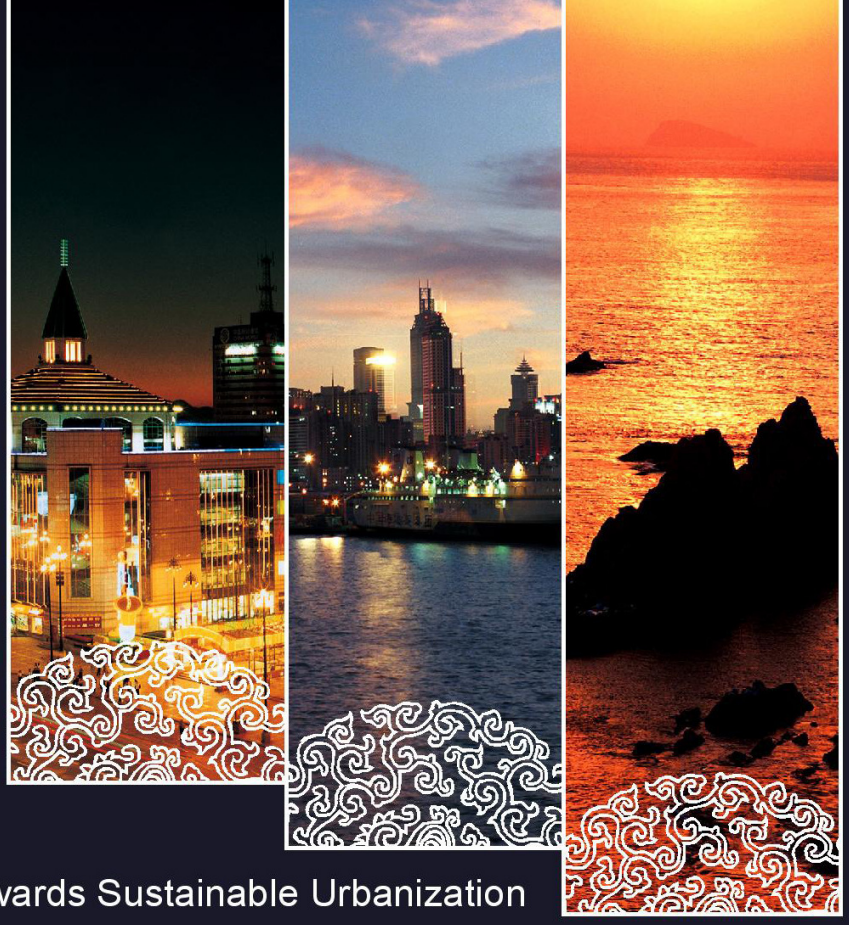

A Way Towards Sustainable Urbanization

# Urban Growth Without Sprawl

## 44th ISOCARP Congress

Dalian ,China

19-23 September 2008

The Urban Planning Society of China (UPSC)
and
The Internatinal Society of City and Regional Planners(ISOCARP)

**44th ISOCARP CONGRESS DALIAN, CHINA**
**CONGRESS PAPERS**
**INTRODUCTORY REPORTS**
**SHORT OUTLINES**

**COLOPHON**
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**Introductory Reports by the General Rapporteur and the Rapporteurs and Chairs of the Workshops**
**Short Outlines of Congress Papers**
**CD ROM with Full Papers**
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Authors are listed in alphabetical order in each workshop.

**International Society of City and Regional Planners**
**Association Internationale des Urbanistes**
**Internationale Gesellschaft der Stadt- und Regionalplaner**
**Asociación Internacional de Urbanistas**

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WS 5: Isabel Viana, Uruguay
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# Introduction to the Congress by the General Rapporteur H. Detlef Kammeier

Professor emeritus of urban and regional planning,
Visiting professor and international consultant

**The Theme of the 44th Congress – from the call for papers to the congress**

The theme of the congress refers to one of those grand goals of city planning that – as so many other city planning promises - is in striking contrast with the reality of urban development all over the world. For most city planners (and other critical minds as well), sprawl clearly has a negative connotation, conjuring up images of uncontrolled residential subdivisions and ribbon development, square miles of unused and derelict land, wasteful and unplanned conversion of valuable agricultural soil, clogged-up roads and expensive but under-used utility lines.

Not everyone finds sprawl harmful and unwanted though. Some economists have even discovered certain advantages in unlimited urban growth, and political scientists would disagree whether such large sprawling cities are necessarily un-governable or not.

As a result of our call for papers, we had an overwhelmingly enthusiastic response in a tidal wave of 220 abstracts. The numbers of paper presenters eventually came down to about 150, and later on, about 125 – still a large number for the six workshops we decided upon (adding one to the original number of five workshops).

Much of the now common unrestrained physical form of urban development, and with it, the economic and social implications of a sprawling urban continuum, appears to be the inevitable consequence of increasing automobile ownership and use, and even more so, of the global market forces that are at work in our urbanizing world, along with rampant rural-urban migration, and an increasingly unregulated private sector. The global fifty-percent line in urbanization has already been crossed, and in Asia, it will very soon be reached.

Our host country China has reached enormous proportions of challenges, but also of opportunities, in its mega-urban regions where an overwhelmingly large proportion of national wealth is generated. In contrast with an earlier era in the People's Republic of China when everything, including urban growth, was claimed to be firmly under control, the Chinese government now finds it close to impossible to "control" urban growth. So in China, as much as in India or any other fast developing country, "cities without sprawl" would seem to amount to wishful thinking or un-attainable goals, or – to invoke another image that is hard to pin down – an important dimension of the idealistic goal of "sustainable city development". At any rate, growth and proportions of mega-cities in the so-called developing countries are unprecedented. They are much greater than those in industrialized countries in history or at present; and the global environmental and social effects of urban sprawl are beyond imagination.

Not surprisingly, the congress will be attended by many Chinese colleagues whose papers will be particularly interesting to the many foreign delegates who are visiting China for the first time. It is very encouraging to see the broad scope of papers on Chinese issues of sprawl and

on possible solutions – ranging from abstract modelling to the nitty-gritty of participatory neighbourhood work, and practical solutions to sustainable “ecological infrastructure”. Dalian, the host city, is a large industrial and commercial city that would offer a rich laboratory of proven and rejected strategies to learn from. China certainly has much to show in terms of urban development lessons, as much as China wishes to learn the lessons of other countries. The professional tours during the congress and the meetings with our Chinese fellow planners coming for their annual congress (which takes place at the same time) provide ample opportunities for professional and personal exchange.

**Six thematic Workshops**

All six workshops provide scope for both theory and practice, and especially for “best practices”, and “lessons learned” from specific case studies. As could be expected, it was not always easy to divide the workshop themes, but the resulting overlap between workshops reflects the multi-dimensional nature of sprawl, and the possible solutions to “living with sprawl” – a motto which was added by a number of authors who felt that fighting sprawl is not an adequate answer.

The papers were allocated to the six workshops in such a way that we have nearly equal numbers of speakers in each of them. This required the congress team (especially the general rapporteur) to shift some papers from Workshops 5 and 6, and to add them to Workshops 2 and 3. By and large, however, the paper authors still find themselves in those workshops they had opted for. So the usual re-shuffling work of the congress organizers was not too difficult, and it will not be hard on the authors.

**WORKSHOP 1: The economics of urban sprawl vis-a-vis the regulatory framework – contrast or complementarity?**

This thematic workshop is designed to include at least three major sub-topics, but it was not easy to maintain this internal grouping. Most of the papers received do not have a specifically economic approach but all of them contribute interesting views of how important it is to take on the challenge of seemingly uncontrollable urban growth.

**1.1 Conceptualizing the economies of urban sprawl**: Contributions mostly look at the winners and losers, or the hidden social and environmental costs and externalities – in a qualitative rather than quantitative manner.

**1.2 Antidotes to sprawl and best practices**: Planners are usually good at exploring antidotes to sprawl but it is still hard to find any proven “best practices” for the management and physical form of large urban agglomerations.

**1.3** To some extent, the first workshop includes aspects of the **economics of infrastructure systems** under sprawling conditions, including the crucial question of adequate user fees to recapture infrastructure investment and recurrent costs.

The rapporteur of WS 1 argues that especially in the very large developing countries, rapid and uncontrolled urbanization causes enormous problems and costs for all inhabitants and government. It is thus mandatory to continue striving for humane and cost-saving measures.

**WORKSHOP 2: Public transport, road pricing, congestion management and urban land use development – well known basic facts and innovative concepts in practice**

The nexus of land use and transport systems is well established. It is also well known that public transport does provide environmentally friendly and cost-effective alternatives to the

unrestrained use of private cars. This workshop includes contributions in three broad directions.

**2.1 Public transportation concepts** are well known as instruments for structuring sprawling urban growth but their costs and management are challenging.

**2.2** Specific **transport policies linked with economic measures such as road pricing** are looked at by some authors, including critical views of contradictory government policies.

**2.3** The transport-land use interface has been the subject of **mathematical modelling** for a long time. This workshop also includes some fundamental thought on the old problem of conquering distance – by all kinds of transport for many decades, and now, by communication technology which might finally lead to the proverbial "death of distance".

The rapporteur of WS 2 states that "we are left with profound questions. Advances in transport technology liberate spatial dreams; the dreams sometimes become nightmares. Have we reached a point at which new dreams are beginning, before we have woken from the last nightmare?"

**WORKSHOP 3: Concepts and policies against urban sprawl: Compact city, eco-city, city greening, and similar concepts – promises only or real successes**

The global debate on how to make urban development more sustainable has generated many conceptual ideas that would promise considerable success if implemented. The focus in this workshop is on a review of innovative concepts, their translation into policies, and their adoption in practice. The many papers in this workshop show how important the concepts of ecological planning have become all over the world, with mixed success.

**3.1 Defining "sprawl" as an unintended urban form**, clearly distinguishing it from planned de-concentrated forms of urban growth: What are the most relevant concepts and real experiences?

**3.2** This workshop include papers on the **historical evidence of successfully implementing and enforcing specific concepts of urban form** through strong policies and good management (and also lessons learned from initially successful policies that failed in the long run)

**3.3 "Internal expansion" as a contrast programme** to outward expansion and sprawl: Urban re-development, brownfield development, densification, and regeneration concepts in practice.

The rapporteur of WS 3 concludes that the papers contribute inspiring ideas with regard to informed and effective leadership; policies to recognise and balance economic, social, and environmental considerations; and public and private sector utilization of innovative tools based on science and planning theory.

**WORKSHOP 4: Metropolitan management as part of an urban development and governance framework, from the national to the local scale**

Metropolitan management has several dimensions, political, economic, legislative. The workshop theme also include the dual sense of decentralization, from centralistic to decentralized public systems, and in the form of public-private partnerships. The latter may include various forms of single-purpose or multiple-purpose associations. The rapporteur of this workshop suggested to have the papers presented in four groups.

**4.1** The papers on **regional governance and planning** are focused on metropolitan areas, with their many forms of public and private agencies interacting in the typical multi-jurisdictional areas.

**4.2 Policy initiatives and urban programmes**, including some unusual rural-urban approaches, like the red/green policy in the Netherlands.

**4.3 International comparisons** include papers on city partnerships as well as aspects of urban policy within the European Union.

**4.4 Metropolitan management in transitional economies:** This group of papers promises to be particularly interesting from the point of view of countries where the formerly socialist system was replaced by a mixed system with a strong role for the market forces.

The rapporteur of WS 4 relates metropolitan management (and its attempts at dealing with sprawl among many other challenges) to the ever stronger forces of globalization.

**WORKSHOP 5: Integrating ecological management and cultural heritage conservation agendas in urban development – new dimensions in many countries**

This workshop includes a whole range of papers from theoretical concepts, and experiments, to the actual adoption and integration of innovations in everyday urban management. The grouping of papers is under three broad headings.

**5.1 Urbanization trends and urban sprawl characteristics** includes the morphological characteristics of mega cities including trends of social segregation

**5.2** Linking **cultural heritage and ecological concepts** is the overriding theme of some contributions, including some from China where this theme is one of the hottest subjects in today's rapid urbanization.

**5.3 New requirements for urban management and planning** would result from an explicit new emphasis on heritage conservation.

The rapporteur of WS 5 stresses the importance of quality of life as a goal of good urban planning and management which would strive to incorporate heritage much more than in the past.

**WORKSHOP 6: Patterns between sprawling and compact city forms: Urban densities, housing and community formation, and social implications**

This workshop was added after receiving unexpectedly large numbers of abstracts. There is a much better focus for those papers that are dealing with the critical interface between urban form and community organization.

