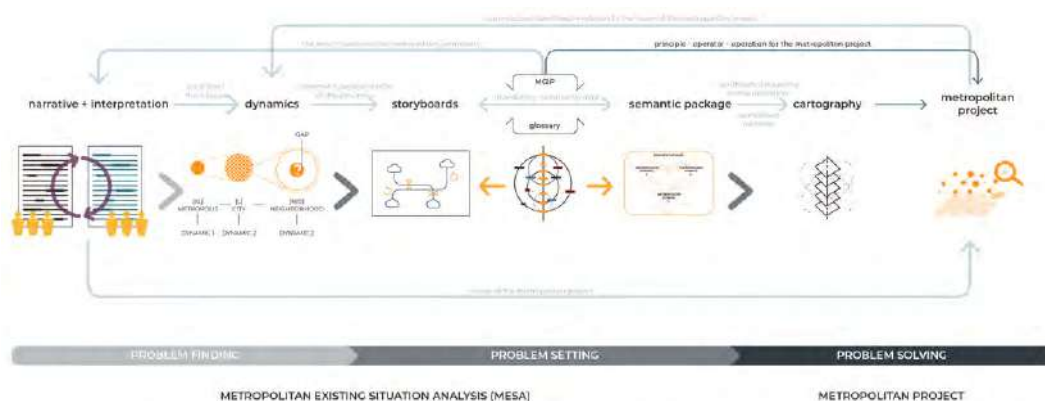


Figure 13 Metro-dology: Problem Solving Phase

In the problem-solving phase, (Figure 13), the metropolitan architecture projects are developed through site-specific operations as a response to the existing gap and in relation to their potential location defined with the metropolitan acupuncture chart. Nevertheless, the latter act as a framework that stresses the value of the metropolitan architecture projects in

building the connections between the big scale of the metropolitan network and the archipelago of the local scale of places to enhance our experience in the space-time of the metropolis.

Maps are also instrumental in the final decision-making act. The use of data enables the production of Impact Scenario Maps that simulate long-term scenarios of metropolitan development to evaluate the impact of Metropolitan Projects on the territory.

The metropolitan dynamics transform existing landscapes, infrastructure networks and city fabrics. The dynamics are processes of transformation of form and map of the urban field on a metropolitan scale. Growth through densification and investment of larger spatial fields change the value of the existing poles and settlement patterns, concerning the new metropolitan paradigm. For this reason, Metropolitan Architecture needs to protect the local value, and also be equipped with "sensitive" infrastructures so that they do not remain or are uprooted or "museumised".

3. Guadalajara Case Study

The case of Mexico offers a unique opportunity to observe how and why drastic change is occurring in migration patterns. The case study of Guadalajara is a result of the TELLme Training Lab held in February 2019. The aim of the training lab was to test the problem finding and setting of the Metro-dology by identifying the issues and dynamics of the metropolitan region with the local government, academia, and local stakeholders, and verifying them with the Metropolitan Cartography tools.

3.1. Problem Finding

The project began with comprehension of the city's geographical position and geopolitical role as an attracting point by identifying possible reasons and directions of migration, and the city's capacity in handling its growing population, land use and ecological footprint. The city's economic growth and social connections are the mechanisms that facilitate migration and determine the scale of impact.

Guadalajara is the second most important city in the centre-west of Mexico, capital of the State of Jalisco. It is also the place of origin of mariachi and tequila, and one of the most important industrial and commercial centres of Mexico: some even call it the Mexican Silicon Valley. The agglomeration that forms the metropolis has around 4.1 million inhabitants. The city of Guadalajara has started to grow again (0.09 %/year), after a period of decline from 2000 to 2014. Today, even though the population growth until the last survey seemed stabilized, the whole metropolitan area shows an expansion in terms of land consumption that has generated sprawl, and illegal occupation of natural and agricultural areas.