**6.1 Urban densities and land-use patterns – old and new:** Established traditional patterns compared with new ones, experimental proposals and plans, and the community test of such patterns in reality.

**6.2 Housing, community, and dwelling types:** Anti-sprawl measures result in alternative forms of public and private housing, with a variety of dwelling types, and their acceptance or modification by the community. There are old and new lessons from this interaction of physical form, financing, and social structure.

**6.3 Public assistance and community initiatives in housing:** Financial and managerial assistance for specific social groups in the city have been used for many decades, but there are encouraging innovations and interesting results in physical form and social effects.

The rapporteur of WS 6 draws our attention to the significant differences among the various countries (postindustrial vs. emerging economies and transitional countries) with regard to their options for facing the challenges of fast growing cities. Her specific interest is in those local initiatives in housing where sometimes surprisingly innovative results are achieved.

**Hot Topics, lively Debate, and good Company for a great Congress**

The six workshop topics and their sub-topics were announced in the call for papers. Now, however, the array of topics for discussion has been modified through the rapporteurs' efforts at grouping the papers received. While the suggested grouping looks promising in terms of interesting contrasts among the presenters and their views, the actual debate at the congress will show how much the ISOCARP members have to contribute to this broad and complex theme. The organizers have always tried to provide as much time as possible within the workshop sessions for lively discussions, apart from giving each speaker a reasonable amount of time for expressing his or her views. Now that there are no more than 22 papers per workshop, we should be able to strike a perfect balance between presenting our views in carefully prepared papers, and spontaneous discussions throughout the congress.

As the General Rapporteur in this year's congress I am happy to conclude my introduction with my best wishes for a fruitful congress hosted by a great city. In the usual ISOCARP spirit of being professionally serious and convivial in our personal relations across the continents, I am looking forward to meeting old and new friends and working with all of them towards the lofty goal of our congress – cities without sprawl, or at least, being able to manage our environment reasonably well, under difficult conditions.

Bangkok – Damascus – Munich, August 2008

# INTRODUCTORY REPORT WORKSHOP 1:
# The Economics of urban Sprawl vis-a-vis the regulatory Framework – Contrast or complementarity?

**Rapporteur**: **B.K. Jain**
Delhi Development Authority, India

**Chair**: **Hari Srinivas**
Global Development Research Centre, Kobe, Japan

## Introduction

Cities of almost all countries are experiencing a large increase in urban growth which results in a mostly horizontal expansion of such urban centres. This horizontal expansion has serious consequences in terms of cost, transportation, physical and social infrastructure, consumption of fertile agricultural land, ecology or in other words the overall quality of life of people. It is felt that to make it economic and environmentally sustainable and to achieve a good quality of living the sprawl of these centres needs to be minimised.

The form, nature, density/intensity of the built volume, the quality of physical and social infrastructure in these sprawl areas depend on various factors in the country, i.e. political set up, economic status, governing mechanism, legal and other institutional systems etc. However, the situation within the developed countries is similar to the developing countries. In developed countries the reason is mostly quality living away from congestion which is largely supported by a private mode of transport, whereas in developing countries it is an economic housing option for the generally economically weaker migrant population as the services and infrastructure are missing there, both physical and social. The other important reason for fringe growth is land grabbing/speculation due to a weak enforcement of law, a manipulation through bureaucratic and legal systems etc. However, whatever is the situation the provision and maintenance of services in these unintended extensions is a costly affair due to its sparse and irregular built-up form in every situation, whether it is in the developed or the developing world. The developments in these sprawl / fringe areas become a costly and difficult affair as various stakeholders come into picture, and there are no payers or any willingness to pay for the provision of infrastructure.

## Congress Theme and its Focus

The main theme of the congress has been divided into six workshops based on different aspects of urban sprawl i.e. transportation, ecology/environment, management, cultural/heritage conservation, density/urban structure etc. The theme of workshop 1 is urban sprawl vis-a-vis the regulatory framework – contrast or complementarities. It has been further divided into the following three major sub-topics:

1. Conceptualising the economies of urban sprawl
2. Antidotes to sprawl and best practices
3. Economics of the infrastructure system.

Considering the experiences of China, India and other developing countries where urbanisation is growing at a very rapid pace and has reached enormous proportions of challenges and opportunities, the purpose of discussion is very important. The economy of urban policies, urban form and hidden social and environmental costs and their externalities, metropolitan growth management, regulations and economics and the impact of physical infrastructure and its recurring maintenance are issues which need serious consideration for a long term vision.

**Workshop Focus**

The workshop has 22 papers. The authors who submitted the papers are from various countries of Europe, Brazil, India, China, Australia, South Africa etc. The authors have described observations, analyzed the existing situations in case studies and have drawn conclusions based on their experience.

It has become clear that factors such as demographic growth, social stratification conditions, real estate markets, scientific and technological changes, etc. affect urban sprawl, and the land which is the less fertile and has the less speculation/land value resist the least for urban sprawl. Associated problems with urban sprawl are a.o. the high cost of travelling, the degradation of environmental quality, inefficient management of the city. Urban renewal has been preferred above urban sprawl as the advantages of urban renewal are that it facilitates higher densities, accesses advantages to city centres and transforms the city into a new urban design (but the process is slow and expensive). Densification has also been supported by plans of Geneva, an example of Sydney, and it has been mentioned that it has helped in the preservation of natural greens, the check on increasing rents, reduced pressure on urban ecology, cohabitation of different social groups and the economic vitalisation of the city. The situation of Brasilia has been explained as unfriendly to the people due to their long commuting for work and home which has resulted in a fragmentation of the city and its dispersion in every way. Long distance commuting is a daily nuisance for people without a suitable mode of public transport. The sustainable solution to urbanisation has been advocated in the form of eco-cities, but it has been objected that the backyards of our living areas should not be converted into built-up for the sake of containing the sprawl which degrades the existing environmental living quality of the area. The author from Spain has stressed the importance of planning acts / legal provisions for social cohesion, social equity, social housing etc. The author from Dhaka suggests that a large scale land acquisition policy may be helpful in checking the sporadic growth, and comprehensive planning with the use of satellite / GIS data may be useful tool in checking urban sprawl. Mixed use has been explained as another alternative to urban sprawl as it may help in retaining the centrality and urban character of the city core. This has been explained with the example of Amsterdam. In China, the Development Zones and Export Processing Zones at state level have been taken up which are a horizontal expansion of the urban area but in a planned manner. They are very successful.

## Short Outlines of Papers as provided by the authors (in alphabetical order)

*Ainstein Luis, Buenos Aires University, Argentina (1)*[1]

**A systemic Approach to Sprawl: intervening factors, existing relationships, emerging consequences and required public policies**

The present paper is aimed at discussing within a systemic approach the characteristics, causes and consequences of sprawl, as well as to identify the character of public policies necessary to prevent its further extension.

*Altinok, Emrah; Cengiz, Hüseyin, Yildiz Technical University, Istanbul, Turkey (2)*

**The Effects of urban Sprawl on spatial Fragmentation and social Segregation in Istanbul**

The paper discusses Istanbul's spatial fragmentation and social segregation problems which are related to urban sprawl.

*Byrnes, Terence, Byrnes & Associates Pty Ltd, Sydney, Australia (3)*

**Spread City - Learning to live with it**

Urban sprawl is unique to our times but only because of its scale not its causes. The success of our urban futures will rely upon adaptation to these root causes but not lamenting as a failure the inevitability of the phenomenon.

*Christeler, Stephane; Sall, Ousmane, SPS/CSDP, Geneva, Switzerland (4)*

**Urban Growth without Sprawl: six examples in the city and region of Geneva**

The paper will show six examples of urban projects in the city and region of Geneva that respect the principles of sustainable development and the principle of continuity in relation to the existing urban zone.

*Da Costa Lobo, Manuel, IST- CESUR, Lisbon, Portugal (5)*

**Problems and Solutions of Environment and Urbanization in the World**

The following will be discussed: Strong migration flows, increase of demand on Metropolitan Areas. / Congestion of markets and homeless people. / Development with large impacts on environment and employment. / People are loosing a scheme of human values. / Growth of panic in big cities.

*Engelke, Dirk, pakora.net - Network for towns and regions, Karlsruhe, Germany (6)*

**The economic View on urban Sprawl in decentralised metropolitan Areas and their Hinterland**

The case study will have a look at the different forces of urban sprawl in decentralised metropolitan areas and their hinterland and will focus the economic view on urban sprawl in medium sized cities of the hinterland of these areas.

*Grozdanic, Milica, Town Planning Institute of Belgrade, Serbia (7)*

**Belgrade - European Metropolis, Transformations through Space and Time**

This paper examines the system of urban planning and development in Serbia in the period of transition (which is characterized by market economy and privatisation) and the actual Belgrade practice.

*Holanda, Frederico; Ribeiro, Romulo; Medeiros, Valerio, University of Brasilia, Brasil (8)*

**Brasilia, Brazil: economic and social Costs of Dispersion**

The following will be discussed: Brasilia, Brazil, low densities, dispersion of the urban areas, concentration of jobs in poorly accessible areas of the metropolis, socio-economic and infrastructural costs of sprawl, new trends towards compactness provided by new boroughs.

[1] The numbers refer to the Presentation Schedule in the different sessions of the workshops

*Jenkinson, James, self-employed, Winchester, United Kingdom (9)*
**Eco-Cities, a sustainable Solution to Urbanisation?**
Eco-cities are needed to solve the global pollution and urbanisation crisis. They must minimise traffic and have ecological links into their surroundings. Plant and wildlife needs to thrive, energy independence promoted and they must be livable.

*Kaur, Guneet, City Plan Services, Sydney, Australia (10)*
**Urban Sprawl - an issue of growing concern**
This paper explores the reasons of urban sprawl; problems associated with it and suggest some possible measures to control the massive urban spread. The paper also discusses some policy initiatives taken by the Australian Government as a positive step to control the sprawl.

*Listowski, Alicia, self-employed, Paris, France (11)*
**About metropolitan Space, data Processing and Self-Sufficiency**
The paper is divided into two parts: 1. interventions in an existing town; 2. new town with all the implications the new technologies allow.

*Marinero, Angel; de las Rivas Sanz, Junta de Castilla y León, Simancas, Spain (12)*
**Sprawl Control in a Spanish Region**
The paper explains a 10-year process to implement a planning regulatory framework openly oriented to sprawl control, and contrasts it with the reaction of local authorities, market operators, media and the public.

*NIU, Xiong; BI, Xiongyang, Tsinghua University, Beijing, China (13)*
**Spatial Distribution of Industries in Chinese Cities during the transitional Period: A Case Study on the City of Nanning**
This paper studies the distribution features of industries in Nanning (a provincial capital) by adopting quantitative research methods, so as to test the application of Spatial Economics Theory.

*Owei, Opuenebo; Ede, Precious; Akarolo, Chimbiko, Rivers State University of Science and Technology, Port Harcourt, Nigeria (14)*
**Land Market Distortions in Nigerian Cities and Urban Sprawl: the Case of Abuja and Port Harcourt**
Both Abuja and Port Harcourt in Nigeria have experienced urban growth that has been difficult to manage. Factors responsible are attributable to public land acquisition, the role of indigenous urban communities and poor planning.

*Pagonis, Thanos; Chorianopoulos, I.; Koukoulas, S.; Drymoniti, S., University of the Aegean, Mytilene, Greece (15)*
**Urban Competitiveness and Sprawl as conflicting Planning Priorities: the Olympic legacy of Athens**
This paper investigates the relationship between urban competitiveness and sprawl in the context of spatial planning and governance of metropolitan areas. It focuses on Athens, which hosted the 2004 Olympic Games, and examines the impact of large-scale infrastructure projects on the changing patterns of land development in the urban periphery.

*Petetit, Sylvain; Guet, Jean-Francois, CERTU, Lyon, France (16)*
**The French SCOT, a good Tool to restrain urban Sprawl?**
Since 2000 France has developed a kind of strategic planning especially to restrain urban sprawl. Today we have about 300 SCOT projects (schéma de cohérence territorial) and 40 approved documents. Will they succeed in restraining this sprawl?

*Rahman, Golam; Alam, Nurul; Alam, Deanna, United International University, Dhaka, Bangladesh (17)*

**City Growth with urban Sprawl and Problems of Management for sustainable Urbanization**

Proper planning and management of urban growth may ensure sustainable urbanization and arrest urban sprawl.

*Sanjaykumar, Sonar, Delhi Development Authority, Delhi, India (18)*

**Urban Sprawl - A system dynamic Approach**

A system dynamic approach based on a System Concept and System Dynamic modelling seems to be more appropriate to arrive at optimal strategies for sustainable development of the System without Urban Sprawl.

*Twitchett, Bill, Association Terre et Cité, Arras, France (19)*

**Convivial Regions versus Sprawl**

Urban sprawl is a regional affair: subsidiarity, protection of food production. It is also tributary to decisive sub-continental factors and these need to be identified and dealt with in a way that is complementary to an adapted regional approach.

*van den Hoek, Joost W., Inbo.com, Amsterdam & TU Delft, Netherlands(20)*

**The Mixed-use Index (MXI) as Instrument for anti Sprawl Policy**

Research shows that the MXI is a valid indicator to characterize urban development in terms of urbanity, liveliness, and sustainability. The generic character of the MXI implies a global usefulness for design, analysis and policy.

*WEI, Yaping; MIN, Zhao, Zhejiang University, Hangzhou, China (21)*

**Entangling Land-Use Regulations in China’s Urban Growth: The Case of Guangzhou**

The urban growth of China's mega-cities is a combination of 'Urban Spill Over' and 'Local Urban Sprawl'. We examine the land-use regulations and urban growth from an institutional context.

*ZHANG, Xiaoli; HU, Yang, Beijing Municipal Institute of City Planning and Design, China (22)*

**Lay equal Stress on Land Utilization Efficiency and ecological Environment - Adhere to intensive growth oriented Development Zone Construction**

The article, based on the Chinese development zone construction, taking the regulatory plan as starting point, discusses how to achieve growth without sprawl and to ensure the urban ecological environment at an urban marginal area.

# INTRODUCTORY REPORT WORKSHOP 2:
# Public Transport, Road Pricing, Congestion Management and urban Land Use Development – Well-known basic facts and innovative concepts in practice

**Rapporteur: Peter Ross**
SSUPP - Sustainable Shenyang Urban Planning Project, United Kingdom

**Chair: Gildo Seisdedos**
Instituto de Empresa, Madrid, Spain

"To conquer distances – virtually or physically – is a lifelong dream of humanity, which reflects in many symbols, such as the seven league boots, the first step of man on the moon or the internet. At first glance, all of these symbols imply a liberation from natural chains – but the more we get used to them or when looking more closely, we usually also discover a certain ambivalence, which may take years or even decades to become apparent."

Thus starts Dirk Zumkeller's valuable contribution to Workshop 2. It might also serve as setting the scene for the whole Workshop. It implies the tyranny of distance in terms of human settlement, the opening up of possibilities through technology, and yet – in the end – the new tyranny of the technology.

Throughout history human settlement was constrained by limits of movement. Just as the absence of the elevator limited the height of buildings, giving a Hausmanian coherence to city form, so the absence of effective mechanical transport necessitated compact, often terrifyingly dense, cities. This was as true for 3rd century Rome as for 19th century Manchester. Whilst the rich could commute by horse from outlying villas and settlements to oversee their factories or their counting houses, for the masses there was no relief from plague or pressure: no Broadacre City was possible for them. That is, until transport technology advanced.

First came the railways. Their role in regional economic development remains valid to this day, and is well known. Equally the possibility of suburban development opened up: the map of North London suburbs is a map of railway lines. We are not yet talking about sprawl, as each suburb was tethered to its station, and each station was an economical and technologically determined distance from its neighbour. We are however talking about the first breath of freedom, as well as the healthy breath of country air.

We are also talking about a new realisation of an old dynamic: the relationship between transport nodes and land values. In this case the railway companies quickly realised that they could gain more from the sale of station-favoured land than they could from the sale of day returns. They became more land speculators than transport providers. As competition between railway companies increased they started to subsidise the tickets in order to benefit more from the sale of housing plots. Urban transport systems, once separated from the land developers, became dependant on government funders, and tax payers across the developed world still pay for this initiative. Fernanda Magalhães and Eduardo Rojas remind us of the intersection of

such financial consequences, especially in a world where decentralisation is becoming a major factor: “Growing decentralization of government responsibilities gives municipalities a larger role in the provision of services to the population and enterprises. The institutional mechanisms they use to identify, design, and execute investment projects, are one of the key determinants of their capacity to provide these services.”

The Garden Cities, and their degenerate cousin the garden suburb, arose as an attempt to bring dignity, and in some cases saleability, to this spawning urban form. Ironically they arrived just in time to provide garage space for motor cars, and hence as the model for Motopia. The suburb was free of the railway station, and almost free of the city.
But freedom will not be exercised if that which can be obtained by freedom is not wanted. The private car made possible, it did not oblige.

Leafy suburban villa development, served either by railway systems or more usually now by the private motor car, appears to be an object of desire for many, if not most, aspiring middle classes across the world. From Nigeria Abimbola Tofowomo reminds us clearly of this: “Urbanization is now a rising trend seen all over the world, especially in an alarming rate in developing countries. This makes cities grow both in number and in physical size. In quite a lot of instances, the percentage increase in population is accompanied by more than proportional percentage increase of an urbanized area. This is an indication that the two growth rates differ and urban area grows in a more rapid pace.” From a Chinese perspective Qi Lei and Lu Bin put it in a similar way: “Just like urban sprawl in cities of U.S., the impervious area of cities grows much faster than the population, and the population density becomes lower and lower in the past few years.”
But not all; there are many who seek the intense urban experience, and who require no more than the elevator and the bicycle to meet their transport needs. For them the pedestrian street, and its concomitant advantages – so well covered by Nasim Iranmanesh for this Workshop – is the height of urban living desirability.

We are a perplexing species, we want community and we want privacy, we want quiet and we want excitement. We want engagement, and – literally – we want distance. Often what we say does not match well what we do, and we need governments to tell us what we need to do, as Frediani, Giacobbe, Ravella, and Pistola, remind us: ” environment sustainability depends on the appropriate decisions taken in the political administrative sphere. But Awais Piracha is perhaps more realisitc: “If they really were serious about sustainable transport, the governments, and public and private organizations and individuals would make sure that their policies and choices result in a reduction in cars use.”

So, in the world as it actually is, we must deal with a complex situation driven by complex human needs and desires. Fortunately for this workshop we have two papers which track such thinking from the past into the future in one country. Jos Gadet and Koos van Zanan remind us that “The Netherlands have been seriously challenging urban sprawl for almost half a century”, and give us the detail of how that has been enacted, as well as a rigorous analysis, and some pointers for the future. Yvonne van Remmen and Arjen.J. van der Burg, within the same framework, remind us of the advantages of “planning spatial developments along public transports hubs so that the lines are used efficiently. We have ample evidence of successful local developments of such kind (e.g. development around large train stations)”, returning us figuratively to North London.

The Workshop is fortunate too to be able to call upon recent experience in Bursa – Istanbul, through the work of S.S Eryilmaz, H. Cengiz, and Y.Eryilmaz, and in Belgrade, thanks to contributor Vladimir Savcic. Harry Storch, writing about Ho Chi Minh City, is right to remind us that "vulnerabilities of lives and livelihood to climate-related environmental processes are primarily the result of inadequate and unsustainable urban planning practices, associated with complex natural settings and societal structures."

New tools are also available to us, both at the Macro scale through the work of Ying Long, Zhenjiang Shen, and Liqun Du, providing us with an introduction to a long-term urban form prediction for the Beijing metropolitan area, and at the micro level through Yuan Li and Zizhang He. This latter work posits a method for the internal navigation of complex buildings; a recognition that the nature of place is changing dramatically, which is taken further by Kaveh Fattahi and Hidetsugu Kobayashi, as indeed it is in Dirk Zumkeller's paper referred to at the beginning of this note.
Some papers were added to this workshop: There are two modelling-type studies, an assessment of the future of the famous Dutch Randstad model (by VROM), and a comparative assessment in the form of "eleven studios on eleven cities" (by McCormick). In addition, three interesting cases from cities as far apart as Vienna (Fleischmann), Shiraz (Mohaved), and Cancun (Jasso Ortiz) were shifted into this workshop. All of the additional papers contribute interesting analytical views to the specific theme of the workshop.

So we are left with profound questions. Advances in transport technology liberate spatial dreams; the dreams sometimes become nightmares. Have we reached a point at which new dreams are beginning, before we have woken from the last nightmare?

## Short Outlines of Papers as provided by the authors (in alphabetical order)

*Abimbola, Tofowomo,Ministry of Lands, Housing and Environment, Akure, Nigeria (23)*[2]
**The Planning Implications of urban Sprawl in Akure, Nigeria**
Sprawl is not the result of government policies or bad urban planning, but the inexorable product of an automobile-based living pattern. Akure urban Sprawl has been associated with significant improvements in the quality of living and technology.

*Erylmaz, Semiha Sultan; Cengiz, Hüseyin, Yildiz Technical University, Istanbul, Turkey (24)*
**The urban Sprawl Model for an affected Metropolis: Bursa – Istanbul Example**
In this study, the linear urban sprawl formations within Bursa which became a focus for transportation with a swift access from Bursa to Istanbul Metropolis will be analyzed.

*Fattahi, Kaveh; Kobayashi, Hidetsugu, Hokkaido University, Sapporo, Japan (25)*
**New Communication Infrastructures promoting new Criteria for compact Cities**
Researches have revealed that planning targets which disregard new movements towards new communication tools will fail. In this paper the authors examine whether or not these changes can be applied to make new criteria for compact cities.

[2] The numbers refer to the Presentation Schedule in the different sessions of the workshops

*Fleischmann, Philipp, Andreas Hawlik Architekt, Vienna, Austria (26)*
**Waking up the dormitory Town – Visions for Vienna-Atzgersdorf**
Taking a quarter of Vienna as an example, a concept for initiating diversity and multi-functionality within mono-functional large social housing areas of the post-war period is developed.

*Frediani, Julieta Constanza; Giacobbe, Nora Odila; Ravella, Olga; Pistola, Juliana Paula, FAU-UNLP, La Plata, Argentina (27)*
**Compact City – Sprawl City: two interacting urban forms**
The paper analyses the role of urban transport in unsustainable urban areas and focuses on energy consumption. The hypothesis is based on the idea that higher energy consumption produced by urban transport depends on the expansion of the urban form.

*Gadet, Jos; van Zanen, Koos, Physical Planning Dept. Amsterdam, Netherlands (28)*
**Shaping the Core City: It's people that matter**
The three hard core spatial settlement conditions of the knowledge-based economy compulsary need intra-urban restructuring, with sprawl reducing side effects.

*Iranmanesh, Nasim; Etaati, Kouros, Islamic Azad University, Tehran, Iran (29)*
**Pedestrianization - a great Necessity in urban Designing to create a sustainable City in developing Countries**
The role of pedestrians in urban design is very important but regretfully it is neglected in many cities especially in developing countries such as Iran.

*LI, Yuan; HE, Zizhang, School of Architecture and Civil Engineering, Xiamen University, Xiamen, China (30)*
**3D Indoor Navigation: a Framework of Combining BIM with 3D GIS**
It is urgent to develop a framework which aims at supporting indoor evacuation in case of an urban emergency response. The authors propose a 3D GIS-based, BIM information-supported, topologic analysis-oriented indoor navigation solution.

*LONG, Ying; SHEN, Zhenjiang; DU, Liqun, Beijing Inst. of City Planning, China (31)*
**Complex constrained CA urban Model: Long-term urban form prediction for Beijing metropolitan area**
BUDEM, using cellular automata, is the spatio-temporal dynamic and bottom-up model for simulating long-term urban growth in the Beijing metropolitan area. We employ BUDEM to predict sustainable urban form.

*Magalhães, Fernanda; Rojas, Eduardo, UFRJ, Brasilia, Brazil (32)*
**Stategic Project Choice in a Context of limited Resources**
This paper deals with the steps taken into the decision making process in order to select actions or projects aiming at sustainable development. It looks at a number of case studies in order to draw lessons.

*McCormick, Tony, Hassell, Sydney, Australia (33)*
**11 Studios in eleven Cities – Propositions for a sustainable future**
HASSELL, an international planning and design firm, has conceived the 11 Studios in 11 Cities initiative. Planning propositions for each of the 11 cities will be prepared for the year 2030. The project is designed to encourage the cities to address the consequences of climate change sooner rather than later.