The first analysis started with a set of protocol maps to achieve a structural plan of Guadalajara that reveals the relationship between different municipalities and their roles in the metropolitan region. (Figure 14) Guadalajara has a strategic geographical position for the relationship between the two oceans. Today, it is also in a position of the junction between

the axis that connects the city to Mexico City and the axis that connects Guadalajara with the port of Manzanillo. (Scale XL)

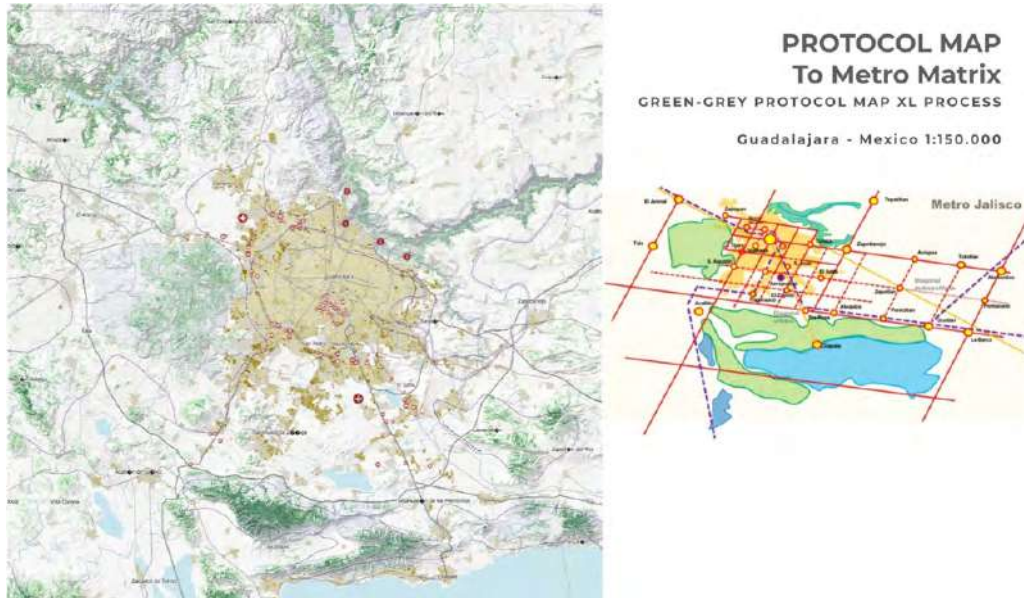


Figure 14 Protocol Map and Metro Matrix of Guadalajara (XL Scale)

After the discussion with local actors such as the universities, municipalities, civil society, and IMEPLAN (Instituto de Planeación y Gestión del Desarrollo del Área Metropolitana de Guadalajara), and based on the Protocol Map and the Metro Matrix, we observed the formation of a metropolitan axis in the metropolitan region of Guadalajara in the L scale (Figure 15): Villa Corona - Acatlán de Juárez - Tlajomulco de Zúñiga. Each municipality has its strong characterization within this axis: Villa Corona is a tourist resort, whereas Acatlán de Juárez has the freight railway that connects Guadalajara to the port of Manzanillo, and Tlajomulco de Zúñiga is an airport city.

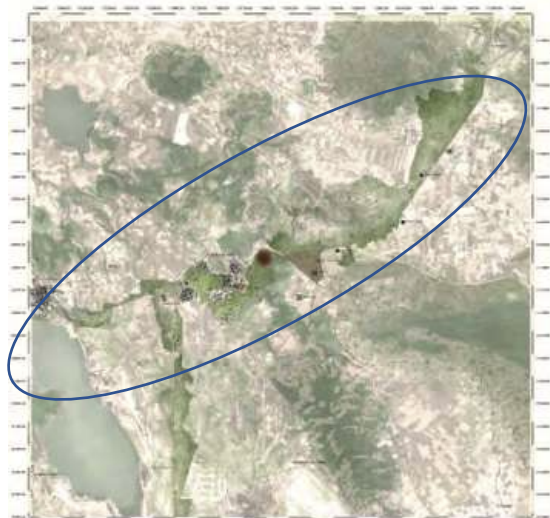


Figure 15 The New Metropolitan Axis of Villa Corona - Acatlan de Juarez - Tlajomulco de Zúñiga (L Scale)

Finally, at the M scale, the area between Villa Corona and Acatlán de Juárez is chosen as a strategic position for the relation with Guadalajara and the Manzanillo Valley. (Figure 16) Since its proximity to the railway station for freights, with a provision of conversion to a passengers station, the area is defined as a buffer zone, that is, the area under tension between three different physical states generating abandoned areas, infrastructural barriers, and informal settlements: City (Guadalajara), Agriculture (Valle del Manzanillo), and Nature (Lagoon). In the area, due to the increasing housing demand from all social levels, there is a planning proposal for mass residential development. The identification of this threshold as an urban-rural linkage landscape that interacts with other existing landscapes, networks and fabrics, encouraged the participants to consider a type of settlement can merge the urban and rural landscape.