*Movahed, Khosro, Shiraz Azad Islamic University, Shiraz, Iran (34)*
**Discerning Sprawl Factors of Shiraz City and how to make it liveable**
This paper investigates Shiraz concerning sprawl from 1956 to present. It explains how the city has grown. The study is going to discerning sprawl factors of Shiraz during 50 years and the major focus of the paper is how to make it liveable.

*Ortiz Jasso, Eduardo, IMPLAN, Cancun, Mexico (35)*

**The Case Cancun**

By formalizing the Independent Institute for Urban Development Planning, Cancun has the opportunity to plan the urban growth of the city. The 'Strategic Plan' is the instrument which gives the city a view of the fields there has to be worked on.

*Piracha, Awais, University of Western Sydney, Australia (36)*

**Bridging the Gap between Policy Rhetoric and Action: Role of the state, public sector organizations and individuals in sustainable transport in Australia**

Australia has peculiar taxation policies subsidizing car purchases and rewarding higher mileages. Even environmentally conscious organizations like universities and local governments are actively facilitating the use of these subsidies by their employees.

*QI, Lei; LU, Bin, Peking University, Beijing, China (37)*

**Urban Sprawl: A case study of Shenzhen, China**

This paper provides an integrated analysis of urban sprawl based on GIS, especially on the variation of land use pattern and the dynamics of urban sprawl, and presents Shenzhen as a case study.

*Savcic, Vladimir, Universidad Politecnica de Catalunya, Barcelona, Spain (38)*

**Inter-Mobility as a Role for urban (Re)-Development of Belgrade public Space Areas**

The paper analyses actual and future projects in zones of inter-modal terminals in the case of Belgrade – contemporary traffic system pivots, organisation, mechanisms and managing as a role for actual urban and architectural (re)development.

*Storch, Harry, Brandenburg University of Technology, Cottbus, Germany (39)*

**Adapting Ho Chi Minh City for Climate Change. Urban Compactness: a Problem or Solution?**

HoChiMinh City is historically a region sensitive to climatic effects. Vulnerability to climate-related environmental processes is the result of unsustainable urban planning practices, associated with complex natural settings and structures.

*Van den Burg, Arjen; Vink, Bart, VROM, The Netherlands (40)*

**Randstad Holland towards 2040 - Perspectives from national government**

The new spatial strategy for Randstad Holland is to upscale the four urban regions, to intensify land use and to improve internal and external accessibility. Governance of Randstad Holland is multi-scalar and works through different mechanisms, not through formal government reform.

*Van Remmen, Yvonne; Van den Burg, Arjen, VROM, The Netherlands (41)*

**Urban Growth without Sprawl, a Way towards sustainable Urbanisation**

We will elaborate on current thinking in The Netherlands regarding sustainable urban development, reconstruct its history (going back to 1966), its instruments and highlight their effects on mobility.

*Zumkeller, Dirk, Institute for Transport Studies, University of Karlsruhe (TH), Germany (42)*

**Does Vicinity lose Significance through Telecommunication? A glance at our future mobility**

Does vicinity loose significance through telecommunication? This question raises the problem whether the essence of transport and mobility is driven by the unlimited demand for simply distance - or is it a system in which variety of any activities is maximized under the given limitations of available systems to conquer space?

# INTRODUCTORY REPORT WORKSHOP 3:
# Concepts and Policies against urban Sprawl: Compact city, eco-city, city greening, and similar concepts - promises only or real successes

**Rapporteur: Garry Smith**
ENSR Australia, Pymble, Australia

**Chair: Shi Nan**
Urban Planning Society of China, Beijing, China

## Introduction to the Workshop

Workshop 3 was established in order to include in the conference a review of innovative anti-sprawl concepts and experience, their translation into policies, and their adoption in practice. It considers themes from the global debate concerning how to make urban development more sustainable and the conceptual ideas involved, including those which exhibit considerable promise of success if effectively implemented.

## Preliminary Thoughts by Rapporteur and Chair

The workshop provides an important opportunity to review historic experience and planning responses to uncontrolled urban expansion, recognizing limitations to some traditional approaches through case study analysis from many parts of the world. The papers discuss a broad range of planning considerations including cultural, environmental and economic factors affecting urban growth, the effects of legislation, and the importance of scientific and spatial considerations in building compact cities utilising, for example, industrial urban wastelands. The opportunity arises to recognize and endorse those approaches and tools which are proving effective in minimising sprawl, and to question ineffective approaches, while at the same time critically analysing the assumptions inherent in anti-sprawl thinking.

## Statements about the Workshop

Workshop 3 has been structured to consider the following 3 themes on consecutive days of the conference:

### *3.1 Defining "sprawl" as an unintended urban form, clearly distinguishing it from planned de-concentrated forms of urban growth: What are the most relevant concepts and real experiences? Can we formulate a contemporary theory of urban sprawl? Are there convincing examples of progress in avoiding urban sprawl?*

Papers describe practical tools evolving from American, Canadian and European smart growth policy, and the influence of culture, markets, residents and political factors on spatial planning. The practical aspects of inner city area development are considered in a paper from Belgrade, which discusses the implications of such growth from the perspective of the protection of public goods and interests.

Other papers consider frameworks for research on urban containment in the face of factors such as population migration, and the concept of reconciling the brown and green agendas. Topic areas include a description of “internal expansion” as infill development, and how to protect public goods and interests.

Several papers consider specific cultural and economic topics relevant to urban planning and city growth, identifying University and education-related activities as drivers of growth in England and China. Discussion includes consideration of new settlements and mass transit systems and the impact of university campuses as creative hubs important to internal city expansion.

***3.2 This workshop includes papers on the historical evidence of successfully implementing and enforcing specific concepts of urban form through strong policies and good management. It includes lessons learned from initially successful policies that proved of limited success in the long run.***

Papers from Italy and Slovenia consider urban development lessons learned from observing historic growth in Rome, and cultural factors relevant to urban expansion in Europe today. A paper from Iran considers the lessons from development of traditional Persian cities as a model for eco-city development.
Case studies from Brazil and Serbia describe the application and outcomes of planning strategies designed to directly intervene in city growth.

Several papers, describing examples from Europe and Southeast Asia, include discussion of sustainable development, the development of urban environmental standards for development, and the greening of industrialised and globalised cities. A number of papers at the conference have described an ‘Ecological infrastructure network’ concept.

A paper from China discusses a wide range of economic, social and environmental aspects of current Chinese socio-economic development with respect to the new Chinese Town and Country Planning Act, including issues of public participation and respect for the public will.

***3.3 “Internal expansion” approaches and programmes in contrast to outward expansion and sprawl: Urban re-development, brownfield development, densification, and regeneration concepts in practice.***

An important perspective in a paper from Germany considers the need for caution with respect to the application of anti-sprawl theory, considering the potential costs of urban consolidation planning in the event that cities move from rapid growth to rapid decline circumstances.

A paper from China frames a concept of 'Urban sprawl risk assessment’ to identify sprawl risk areas and the conflicts which may emerge between urban processes and other landscape processes. The paper considers the effects of development pressures using Chinese examples from the Three Gorges Reservoir area and emigration from the earthquake-stricken areas in Sichuan Province, where cities have exhibited rapid expansion of urban space.

Several papers consider the overlap between science and planning in so-called ‘Brownfields’ development which recycles former industrial waste land within cities and minimises urban

expansion. In several parts of the world brownfields has evolved from an initial public health protection measure to an important strategic planning approach which may directly and rapidly address urban sprawl. The approach of reutilising derelict inner urban space is providing governments and the private sector with direct control over the mixture of environmental, social and economic factors which affect urban quality of life.

**"Inspiring Ideas" for the Workshop**

The workshop includes a valuable cross-section of topics including historic analysis, consideration of successful and problematic case studies on urban sprawl; discussions on research and the definitions and future implications of anti-sprawl planning; practical tools for minimising sprawl despite important cultural, demographic and economic factors affecting urban expansion; and the relationship between anti-sprawl policies, city greening and environmental sustainability. The workshop identifies genuine successes, and the challenges to minimising sprawl, exhibiting worthwhile attributes such as:

- Informed and effective leadership in developing and applying proven planning methodologies
- policies to recognise and balance economic, social, and environmental considerations, and
- public and private sector utilisation of innovative tools based on science and planning theory.

## Short Outlines of Papers as provided by the authors (in alphabetical order)

*Castello, Iara Regina; Castello, Lineu, UFRGS / CNPq, Porto Alegre, Brazil (43)*[3]

**Compacting Porto Alegre: The new 'City Gates' Project**

The paper deals with the more down-to-earth situation of a medium sized Brazilian metropolis (1.5 million), where urban sprawl is still governable. It portrays a gallery of sprawl deterrence concepts in practice and shows continued planning policies achievements.

*Djokic, Jasmina; Graovac, Ana, Town Planning Institute of Belgrade, Serbia (44)*

**Implosive Sprawl – Belgrade Case Study**

This paper analyzes aspects of possible implosive sprawl, which happens inside the existing City boundary - "transfusion" of FAR, missing in realization for public spaces, usurpation of riverbanks and woodlands and inadequate planning solutions.

*Fattahi, Sara, Shiraz University, Shiraz, Iran (45)*

**Analyzing traditional Persian Cities as a Model for the Eco-City**

Regarding many researches which are done in BMRC changing Bushehr into an Eco-city is one of the effective ways to control its uncontrolled urban development. This paper tries to introduce several BMRC projects that have been done in Bushehr recently.

*Goedman, Jan; Houtsma, Wim Heiko; Zonneveld, Wil, Ministry of Housing, Spatial Policy and the Environment (VROM), The Hague, Netherlands (46)*

**Dutch spatial Planning: from implicit to explicit sustainable urban development**

Dutch spatial policy always aimed at 'concentrated deconcentration'- an implicit strategy towards sustainable urban development. The quest for explicit sustainability is illustrated by efforts shown in a recent strategic study for the Randstad Area.

[3] The numbers refer to the Presentation Schedule in the different sessions of the workshops

*Gossop, Chris, PINS, Milton Keynes, United Kingdom (47)*
**Cambridge, England - Planning for knowledge-led Growth in a tightly constrained Sub-Region**
Cambridge is experiencing significant expansion of its high-tech industry and a mismatch between homes and jobs. The paper explores the latest strategies for redressing the imbalances; these plans include a prototype 'eco-town', Northstowe.

*Heyning, Helena, MB&A bv, Amsterdam, Netherlands (48)*
**Smart Growth: Answer to urban Sprawl?**
Three intercontinental examples of 'smart growth' are compared, with 'real time' planning examples at national, regional and local level as well as the impact of different cultural backgrounds.

*HUA, Ying & YANG, Xiaodi, Cornell University, Ithaca, USA (49)*
**University Campus as creative Hub critical to the internal Expansion of the City**
This paper will analyze the important role of universities; city campus redevelopment in stimulating the city's internal expansion, instead of suburban expansions. Case studies to be examined include Pittsburgh, Osaka and several Chinese cities.

*Johnson, Craig, EDAW, Denver, USA (50)*
**Tropical green Cities**
The paper will present the findings of Craig Johnson's year-long fellowship documenting the relationship between modernization and urban greenery in Southeast Asian Cities.

*LI, Bo, Graduate School of Landscape Architecture, Peking University, Beijing, China (51)*
**Urban Sprawl Risk Assessment based on ecological Infrastructure: an approach to smart conservation**
This paper discusses an approach to smart conservation in the context of great pressure of urbanization in China through the assessment of urban sprawl risk based on ecological infrastructure. Hangzhou city is used as a case study.

*LIU, Yun; PENG, Chong, School of Urban Design, Wuhan University, Wuhan, China (52)*
**The Impact Analysis of the Town and Country Planning Act 2008 on the smart Growth of a small-sized Town in China: Case Study of Lianjiang Town Master Plan**
This paper analyses the main content, the new stipulations about urban land scale and spatial construction of the new act, and studies the case how Lianjiang Town made the choice of smart growth under the influence of the new act in its master plan.

*Maksin-Micic, Marija, Singidunum University, Belgrade, Serbia (53)*
**Problems and Possibilities for steering urban Sprawl in Serbia**
In order to achieve any success in steering urban sprawl the focus should be laid on the efficiency of a settlement network at the functional urban area to achieve a more efficient control of urban sprawl in peripheral urban zones.

*Malusardi, Federico; Scoppetta, Cecilia, Sapienza University of Rome, Italy (54)*
**Rethinking urban Morphology through urban Forestry (case of Rome)**
Urban forestry implies an idea of adaptation in the biologic sense, a possible relationship (natural/artificial), expressed in the image of environmental infrastructure as a living machine producing energy; a different kind of development.

*Pichler-Milanovic, Nataša, University of Ljubljana, Slovenia (55)* ***(not present)***
**European urban Sprawl: Sustainability, Cultures of (Anti)Urbanism and 'Hybrid Cityscapes'**
The aims of the paper are to provide specificities of European patterns and processes of urban sprawl and to show a small number of important 'archetypical' perspectives with policy innovations regarding the sustainable management of urban sprawl.

*Rosenfeld, Elías; Discoli, Carlos; San Juan, Gustavo, IDEHAB, la Plata, Argentina (56)*
**Compact City versus diffuse City: their implications in urban life quality and sustainability**
The main macrovariables of compact city (CC) and diffuse city (DC) are analysed in La Plata and its surroundings, in Argentina. In order to define quantitatively the disadvantages against urban sprawl an urban life quality model will be implemented.

*Schönwandt, Walter; Jung, Wolfgang; Bader, Johannes, University of Stuttgart, Stuttgart, Germany (57)*
**Internal Growth: Can strategic planning procedures help to achieve it?**
In the research project we apply a 'Problems-First approach'. This means not to start with methods, instruments or theories but with (socially constructed) problems particularly identifying the processes that cause land consumption.

*Siedentrop, Stefan; Fina, Stefan, University of Stuttgart, Germany (58)*
**Urban Sprawl beyond Growth: from a growth to a decline perspective on the costs of sprawl**
This paper extends current research on urban sprawl to aspects of demographic change. Based on area statistics, we introduce a “shrinkage” type of sprawl for Germany. We focus on areas with population decline and describe cost-related consequences.

*Smith, Garry, ENSR, Sydney, Australia (59)*
**Contributions of Brownfield Development to urban internal Expansion and urban Renewal in Practice**
Brownfields development allows sustainable global urban renewal through recycling of land. This paper describes innovative concepts and policies in brownfields planning and implementation using Australian examples of best practice.

*Subba, Mahendra; Bjoenness, Hans Christie, Nepal; Norwegian University of Science and Technology, Trondheim, Norway (60)*
**Urban Sprawl - A Necessary Evil? Towards a framework for research on urban containment for Kathmandu Valley, Nepal**
Subba (in 2003) made a baseline study of residential sprawl in Kathmandu. To expansion mainly from ’within’, aggressive sprawl has been added. Who are new actors and what is the role of the public sector? An urban containment policy is revisited.

*Valdes, Paula, Universidad Nacional del Nordeste, Resistencia, Argentina (61)*
***(not present)***
**La Ordenación de Espacios metropolitanos. Transformaciones socio- territoriales en el eje Gran Resistencia-Corrientes, Argentina**
The study of these metropolitan areas is important because it's a reality of today's cities.

*Yuen, Belinda, National University of Singapore (62)*
***(not present)***
**Internal Expansion: Singapore high-rise**
This paper examines how Singapore turns its space constraint to support the growth of a livable city. The continuing residential satisfaction with its highrise public housing lends lessons for other cities faced with the challenge of managing urban growth.

# INTRODUCTORY REPORT WORKSHOP 4:
# Metropolitan Management as Part of an urban Development and Governance Framework, from the national to the local Scale

**Rapporteur: Tang Zilai**
Department of Urban Planning, Tongji University, Shanghai, China

**Chair: Ng Waikeen**
Scott Tallon Walker Architects, Dublin, Ireland

Urban management has been defined as 'efforts to co-ordinate and integrate public as well as private actions to tackle the major problems the inhabitants of cities are facing and to make a more competitive, equitable and sustainable city' (van Dijk *et al.*, 2002). With increasing pace of globalization and decentralization, metropolitan management and governance is experiencing unprecedented transformation in social, economic, environmental and political terms. Especially the sustainability of metropolitan development has become one of the strategic issues of urban growth management and much attention has been paid on debates on urban sprawl.

Papers to be presented at Workshop 4 on Metropolitan Management and Governance can be roughly classified into four categories, namely regional governance and planning, policy initiatives and urban programs, international comparisons, and metropolitan management in transitional economies.

## 1. Regional Governance and Planning

Metropolitan regions usually cover a quite large area and consist of several independent municipalities. It is truly a challenge for governance of metropolitan regions to co-ordinate and to integrate a variety of stakeholders. In this section, three papers are devoted to the discussion on regional development policies in Portugal. Mendes and Morgado conduct a research on centrality of Lisbon Metropolitan Area, using density, connectivity and diversity as the leading indicators, and they found that the deficiency of multi-level planning induced discontinuities between local and regional planning, resulting in a lack of effectiveness of the proposed strategies. Danko and Lourenço analyze the contribution of strategic planning to the balanced development of Douro sub-region, focusing on the impact of infrastructure networks, namely transportation, water and wastewater systems. Brandão-Alves *et al.* show that the innovation of regional plan for the Azores Archipelago has promoted a balance between urban renewal and urban expansion through various policy initiatives like regeneration, diversification and densification.

The effectiveness of metropolitan governance requires not only public-private partnerships but also cooperation of public agencies at different levels and participation of citizens from various sections of civil society. Weith discusses cooperation between federal states in land use management in Germany. He identifies two types of cooperation between federal planning authorities, including the formalized form of cooperation in Berlin-Brandenburg and a more flexible arrangement of administrative working groups in the metropolitan region of Hamburg.

In contrast, Hoffman-Aguirre tells an interesting story of the Metropolitan Area of Mexico City. While Mexico City (Federal District) tries to counteract urban sprawl through policy initiatives of re-densification, the municipalities in the State of Mexico works in an opposite direction to allow the sprawl in other parts of the MAMC. The paper by Chávez de Ortega is also devoted to Mexico City (Federal District) with focus on citizen's participation as a means to control accelerated urban sprawl. From another fast growing developing country, Simatupang conducts a research on conurbations in Java. She confirms that sprawl as the predominant form of urbanization in Indonesia is caused by the deficiency of administrative-spatial configuration of urban areas, and suggests that urban management should take a conurbation as one system.

**2. Policy Initiatives and Urban Programs**

The challenge of urban sprawl is faced by almost all countries. In recent years, cities in different countries have implemented a variety of policy initiatives and programs to deal with urban sprawl in diversified contexts.

Meijer examines the effectiveness of the Dutch policy for urbanization with valuable agricultural landscapes, which became known as 'red for green' policy in 1990s when Neoliberalism and New Public Management were the prevailing movements in social and political sphere. This policy was designed to allow landowners in rural areas to build a large house (red) if they simultaneously developed 5 or 10 hectares of their land for nature and recreation purposes (green).

Thierstein and Reiss-Schmidt present the urban development strategy, called Perspective Munich. This strategy is based on tripod of 'urban, compact, green' and designed to promote urban development through internal expansion of reuse of redundant urban land. They also conduct an evaluation exercise of the above-mentioned urban policy and discuss a number of preconditions for its successes. A research on cautious urban redevelopment in another German city, Berlin, is provided by Li. The paper is based on the case study of Spandauer Vorstadt and Li finds that in addition to the avoidance of urban sprawl, cautious urban redevelopment has brought about a variety of positive effects including preserving cultural value, supporting regional economy, promoting private ownership of housing and stopping decay process of historic quarters and buildings.

One of the planning strategies to deal with urban sprawl is called dispersed concentration at regional or national levels. The development of new settlements as a planning strategy to deal with urban sprawl is discussed by three papers. Fritz conducts a case study of Trincity which was designated as a new development in order to alleviate the strong pressure of urban sprawl faced by Port of Spain, the largest city in Trinidad and Tobago. Ordoñez *et al.* elaborate "a green, water and pedestrian city' as the planning concept of Xaman-Ha city which is a new settlement designated to attract a high percentage of floating population in the state of Quintana Roo, one of the most important tourist development regions in Mexico. The paper by Barbieri focuses on the manifestation of new urbanism in a high-profile development in Erechim, a medium-sized city in southern Brazil.

**3. International Comparisons**

Metropolitan management and governance is based on the characteristics of regional and national contexts, international comparative research can provide a valuable platform for discussions on challenges and opportunities faced by cities in different countries.

Tang and Xu conduct a comparative study of the governance of capital metropolitan regions between Berlin-Brandenburg and Beijing, with focus on mechanisms of regional communication and cooperation. Elgendy *et al.* provide a comparison of regeneration of vacant or underused land as a countermeasure to urban sprawl through a cross-border study of Baden-Wüttemberg in Germany and Basel-Landschaft in Switzerland. The paper by Fiedorowicz and Fiedorowicz presents a comparison of the spatial structure of Poland with four groups of European countries. The paper by Lourenço and Danko is also devoted to a comparative study of European countries, namely Portugal and Italy, regarding the methodology for selection of minor deprived urban communities based on definitions and characteristics. Sustainable development policies for minor deprived urban communities are designed to strengthen economic and social cohesion in the European Union.

**4. Metropolitan Management in Transitional Economies**

While the challenge of urban sprawl is faced by almost all metropolitan regions, cities in transitional economies can certainly be identified to share some characteristics. According to the paper by Lorens, while urban sprawl is faced by post-socialistic cities in central and eastern European countries, there also are opportunities for public policies to promote the regeneration of inner cities because the pressure for urban sprawl can be contained due to limited population growth and immigration. Kudryavtsev examines the negative impacts of mega-projects of private housing development in Moscow metropolitan region, and asks for better coordination with local urban development. Elisei discusses the weaknesses of the current planning system in Romania and suggests that tangible steps are taken to reform the planning system to deal with challenges and opportunities brought about by market-based economy. The paper by Nghi depicts the situation of urban sprawl in Ha Noi and Ho Chi Minh cities of Viet Nam and discusses planning interventions to deal with urban sprawl.

Reference

van Dijk, M.P., Noordhoek, M. and Wegelin, E. (eds.) (2002) Governing Cities: New Institutional Forms in Developing Countries and Transitional Economies, ITDG Publishing, London.

## Short Outlines of Papers as provided by the authors (in alphabetical order)

*Adonis Barbieri, Rodrigo, PROPUR / UFRGS, Porto Alegre, Brazil (63)*[4]

***(not present)***

**From global to local: City Marketing and the Plan Erechim100**

This paper intends to understand how the new practices in urbanism such as City Marketing have influenced the peripherical cities, out of the 'Global Cities'.

*Aubert, Bernard, Private Office, Paris, France (64)*

**The Challenge of Growing the City within its Limits**

The balance between rurality and urbanity, prescribed by the Regional Plans, involves local actions: land control, wasteland recovery, choice of saving space densities. The growth of the city inside its limits requires political will and resources.

*Brandão Alves, Fernando; Conceicao, Paulo; Granadeiro Cortesao, Joao; Pinho, Paulo, FEUP - DEC – CITTA, Porto, Portugal (65)*

**The new Azores Regional Plan as a Tool to regulate the Sprawled Growth in the insular Portuguese Territory**

How can a plan contribute to the regulation of urban sprawl in the insular Portuguese territory? The Azores Regional Plan promotes the balance between urban renewal and expansion as a way of containing, reverting and preventing this phenomenon.

*Chávez de Ortega, Estefanía, UNAM, Mexico City, Mexico (66)*

**Citizen Participation as a Means to control accelerated urban Sprawl**

A study of Xochimilco, one of Mexico City subdivisions, shows the impact in controlling the accelerated urban sprawl in this region by promoting citizens' participation supported by popular territorial representatives (Calpuleques).

*Danko, Cristina; Lourenço, Julia, University of Minho, Guimarães, Portugal (67)*

**Strategic Planning for equitable Territory Development: the case of sustainable water and wastewater infrastructure in northeast Portugal**

Selected Portuguese municipalities were ranked according to their urban water and wastewater infrastructure sustainability, providing a starting point for discussing Portugal's territorial inequalities and strategic programmes for promoting equity.

*Duong Quoc, Nghi, UEPP-VN, MoC, Ho Chi Minh City, Vietnam (68)*

**Urbanizing without Sprawl: Vietnam experiences and perspective**

This paper depicts some urban sprawl experiences of Vietnamese cities and related challenges and opportunities in the light of the country's urban development trends and perspectives. Finally, it proposes some new ways of thinking in addressing the issue.

*Elgendy, Hany; Seidemann, Dirk; Wilske, Sebastian, University of Karlsruhe, Germany (69)*

**Perspectives for urban Regeneration in European metropolitan Areas: a cross-border study in Germany and Switzerland**

Based on a cross-border study, this paper investigates the patterns and characteristics of inner development potentials in metropolitan areas in a German and a Swiss region. It aims at finding out possibilities for mobilising these areas.