Figure 16 The Field of Action between Villa Corona and Acatlan de Juarez (M Scale)

3.2. Problem Setting

After defining inequality and fragility of the territory as the main issues, the participants worked on defining the dynamics causing the issues. The following discussion was focused on answering the following question: Considering the vulnerability of the territory, is it possible to determine sustainable locations for metropolitan residential projects? Based on the initial survey, the TELLme team prepared the procedure maps as a base for discussion. As a result, the participants defined the following dynamics, varying in scale:

- Dynamic 1: The conversion of agricultural land to urban and peri-urban settlements. (Urban-Rural Linkage XL scale)

- Dynamic 2: The expansion of settlements within the valley and the development of small centralities due to a robust localisation of mining centres and productive food processing industries. (Urban-Rural Linkage L and M)

The issue that we started in the Guadalajara-Acatlan de Juárez-Villa Corona area is related to the intensive exploitation of agricultural land due to the presence of red fruit production managed by American multinationals. This production, which has led to a substantial increase in the standard of living of the populations involved in its management, has also caused a significant eutrophication of Lake Chapala with a consequent reduction in the size of the lake, a worsening of the landscape conditions, and now recognised health problems for the indigenous people who lived in the lake (respiratory diseases and malformations).

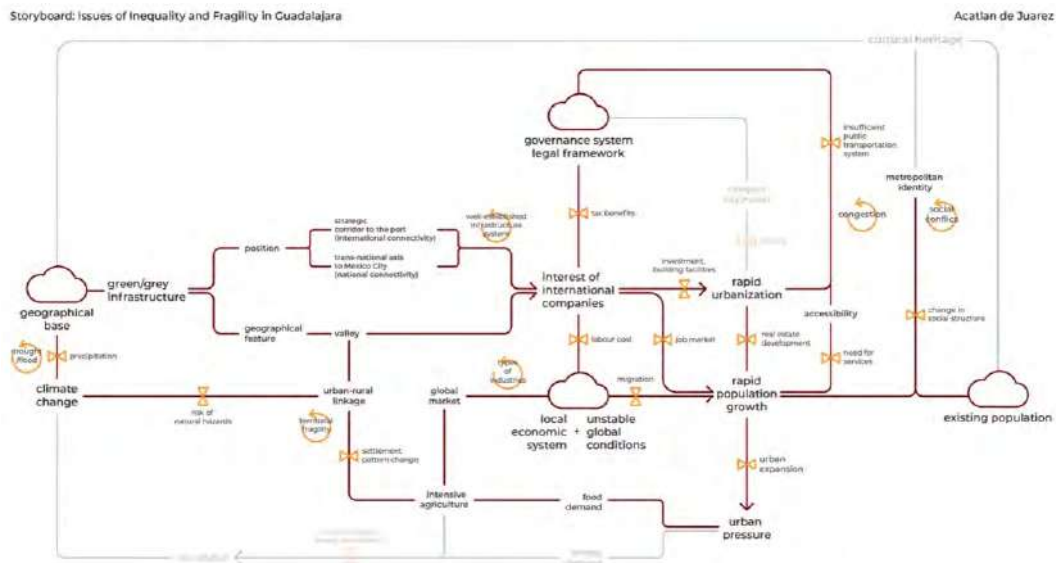


Figure 17 The Storyboard of Dynamic 2: The expansion of settlements within the valley and the development of small centralities due to a robust localisation of mining centres and productive food processing industries

The loss of local markets and knowledge of the cultivation of local products (for example, amaranth) is a possible consequence of having opted for a single international client. From the social point of view, internal and external immigration will focus on an area that is already characterised by the presence of indigenous communities living on the edge of poverty. (Figure 17)

The agricultural vocation of the area is confirmed by the presence of the Metropolitan Trail of Acatlán de Juárez, which had to solve the problems of compliance with the Official Mexican Standard for Treatment of Wastewater Discharges that the municipal rakes did not guarantee to observe. The Metropolitan Trail, which cost 1000 million pesos, however, was only operational for 13 months, due to problems of management and adequate treatment of water; It was the primary source of work for 250 families.