*Elisei, Pietro, DipSU - Uniroma 3/Planum.net, Velletri (Rome), Italy (70)*

**Integrated Development Plans in Romania: pure formalities or tangible steps towards the design of a new culture of planning?**

This paper treats urrban regeneration in a post-communist country. It describes the need of designing strategic plans versus the attempt of maintaining laissez-faire logics.

[4] The numbers refer to the Presentation Schedule in the different sessions of the workshops

*FAN, Li, National Research Center of historic Cities, Shanghai, China (71)*

**Cautious urban Redevelopment in Berlin**

After the reunification of Germany, the principle of cautious urban redevelopment in Berlin was used. Effective social, cultural and economic development took place in a short period of time. The Spandauer Vorstadt district is one of the areas selected for urban redevelopment.

*Fiedorowicz, Kazimierz; Fiedorowicz, Jacek, Częstochowa University of Technology, Warsaw, Poland (72)*

**Shaping spatial Structure of the new Member Countries of the EU**

Polish spatial structures have been compared with other new EU member countries & Spain with Portugal. In case of the new EU members lacks in these structures have been observed. These lacks can be deleted by activity corrections.

*Fritz, Annika, UWI, Port of Spain, Trinidad and Tobago (73)*

**Trincity Millennium Vision**

There are ways in which metropolitan management can be achieved in the absence of legislative provisions. Vision, ownership of land, an idea which is financially feasible and stakeholder participation are key ingredients which can guarantee success.

*Hofman, Victor Hugo, UNAM, Mexico City, Mexico (74)*

**Redensification vs. Sprawl; The metropolitan Area of the City of Mexico**

While the City of Mexico works to frame suitable compactness policies, the surrounded municipalities (State of Mexico) give permissions to sprawl over the Metropolitan Area of Mexico City.

*Kudryavtsev, Fedor, Moscow Institute of Architecture, Moscow, Russia (75)*

**City-scale private "Megaprojects": real estate manipulations or way to planned development**

New scales of private housing projects that are under development in Russia will be presented as both a threat and an opportunity for the quality of the country's metropolitan areas.

*Lorens, Piotr, Gdansk University of Technology, Gdansk, Poland (76)*

**Urban Regeneration vs urban Sprawl - problems and prospects in the post-socialistic cities**

The paper examines the chances for successful regeneration strategies as the counter-proposition to suburban development in the realities of a market-oriented urban development system by the example of Polish cities.

*Lourenço, Julia; Danko, Cristina, University of Minho, Guimarães, Portugal (77)*

**Generalizing urban Sustainability Success Stories: a discussion on selected European cases**

Selected European experiences on urban systems sustainability provide a backdrop for a discussion on the importance of appropriate scales for defining quantitative and qualitative comparison parameters in order to achieve methodology generalization.

*Meijer, Michaël, SAB Strategie & Ontwerp, Velp, Netherlands (78)*

**A Dutch Strategy for Urbanisation within valuable Landscapes**

The following will be discussed: New strategies for small scale urbanisations within valuable landscapes without creating urban sprawl; Substantial quantities of new dwellings and benefits for the countryside while offering solutions for a more efficient agriculture at the same time.

*Mendes, Clara; Morgado, Sofia, LUOTP/FA-TU Lisbon, Portugal (79)*

**Lisbon Metropolitan Area: centralities, urban growth and policies**

The paper will address topics concerning the current metropolitan development in Metropolitan Lisbon: Patterns of land use and their dynamics; Metropolitan government in its correlation with national urban policies and local urban planning.

*Ordoñez, Juan Felipe, J. F. Ordoñez and Partners, Distrito Federal Mexico City, Mexico (80)*

**Xaman Ha City, an Answer to the poor Growth and spread Population**

An alternative response to the poor growth and spread of developing cities; an economic self-sufficient center growth accessible to low-income population; and a sustainable city model as an answer to housing needs.

*Simatupang, Wita, Cipta Trimatra, Jakarta, Indonesia (81)*

**Conurbations in Java, Indonesia: the call for multi stakeholder urban management**

Sprawl in Indonesia is an obvious fact yet statistically hidden. Considerable urban population does not live in cities. Conurbation is underestimated, leaving urban areas poorly serviced. It seems that multi stakeholder urban management is in demand.

*TANG, Yan; XU, Jingquan, China Academy of Urban Planning & Design, Beijing, China (82)*

**Regional Governance of the Capital Metropolitan Region: a comparative study of Berlin-Brandenburg and Beijing**

The paper examines regional governance and institutional changes in the political and administrative structures of two capital metropolitan regions, Berlin-Brandenburg and Beijing.

*Thierstein, Alain; Reiss-Schmidt, Stephan, Technische Universität Munich; Department for Urban Development Planning, City of Munich, Germany (83)*

**Urban Development Management in Munich, Germany. Integrated strategy, impacts and learning from external evaluation**

Key strategies to countervail unwanted urban sprawl are ‘internal expansion’ and ‘urban, compact, green’. A first external evaluation puts focus on how to make a comprehensive urban strategy with generally formulated objectives assessable and tangible.

*Weith, Tomas, University of Potsdam, Germany (84)*

***(not present)***

**Cooperation between federal States in Land Use Management – a successful framework for sustainable metropolitan development in Germany?**

The aim of this paper is to analyse current forms of cooperation in land use management between federal states in Germany, and to discuss options for enhancing cooperation to target sustainable metropolitan development.

# INTRODUCTORY REPORT WORKSHOP 5:
# Integrating ecological Management and cultural Heritage Conservation Agendas in urban Development – new dimensions in many countries

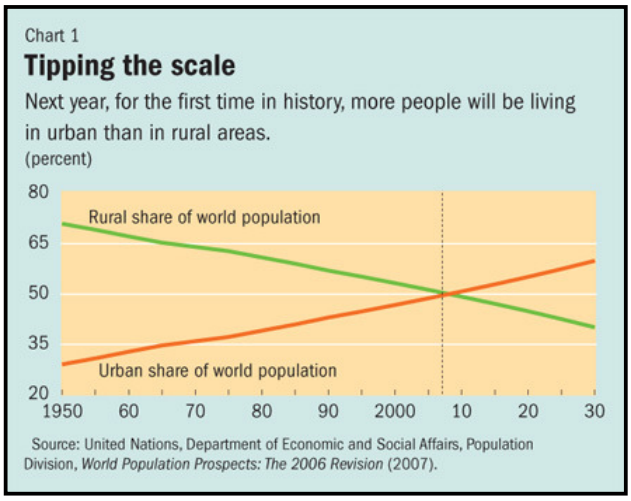
**Rapporteur: Isabel Viana**
Viana & Partners, Montevideo, Uruguay

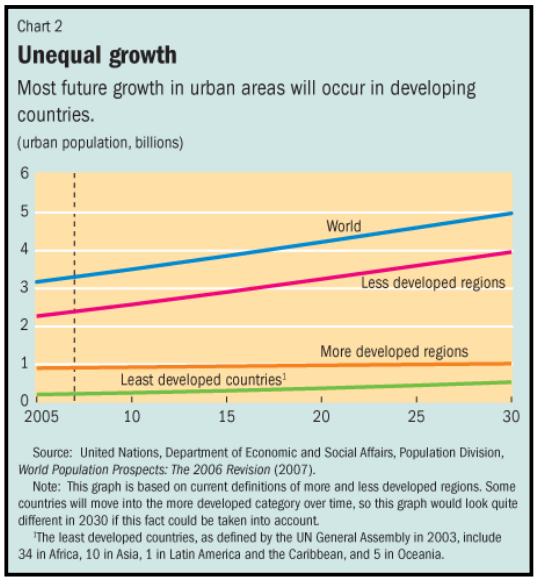
**Chair: Ruan Yisan**
National Research Center of Historic City, Tongji University, Shanghai, China

This workshop includes a whole range of papers from theoretical concepts, and experiments, to the actual adoption and integration of innovations in everyday urban management. This topic has been added to the range of topics in the first announcement, adding an explicit focus on ecological and conservation aspects because these concepts are still relatively new in China and other countries in rapid development and transition (Prof. Detlef Kammeier, Call for papers – 44th ISOCARP Congress)

The Congress frame requires to analyze the urbanization main tendencies and its possible change. In that context, the Workshop must discuss about the inclusion in a new planning paradigm of heritage preservation subjects (natural and cultural). This Introductory Report proposes some main characteristics of both themes. The paper discussion and analysis is expected to contribute to elaborate theoretical proposals about those subjects and identify successful practices.

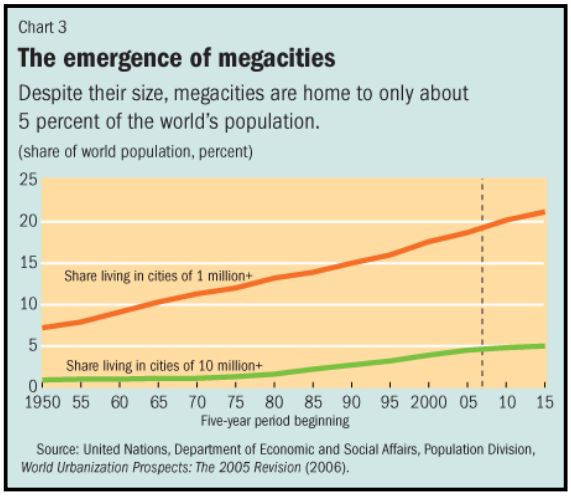
## 1. Urbanization Trends and City Sprawl Characteristics

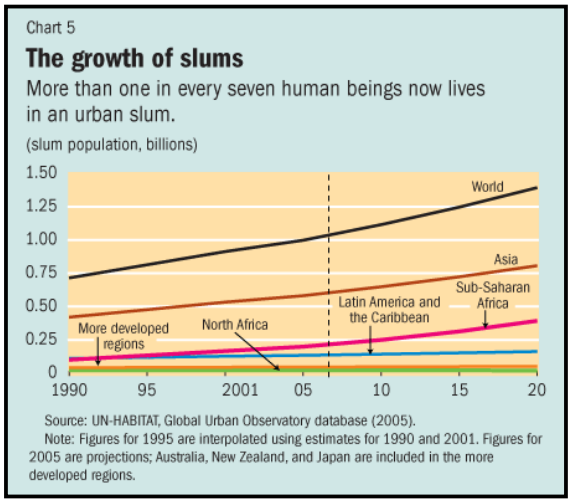



- Rapid urbanization processes all over the world. Urbanization generates higher incomes to citizens, but in spite of its benefits of urbanization, the evidence supports that urbanization, especially when its pace is rapid, can impede development and exacerbate environmental problems.

- Development of megacities (more than 10: inhabitants).




Growth of low density peripheries, characterized by single-use zoning, low-density land use and car-dependent communities, uncontrolled residential subdivisions, vacant lands, urbanization without or with incomplete infrastructures, lack of adequate regulations, high frequency of slums.

- Sprawl increases the urban surface. Their expansion occupies former rural lands. The expansion growth rate is bigger than the population growth one. It even occurs in cities diminishing its population in absolute numbers, as Montevideo or Melbourne.
- Urban sprawl is sustained by growth among existing populations and different population flows: from rural areas towards cities, from downtowns toward peripheries and people migrating from distant countries towards global megacities.
- Sprawl creates negative impact in the cities' environment and people's quality of life (loose of agricultural land, crowding and increased violence and crime in cities, increased infrastructure and transportation costs, etc.)
- Sprawl usually has a negative connotation for the administration, but there are some groups in the society that sustain it. The urbanization process increases land value and the possible revenues of parceling are bigger than any kind of land exploitation. This circumstance feeds real estate and construction activities. Living in individual parcels with green areas is a prestigious social pattern, prices of land in peripheries are lower than near cities center.

## 2. Heritage

Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural, tangible and intangible heritage is an irreplaceable source of adaptative strategies and inspiration.

World Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located. The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.

There are other heritage categories. Even though it might not be important for the whole mankind, there are natural places, landscapes, buildings, techniques, intangible manifestations of culture (dances, music, food, dresses, religious practices, social ceremonies

for marriage, for death and other celebrations) that can be considered as part of local, regional or national identities, and require preservation actions in the adequate scale.
The cultural habits of societies change. The acceptation of the abandon of old ones and the adoption of new cultural patterns, the discrimination of what needs to be preserved to be known and enjoyed by future generations is another challenge to be faced.

Societies receive legacies from two sources - the natural environment and the creations of human beings. These inheritances everywhere commingle; no aspect of nature is unimpacted by human agency, no artefact devoid of environmental impress.

We have traditionally dealt quite differently with these two kinds of legacy. The present pattern of interaction of a society with its natural and cultural environment is a single expression of its culture.
Society's heritage is tangible and intangible. Mass global communications based on new technologies and population mobility (local, rural-urban, international and global migrations) challenge the conservation of cultural expressions of different nations. New cultural forms and different values are being born in cities. Only what is dead does not change. The management of the changing process preserving the consensual cultural mankind values is our challenge.

Management of both heritages has many features in common, and both realms often share similar procedures. Relations between the cultural and the natural heritages are not usually conceived as different aspects of the cultural nature of societies.

The quality of life of contemporary society requires building up an environment coherent with its requirements and capacities. It can be done trough urban renewal, using the already built and served urban land or adding new territory to the old cities, where the new requirements can be respected and new technologies can be fully used.

If the option is to use urban renewal, the built heritage shall be endangered. If the addiction of new areas to the urban planning is selected, there will be negative impacts over not urbanized land (natural areas or rural production ones).

### 3. New Requirements for urban Management and Planning

Our debate should search the instruments to build up and administrate an equilibrated use of our planet resources and a good quality of life for present generations without compromising the resources of the future ones, trough a new sustainable balance between natural environment and wildlife, productive activities and urban structures and production.
Prof. Detlef Kammeier asked us if "cities without sprawl" would seem to amount to wishful thinking or un-attainable goals, if is it possible at all to plan and govern such developments and what are the instruments for achieving those "cities without sprawl".

- We need to find a suitable definition for sustainable development and its translation into policy; to revise cultural heritage and ecological concepts; and to find a multidimensional approach to heritage preservation and cultural change dimensions. The former planning codes, methodologies and tools seem to be insufficient and inadequate for the new dynamic of urban transformations, as well as for the contemporary comprehension of space and time relation.

- We need to introduce new technologies for data collection and data management; develop new modes of strategic planning and project development; integrate new information categories into urban planning and decision making; resolve conflicts between various actors, sectors and spatial/network layers and facilitate the negotiation between them; stimulate interaction between professionals and different actors; support decision making processes; evaluate different visions of a city; conduct environmental and urban assessments; create new languages to interact with other disciplines and social participants of the processes, participate in permanent evaluation and redesign processes.

Our Workshop will give us the opportunity to fill those topics with real cases, to discuss new theory propositions and to find good examples of good practices to inspire our own adequate answers to the described challenges.

## Short Outlines of Papers as provided by the authors (in alphabetical order)

*Beriatos, Elias, University of Thessaly, Athens, Greece (85)*[1]

**Uncontrolled Urbanization, Tourism Development and Landscape Transformation in Greece**

Spatial developments in Greece caused a rural- urban continuum and a 'cluttered' countryside. The paper investigates the transformation of landscapes by unplanned urban growth, and the possibilities of a new strategy for a liveable urban development.

*Bracho, Diana; Faneite, Yuri; Faria, Carmen, Universidad del Zulia, Maracaibo, Venezuela (86)*

**Santa Lucía: A hidden Treasure in the urban Structure of Maracaibo**

Within the structure of Maracaibo, Santa Lucia becomes a unique piece. This work outlines its consolidation as a multifunctional center that would lead to sustainability. Its patrimonial characteristics vouch its role as a development hub.

*CHUN, Zhang; BIN, Lu, Peking University, Beijing, China (87)*

**A cultural-ecological Approach in the Regeneration of the inner City: The case of Nanluoguxiang in Beijing**

This paper discusses the inner city regeneration though a cultural-ecological approach. It highlights multi-cultural mutualism in restructuring a harmonious landscape, and analyzes process and outcomes involved by taking Nanluoguxiang in Beijing as example.

*DING, Yuan, National Research Center of Historic Cities, Tongji University, Shanghai, China (88)*

**Fengshui: the fading Landscape of Chinese Cities and cultural Heritage Sites - Wuchang City and Wudang ancient building complexes**

Fengshui, traditionally binding the natural aspects and the cultural, has been re-interpreted and forgotten in China since 1840. With two cases, the author discusses the vicissitude of Fengshui in general and Wudang and Wuchang in particular.

*Discoli, Carlos; Rosenfeld, Elías; Martini, Irene, IDEHAB, La Plata, Argentina (89)*

**Urban Sprawl in the peri-urban Areas of La Plata and its Surroundings**

We propose to evaluate, with an urban life quality model, areas with urban vulnerability, consequence of urban sprawl. Maps will be conformed tending to determine homogeneous areas in order to define the growing 'unsustainability'

[1] The numbers refer to the Presentation Schedule in the different sessions of the workshops

*Gunay, Zeynep, Istanbul Technical Unversity, Istanbul, Turkey (90)*
**Neoliberal Urbanism and Sustainability of cultural Heritage**
The paper examines the dynamics of historic cities to be a model for sustainable cities within the context of neoliberal urbanism. The experiences of three Turkish cities are highlighted as empirical evidence by using strategic impact assessment.

*Kamrowska-Zaluska, Dorota; Kaczorowska-Fudala, Anna, Gdansk University of Technology, Sopot, Poland (91)*
**Rush to become "globally relevant"- culture based development as a significant factor towards sustainable urbanization**
The paper shows possibilities and barriers as well as attempts to implement culture based development in Gdansk. It can play a significant role in preventing uncontrolled suburban residential development and further spatial polarization of the city.

LI, Rui, Wuhan University, Wuhan, China (92)
**Urban Heritage Conservation by using GIS under Urban Renewal: A case study of Hankou historical district in Wuhan, China**
The main object of this paper is to use GIS in urban heritage conservation against the background of urban renewal. A methodology for urban heritage conservation and renewal in the use of GIS will be set up. The case of Wuhan in China will be used to show the result of the applied methodology.

*LUAN, Bo; PENG, Wenjie; HU, Huan, Graduate School of Landscape Architecture, Peking University, Beijing, China (93)*
**Shaping Waterside City Form in Hangzhou through water-oriented ecological Infrastructure**
With the example of Hangzhou in China, the study works across three scales, focusing on shaping the sustainable form of the waterside city by recognizing the value of the water system by ecosystem services, and building a water-oriented ecological infrastructure.

*Martinico, Francesco; Nigrelli, Fausto Carmelo; La Rosa, Daniele, University of Catania, Catania, Italy (94)*
**Urban Sprawl over the Countryside. The Landscape Protection Plan in Sicily**
In Sicily, urban sprawl is affecting many components of landscape heritage. The definition of a Landscape Plan, with the helpful aim of GIS tools, represents the first attempt to study these phenomena and to propose normative solutions.

*Mitrovic, Sonja; Kacar, Maja; Jankovic,(95) Daniela, YMSD Consulting, Toronto, Canada*
**Sustainable Solution for City Park 'USCE' - dimension for the future**
A green space of 140 ha, nested in the river's mouth of Danube and Sava, Belgrade, is proposed for the competition. The challenge was environmental compatibility in urban networks and requirements for the Opera House, the Art Museum and the government building known as SIV.

*Nuri, Mouriño, Environmental Secretary, Mexico City, Mexico (96)*
**Networking in green**
Latin American countries have a shortage in their government system, generating social dynamics known as "irregular settlements". It is imminent adopting "green initiatives" as leading axis of urban planning to reduce city fragmentation.

*Prothi Khanna, Nupur, beyondBUILT, Bangalore, India (97)*
**The Future of the Past in sprawling Cities**
The presentation is based on the significance of natural and cultural heritage in building sustainable cities with the case study of Bangalore, commonly refered to as the "Silicon Valley" of India.

*QIAO, Qing; YUAN, Hong; YAN, Bin, Peking University, Beijing, China (98)*

**Land Use Planning based on ecological Infrastructure in Metropolitan urban Fringe: Dongsanxiang Area, Beijing**

With the example of the case of Dongsanxiang in Beijing, this paper proposes to integrate the ecological infrastructure and the land use planning approaches so as to control urban expansion and protect the landscape resources in rural areas.

*Schuett, Rolf, 3D REID, Glasgow, Scotland, United Kingdom (99)*

**Raster based GIS for urban Management: a low-cost solution for developing countries**

This approach tries to encourage local authorities to work with spatial technologies and (mainly) freely available data, applying local solutions and soft ideas.

*SHEN, Na; LIANG, Jiang; SUN, Hui, College of Architecture and Fine Arts, Dalian University of Technology, Dalian, China (100)*

**Building the cumulative Impact Assessment System within the regulatory detailed Planning Framework in China**

From the aspects of the legal framework, review components, technical measures, and procedural design, the paper establishes a threshold of the Cumulative Impact Assessment within the existing the Regulatory Detailed Planning Framework in China.

*Simms, Doneika, University of the West Indies, St. Augustine, Trinidad and Tobago (101)*

**The Effects of Urbanization on natural Resouces in Jamaica**

The small island of Jamaica has been experiencing rapid urbanization, chiefly in the primate city of Kingston. This presentation offers an insight into the negative effects of urban growth on achieving ecological sustainability in the island.

*WANG, Sisi; CHEN, Chundi; YANG, Qian, Peking University, Beijing, China (102)*

**Ecological Infrastructure as a powerful Instrument for smart Growth: Beijing**

With the case of Beijing City, a typical megacity in China, this paper introduces Ecological infrastructure (EI) as a strategic instrument for smart growth and smart conservation by planning EI and using EI as a structural framework for urban growth.

*XI, Xuesong; HAN, Hui, Graduate School of Landscape Architecture, Peking University, Beijing, China (103)*

**Ecological Infrastructure and urban Landscape Identity**

Taking the case of Weihai, a famous coastal city in China, as an example, this paper proposes the approach of townscape planning based on ecological infrastructure (EI). It illuminates the approach how to control the urban development with an ideal urban landscape model.

*Yamaguchi, Shinobu Yume; Leong, Ceelia; Takada, Jun-ichi, Tokyo Institute of Technology, Japan (104)*

**Case studies on GIS Application on sustainable Development and cultural Heritage Preservation in World Heritage Sites in Asia**

GIS has become a popular technology as a tool to help decision making in sustainable development heritage preservation. The analysis of case studies of heritage sites in Asia will focus on factors leading to a successful implementation of GIS.

*ZHU, Longbin; Sippel, Gerd, GTZ (German Technical Cooperation), Beijing, China (105)*

**Sustainable Urban Conservation and Community Participation**

A sustainable urban conservation concept linking heritage preservation to living condition improvement was introduced in Yangzhou Old City. A strategy in process-oriented way was developed and tested in a pilot block with community participation.

# INTRODUCTORY REPORT WORKSHOP 6:
# Patterns between Sprawling and Compact City Forms: Urban densities, housing and community formation, and social implications

**Rapporteur: Ineke Hulshof**
Hulshof Architecten, Delft, Netherlands

**Chair: Mairura Omwenga**
University of Nairobi, Nairobi, Kenya

In the papers presented here we find a wide range of projects, researches and approaches. All of them have the goal to establish a sustainable environment.

One mayor question arises in this workshop:
In urbanised countries like in the Western ones the threat of urban sprawl is different from the threat in urbanising countries like China. In urbanising countries the development of sprawl is mostly considered to be illegal. The sprawl developments in Europe, The Netherlands and in the USA were mostly very legal and even planned. The notion of the effects of sprawl on the environment and on sustainability can be very helpful for developing countries.

Eight papers are presented by Chinese authors and concern the Chinese development of the urban environment. The Chinese task is huge; urbanisation will increase by 25% from now until 2035, from 45% now to 70%.
Compared with Europe (75%) and the USA (80%) this is still a result not expected to be the final one, but it shows the enormous task the Chinese have to overcome.
It is very impressive to see the sustainable notion in these presentations, and we look forward to a very interesting discussion on the proposals and developments presented.
The approaches in the Middle East differ and culturally show a completely other world. For instance the solution to sacrifice personal freedom in Iran is the opposite of the current Western solution where people are made responsible for solving the lack of space themselves and the introduction of new forms of development with the inhabitants in the bad areas of the big cities.

The papers elaborated by a team of Chinese and other authors show an open communication on the subject and the two presentations on the city relation between Wuhan and Arnhem show a balance in the exchange of knowledge and experiences. The difference in scale is significant but also of great interest to European city development.