The presence of this plant has caused an increase in demographic pressure in the town of Acatlán de Juárez. This pressure could increase if the hypothesis of implanting the Mexican "Silicon Valley" in Acatlán took shape. The State of Jalisco puts great emphasis on technology. It annually exports the equivalent of 21,000 million dollars in services and technological

devices and, between 2014 and 2016, hundreds of new companies in Guadalajara have received investments -most of US origin- amounting to about 120 million dollars, according to Washington Post. The evident vitality of the territory has also attracted the attention of large companies, and multinationals in the information technology sector, which have decided to open their offices there: Intel, IBM, Hewlett-Packard and Dell are present in Guadalajara and its surroundings.

Based on the storyboard produced by the external expert team after the discussion with stakeholders, the key elements of the dynamic were highlighted in the semantic package. The semantic package is a list of keywords that refers to a set of data, the informative levels, which becomes the legend of the maps describing the phenomena produced by the metropolitan dynamics. To represent a given phenomenon, data within different catalogues are selected through transversal "zone of reading". The storyboard is translated into a Semantic Package by selecting the informative levels representing each element of the storyboard. (Figure 18) Experts in various fields provide the connection amongst the main keyword and the data keywords.



Figure 18 The Semantic Package of Dynamic 2: The expansion of settlements within the valley and the development of small centralities due to a robust localisation of mining centres and productive food processing industries (M Scale)

The Procedure Map reveals the physical dimension of the identified dynamic. Related to the dynamic 2 of Guadalajara, the maps seek to highlight the following aspects (Figure 19):

- Connectivity intercepted by the presence of federal roads, regional roads, municipal roads and rural roads, by rail and by the electricity grid;
- Natural Resources intended as a green system that demonstrates a discontinuity in its extension through a limited number of protected vegetative species, agricultural soils and rural settlements;
- Informal and urban-rural settlements and the relative urban growth understood as the settlement pressure that every single urban centre exerts on the territory: Public services and

the degree of social marginalisation make it possible to give a quantitative and qualitative connotation to the area;

- Water governance through the identification of the main surface and underground water flows (blue system) and water collection points divided according to their use (pastoralism and agriculture, industry, public): The network of telecommunications determines virtual flows that generate networks with interchange points with a high level of accessibility;
- Circular economy of the area represented through land specialisation and land use: Spatialization of agricultural activity is readable through the actual growth of recorded production and the mapping of potential agricultural areas.

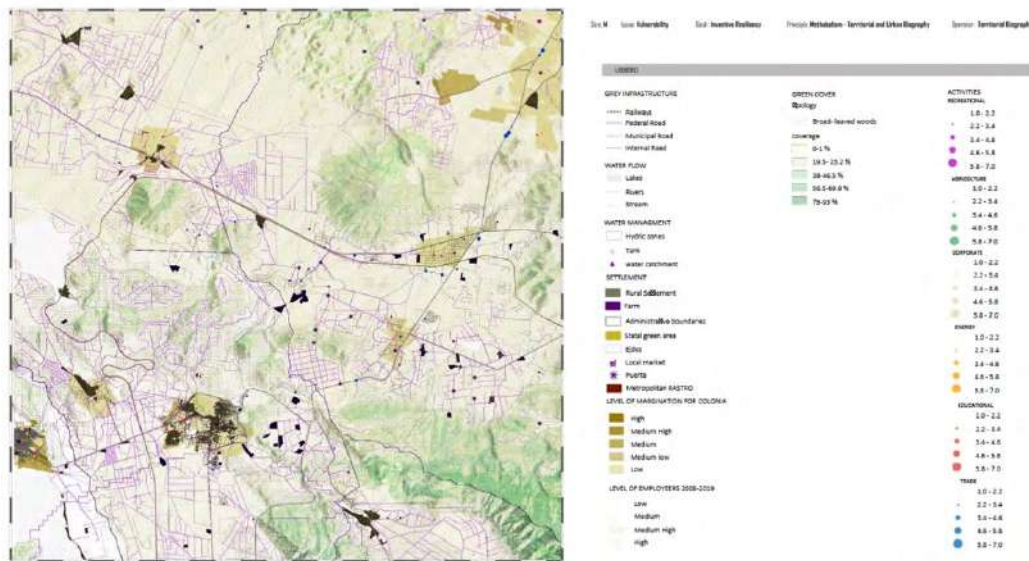


Figure 19 Procedure Map of Dyanmic 2: The expansion of settlements within the valley and the development of small centralities due to a robust localisation of mining centres and productive food processing industries (M Scale)

3.3. Conclusion: Direction for Problem Solving

The main result of the Guadalajara Training Lab was that we identified a metropolitan axis beyond the administrative boundary of the Metropolitan City of Guadalajara. The project needs to be further developed in a sustainable accessibility project that allows the community to experience the environment while avoiding the risk of isolation, and the creation of tourism on which it is possible to invest energy and resources to improve cultural and landscape heritage. The community presence is essential in the area assessments because it reflects the agricultural system of the ejidos, a rural area that can be managed privately or publicly. The lands in common use and the fragmented ones define plots, alignments and geometries as signs that affect the soil and determine the landscape.

4. Conclusion

From the analysis mentioned above, starting from the question about the size of the city, each metropolitan aspect is progressively studied, bonded to a scale and framed throughout the steps of Metro-dology. The necessity for the delineation of fields of action (the bounding box) out of the traditional municipal boundaries emerges as a fundamental step to identify the speed of change produced on the different metropolitan dimensions.

A following step of evaluation needs to be pursued to render territorial criticalities and assets and to help future policy-making processes or ad-hoc interventions. Through a multi-scale integrated approach for assessing metropolis impacts and drivers, the Metro-dology allows us to investigate the relationships among the facets of a city over its surrounding territory.

5. References and Acknowledgment

- Burkhard B; Maes J (Eds.) (2017) Mapping Ecosystem Services. Pensoft Publishers, Sofia
- Chiesa A, (2013) "Landscape urbanism: *un approccio ecologico al territorio urbano*", ARC 2 CITTA' (June).
- Corner J. (2006) Terra fluxus, in Waldheim C., The landscape urbanism reader, Architectural Press.
- Diagnostico de la Region Lagunas, Jalisco, IIEGI, 2017
- Ficha Tècnica Hidrològica Municipal Acatlan de Juarez, Comision Estatal Agua Jalisco, 2015
- Ficha Tècnica Hidrològica Municipal Villa Corona, Comision Estatal Agua Jalisco, 2015
- Febvre L. (1922), *La Terra e l'evoluzione umana*, Einaudi, Torino
- Ortiz P.b.; Kamiya M. (2016) The Political Economy of the Metropolis in the Global North and South: Connecting, Financing, and Ruling, in *Governing the Metropolis*, World Bank, UN-HABITAT, IADB
- Ortiz P. (2013) *The art of shaping the metropolis*, New York, McGrawHill
- Plano Desarrollo de la Region Lagunas 2015-2025, IIEGI
- Plano de Desarrollo Urbano, Acatlan de Juarez, 2015-2025, IIEGI
- Pollak P. (2006), *Constructed ground: questions of scale content*, in Waldheim C., *Landscape Urbanism Reader*, Princeton Architectural Press, Hudson
- Shane G. (2005) *Recombinant Urbanism: Conceptual Modeling in Architecture, Urban Design and City Theory*, Wiley, London
- Soya E.W (2000) *Postmetropolis: Critical Studies of cities and regions*, Blackwell
- UN Habitat (2018) *Policy guide on entrepreneurship for migrants and refugees*, United Nation Conference on Trade and Development (UNCTAD)
- UNHABITAT (2014) *RDD, vol 35 Urban Rural Linkages in Support of the New Urban Agenda*
<http://habitat3.org/the-new-urban-agenda/>

Acknowledgment

Marzia Di Fini, and Valentina Gagliulo within the master thesis “Acatlan de Juarez: nuove tonalita' di paesaggio. Strategie per gli equilibri ambientali e agroalimentari nella regione metropolitana di Guadalajara”, 2018 Politecnico di Milano School AUIC, gave a meaningful support to the research project.