## Topics
We can find five levels or themes in this workshop and try to cover the most interesting items here.

### *Planning*
The cases of Delhi and Riga show a lot of space where this is not expected in the city. Searching the gaps is a solution.

Divya Chopra explores a bottom-up approach to discover the gaps in Delhi.

*Planning into the air*
High rises are considered to solve the density problem in Tel Aviv. This is a confronting paper as they are considered very dangerous in the development of Guadalajara, Mexico.
We can also expect this to be an item in the Chinese development. In one paper on Eco-cities, a density of 600 persons/ha is mentioned. It can only exist in the sky, can't it?

*Planning in the sea*
In the Seychelles a new island is created to avoid urban sprawl. This can be seen as a possible solution, but on the other hand it influences the local ecological infrastructure.

*Ecological Infrastructure*
The papers on Ecological Infrastructure - EI - are all Chinese since this subject is unavoidable considering the urgent urban expansion which is going on in China. However, the theme itself is no guarantee for sustainability and is presented in very different ways here. The notion how to find the leading structure for urbanisation is to be discussed.

***Social***
Looking for local initiatives as a starting point is the leading impulse for the redevelopment in Rotterdam. In Belgium two cases are compared in this aspect, Liege and Ghent, where we find urban development projects to be new instruments in urban regeneration.
In Portugal a debate on the closed condominiums is going on as this is considered a new phenomenon. However, in the USA and Europe we can find a lot of so-called gated communities where the same questions arise. It is good to continue this debate in China where the commune, the big family houses, the Hutongs in Beijing and the Li Longs in Wuhan and Shanghai have the same structure. Here these are felt to be very secure, an aspect to be considered to become more important in a densifying urban environment.

***Fringe development***
In several presentations the sprawl effect of the fringes is studied in China. It is noted that this is mostly illegal and not planned. The building of cheap houses also for rent seems to be possible but the scale and density are completely different compared to i.e. European standards.

***Government***
Most obvious is the search for tools to guide the building densification process where most land in the city is privately owned. Also important is to consider the role and responsibility of the government on local and national scales.

***Economy***
Only two papers consider new economic features to be important in a different approach of renewal. In Wuhan the stimulation and development of creative industry is seen as a motor in redevelopment. This is related to the development of Arnhem where this is also present. In The Netherlands this creative scene is also more active. In cities like Rotterdam it is a motor in the development of backward areas.

***China***

China is on its way to ecological civilization. Growth in gaps is not sufficient as the task is to urbanise from 45% now to 70% in 2035. Iran has 65%, Europe 75%.
The Chinese approach in town planning shown by YU Kongjian is also useful in other regions worldwide.
The EI planning becomes leading but leads to the following questions:
Is sprawl maybe a solution in some EI situations? Or can a compact city survive in EI terms?
The paper of HE Yong gives a prohibited zone of 43.7% of the Beijing area, but the zone is spread as it is the suitable location zone.

**Questions and Considerations**

The impression is clear that one is trying to find the balance in ecological infrastructures, their future, the effect of urbanisation, the need for better and bigger houses etc.
The answer is not clear and we can try to put this question forward and connect it to the different cultures participating in the workshop.

Other themes are:
Location of poor and rich, economy is important for both. The gaps to be found are often caused by cleaning poor areas. Due to political power they can be empty for years. Cities like Los Angeles show a slow movement of the gap area depending on the economic development of the city. Poor people fill the gap area temporarily as it is cheap to live there and as it is near the economy they need.
In considering this gap as space for development the question whether to demolish or to re-use is an important one. It is important to consider the impact of cultural heritage in the redevelopment of former industrial areas. With the changing economy from an industrial to a creative one a lot of space will become vacant. In China there will be stages depending on local developments. This can differ a lot all over the country.

The last item of importance in this workshop is the importance of local initiatives and how to deal with them professionally.

## Short Outlines of Papers as provided by the authors (in alphabetical order)

*Aón, Laura; Alvarez, Andrea; Ravella, Olga; Moro, Silvina, Unidad de Investigación, IDE-HAB, FAU, UNLP, La Plata, Argentina (106)*[1]

**Environmental Potentialities of urbanized Soil in Stages of Densification of central Areas: the case of La Plata old city center**

The paper explores the relationship between trends of densification in central areas, the land-use regulations, and future alternative development patterns.

*Butragueno, Belen, B2BCONCEPT, Madrid, Spain (107)*

**New Networks for the old Paradise**

Networks is a proposal to unravel the studying of problematics that happen in the coastal environments of the so called 'paradise'.

[1] The numbers refer to the Presentation Schedule in the different sessions of the workshops

*Campbell, Maria; Mshumpela, Andile, University of the Free State, Bloemfontein, South Africa (108)*

**The Peoples Housing Process: a case of the Amathole District Municipality**

The Peoples Housing Process in the Amathole District Municipality failed due to incorrect implementation. Areas where beneficiaries can be close to economic opportunities should be identified adhering to the Spatial Development Framework.

*Chopra, Divya, School of Planning and Architecture, New Delhi, India (109)*

**Towards Compact Cities: "In-between" zones as resource. Case: Delhi**

Against the prevailing expansionist approach this paper discusses directions of urban restructuring as manifested in the Indian capital city of Delhi and explores a strategic developmental and planning approach within the 'compact city' framework.

*Galor, David, Galor Planning and Design Ltd, Tel-Aviv, Israel (110)*

**Urban Compacting without Sprawl: The Case of Ramat-Gan**

Ramat-gan is a city in the core of Tel-Aviv metropolitan area. Most of its 13.5 sq.km. are already developed. Demand for housing put pressure to approve residential towers. The new master plan approaches this issue, as well as other densities issues.

*González Romero, Daniel; Pérez Bourzac, Maria Teresa; Rivera Borrayo, Elizabeth, Universidad de Guadalajara, Guadalajara, Mexico (111)*

**When Destiny reaches us: Upwards Growth of a City in Conflict**

Disorderly urban growth has happened in the second largest Mexican city in the form of vertical residential and business buildings. As a response, it is necessary to rethink our urban planning approach.

*HE, Yong, Beijing Municipal Institute of City Planning & Design, Beijing, China (112)*

**Planning for Restrictions to Beijing's urban built-up Space**

A long-term study of Beijing's urban growth over several decades, as a basis for formulating a model for urban growth restraints according to ecological and other risk criteria.

*Huang, Huan; Smolders, Bert; Verweij, Jos, WPDI Wuhan, China; Arcadis, Arnhem, Netherlands; Municipality of Arnhem, Netherlands (113)*

**Cultural Heritage Conservation in historic Wuhan – urban renewal and the creative industry**

The following will be discussed:
New life for a unique urban heritage area in Central China; Masterplan and strategy for sustainable protection and development; Creative economy as key to the engine.

*Hulshof, Ineke, Hulshof Architecten, Delft, Netherlands (114)*

**Poetic Freedom**

The city of Rotterdam gave houses away for free. Not really for free but very affordable. A project was realized with a collective assignment which connects a wide individual freedom with powerful architecture in a very sustainable way.

*Jakaitis, Jonas, Ministry of Environment of the Republic of Lithuania, Vilnius, Lithuania (115)*

**Interaction of Architecture and Society: City individuality under changeable informal effect conditions**

The main task of public authorities is to find ways how, in the course of formation of urban architecture, to create assumptions for the public to become a new-type, active and co-operative civic society taking part in city development processes.

*Kublacovs, Andis, University of Latvia, Riga, Latvia (116)*
**Urban Regeneration and Strengthening of local Neighbourhoods – the way of Riga**
The study analyses the spatial development processes in the Baltic metropolis Riga. It examines the city's actual spatial development initiatives, e.g. the internal expansion, strengthening of the local neighbourhoods and urban regeneration.

*LI, Zhiming; WANG, Wei, South East University, Nanjing, China (117)*
**Illegal Construction on the urban Fringe as new Landscapes of urban Sprawl: the case of Nanjing, China**
The following will be discussed:
Illegal construction on the urban fringe in Nanjing as new landscapes of urban sprawl; The political economy and institutional analysis of illegal construction; The proposals for governance of illegal construction in Nanjing metropolis.

*LI, Dihua; LIU, Ke, Peking University, Beijing, China (118)*
**Ecological Infrastructure First: A case study of the urban new developing zone of Hefei City, Anhui Province**
The urban new developing zone takes the priority to integrate natural processes, ecosystem services, human activities and urban-rural relationships for a city without sprawl.

*MA, Hang, Harbin Institute Technology Shenzhen Graduate School, Shenzhen, China (119)*
**Villages in Shenzhen-typical economic Phenomena of rural Urbanization in China**
The foundations of a new perspective on the 'urban villages' which could overcome the antagonisms of mere continuation or demolition, by promoting a strategy of 'soft reconstruction'.

*Marchand, Koenraad, Vrije Universiteit Brussel (VUB), Kwaremont, Belgium (120)*
**Urban Autonomy and innovative Implementation of Regeneration Projects in disadvantaged Neighbourhoods**
Functionalist solutions do not solve problems of urban conviviality. In this paper we study how cities create attractive urban areas by using urban development projects as new instruments in a contemporary multi-level-governance framework.

*Santos Cruz, Sara; Pinho, Paulo, FEUP - University of Oporto, Porto, Portugal (121)*
**The Impact of closed Condominiums in the metropolitan Area of Oporto**
The paper studies the impact of private residential developments, (closed condominiums) in the urban form of the area of Greater Oporto, using an innovative methodology, and contributing to a better understanding of these new types of urban production.

*Vuksanovic, Zoran, Ministry of National Development, Victoria, Seychelles (122)*
**Ile Perseverance, new Town in Seychelles, innovative Way of avoiding urban Sprawl**
Urban sprawl is endangering Seychelles' most precious resource - its world famous pristine environment. An innovative planning solution is found in the creation of a new settlement on a new island reclaimed from the sea.

*WU, Zhiling; Verweij, Jos; Smolders, Bert, DVR, China; Municipality of Arnhem; Arcadis, Arnhem, Netherlands (123)*
**Framing urban Development: spatial strategies by sister-cities Wuhan, China and Arnhem, Netherlands**
This comparative analysis by the sister-cities Wuhan, China and Arnhem, Netherlands, describes the masterplan strategies of both cities to manage urban development and avoiding urban sprawl. A strong green-blue framework with a key role for 'metropolitan agriculture', tailor made for both cities, is a new effective concept for both masterplan strategies.

*YIP, Stanley C.Y., ARUP China, Hong Kong, China (124)*

**Planning for Eco-cities in China: Visions, Approaches and Challenges**

This paper discusses the approaches used, lessons learned and challenges faced in the recent planning of eco-cities in China. The issues of integrating eco-city planning into the existing statutory planning systems in China will be highlighted.

*YU, Kongjian; LIU, Hailong, Peking University, Beijing, China (125)*

**Ecological Infrastructure as a Tool for smart Growth: a reversed approach**

Ecological infrastructure (EI) are critical landscape patterns and are strategically planned to secure ecosystem services essential for a sustainable city. EI functions as an effective tool for smart growth in the context of rapid urbanization.

*ZHAI, Guofang; Suzuki, Takeshi, Nanjing University, Nanjing, China (126)*

**Evaluating public Preferences for Sustainability with a Choice Experiment Approach in Japan**

This paper applies a choice experiment approach to evaluate Japanese preferences for coastal sustainability. The findings suggest the directions for re-allocating social resources and the potential tradeoffs between the sub-goals.

## ABOUT ISOCARP

ISOCARP is a global association of experienced professional planners. It was founded in 1965 in a bid to bring together recognized and highly qualified planners in an international network. The ISOCARP network consists of both individual and institutional members of more than 70 countries (It has members from countries all over the world).
ISOCARP is a non-governmental organization recognized by the UN-ECE, UNCHS-Habitat and the Council of Europe and has a formal consultative status with UNESCO.

The objectives of ISOCARP include the improvement of planning practice through the creation of a global and active network of planners. ISOCARP encourages the exchange between planners, promotes the profession in all aspects, stimulates research, improves education and training, increases information and awareness on major planning issues.

City and Regional Planners act in spatial processes and are consultants to key decision-makers. Their task is to propose or support spatial interventions and plans on behalf of the society in general or specific actors. Planners combine knowledge, science, design and strategy and are used to work in joint ventures and multi-disciplinary teams.

The association's main event is the annual congress, which focuses on an international planning theme. The congress takes place in a different country every year, preferably on a different continent. ISOCARP also organizes smaller scale seminars and publishes reports and other professional documents. It is represented at major international planning events.

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