Quality of Space – Quality of Life Planning for Urban Needs of diverse timeframes

AESOP

In the organisation of the series of events, the second is always crucial. When the first event was successful, it could easily become one isolated good experience but it can also be the first in a row of many successful events … If the second event goes well, then there is already critical mass to create kind of tradition and good practice to continue in the future…
This rule also applies to European Urban Summer School, the summer workshop for young planners working together on urban issues, facing urban challenges and sharing international experience.

In 2010 UN-Habitat generously supported EUSS for young planning professionals hosted by Wrocław University of Technology (Poland) under the auspices of Association of European Schools of Planning (AESOP). Thanks to excellent cooperation with Krzysztof Mularczyk, Head of the UN-Habitat Warsaw Office we managed to bring together an outstanding group of international tutors, both from academia and practice sharing their knowledge and experience with young planners from all over the world. International Society of City and Regional Planners (ISOCARP) and European Urban Research Association (EURA) endorsed this event. I was acting as head of this first European Urban Summer School and I found this experience both enjoyable and valuable. In the same year I was elected as new Secretary General of the Association of European Schools of Planning and my intention was to continue the summer schools inviting universities being AESOP members to host this event and share the local flavour of planning with young professionals. I believed that I might leave well developed new AESOP activity when my terms of office would be completed in four years time. This is why I was extremely keen to find good location for the second edition of the EUSS and colleagues who would challenge young planners with a problem to be studied. However, time was extremely tight to get the second edition of the summer school prepared…

Meanwhile, the meeting of planning organisations took place in January 2011 in Brussels. João M. P. Teixeira, President of European Council of Spatial Planners (ECTP-CEU), since 2009 was working towards closer cooperation of planning organisations across Europe and was discussing with others, including AESOP, IFHP and ISOCARP, possible ways of collaboration. We started to develop the idea of the Decade of Planning, which would be an „ umbrella framework " for this cooperation. This would have two major advantages:

-an opportunity for planners, urban professionals and politicians to exploit this opportunity and discuss the issues involved in this re-orientation / re-invention directed at fundamental new ways of improving the liveability and quality of life in the cities of tomorrow;

-to ensure that there is a broader synchronisation of activities, products and ideas emanating from those organisations celebrating their centenaries and jubilees in this decade. This would mean a cross-fertilization of ideas, and an accumulation of publicity and attention rather than a competition for it.

In September 2011 during the ECTP 9th Biennial of Towns & Town Planners in Europe in Genova the project was finally structured and presented to the wide public. The very first joint projects of the Decade of Planning was the European Urban Summer School for young planning professionals (AESOP, ECTP-CEU, IFHP, ISOCARP).

In April 2011 João Teixeira invited University Lusófona de Humanidades e Technologieas in Lisbon to host the second edition of the European Urban Summer School. In spite of very tight timetable Rector of the University, prof. Mário Moutinho, responded positively, and prof. Diogo Mateus agreed to act as head of the EUSS 2011. AESOP Council of Representatives accepted the event to be held in Lisbon in September 2011. Partner planning organisations, ISOCARP, EURA and IFHP, endorsed it.

I visited Lisbon in June and together with Mário Moutinho and Diogo Mateus we decided that the topic of the EUSS will be „Quality of Space - Quality of Life". Diogo proposed excellent cases and local speakers. I was impressed by hospitality and fresh ideas of Portuguese colleagues. I enjoyed very much celebrations of the Festival of Sardines after long working day. Everything was moving the right direction...

This time however we were working on „zero budget". This is why collaboration with partner organisations helping us with the tutors was really important. An excellent team, lead by Diogo Mateus, including João Teixeira, Fernando Nunes da Silva, Fernando Varanda, Rogério Gomes, Zoran Roca, Artur da Rosa Pires, Paulo Silva, David Prosperi, Teresa Franchini, Judith Ryser, Pietro Elisei, Stefan Netsch, Niels Kropman, Derek Martin, Branko Cavric, Júlia Lourenço, Alexandra Tisma, Kate Terzano and last but not least Mário Moutinho was working with the group of young planners.

Thanks to generous support of the University Lusófona de Humanidades e Technologieas in Lisbon and personal hard work of Diogo Mateus and Mário Moutinho we were able to produce this book documenting European Urban Summer School 2011. This would not be however possible without Judith Ryser helping with the editorial work. Her outstanding skills, patience and hard work made it possible to deliver good documentary of the lectures and projects. I would like to thank all young participants, who hopefully widened their knowledge and enjoyed their time in Lisbon.

I owe a word of gratitude to João Teixeira, whose help made actually continuation of the European Urban Summer School possible.

When the Universidade Lusófona de Humanidades e Tecnologias was established in 1990, Urban Planning was considered a priority field and was included in the four strategic scientific areas of the educational plans for what would be the largest private, non-profit university in Portugal.

The idea was to set up a department that would provide teaching at Bachelor's, Master's and Doctorate level in conjunction with scientific research and practice on the ground.

Today, we continue to be the only university in the country to offer the three study cycles in the specific discipline of Urban Planning, now organised according to the Bologna Process.

It is true that we have not yet convinced other Portuguese universities to recognize Urban Planning as a complete subject area in its own right, so that more degree courses in Urban Planning can be created.

This would lead to a recognition of the place of Urban Planning in our society, giving it a more consistent role in spatial planning in general and in resolving contemporary problems, many of which are a result of the lack of qualified professionals at different levels of planning decision-making.

The AESOP European Urban Summer School (EUSS 2011) on the theme 'Quality of Space - Quality of Life Planning for Urban Needs of diverse time frames' was extremely significant not only in our department, but as part of the necessary and sustained effort to promote the teaching of Urban Planning and in reflecting on such important issues.

I would like express our gratitude to AESOP for sharing this initiative with us, and also thank all departmental and external teaching staff for their work in making EUSS 2011 such a success.

Mário Moutinho
Rector of Lusofona University

The urban quality is a challenge and an actual issue for urbanists but also for researchers. One of urbanism aims is giving quality to the space and, with that or by it, the opportunity to people achieve quality of life. But work about quality is not a simple task because the sense of quality varies in time and space, by culture, by educational and economic backgrounds etc…. The advantage to could bring, in the same space, young professionals and researchers from different countries of Europe to debate the sense of urban quality meant we to take the challenge to coordinate the European Urban Summer Scholl of 2011.

The preparation of EUSS'11 started late in time and the course only occur on last week of September, with all problems that it could bring because coincides with the beginning of master and PhD courses where young professionals were enrolled had begun. But beside a few inscriptions (about 20) we take the risk and organize the EUSS'11 with collaboration of two municipalities — Odivelas and Sintra — that provide us the "ground" and all needed information to work the discussed theories and give solutions to improve the space quality and with it the opportunity of life quality for users.

The need of a full work days — from morning to night — do not demoralize the important and pleasant fun/party part, an important component that make us more motivated for work. The weather bring us sunny and hot days in the autumn (more than 30º C). This conjugated things brought us a work environment conducive to a good final results in the way to use the space improvement as a positive factor to give users quality of life opportunity.

The results of students work could be sawed on this publication, finally done, after 4 years. They achieved some important inputs, not only for local authorities, that could use the ideas as to develop areas, but also to urbanists that all over Europe experience works that could have similitude with the problems exposed in this EUSS.

As head of school I assume that the proposed objectives were achieved, rather, were exceeded and the most important, young professionals, the future of European Urbanism , enjoy the advantage of interrelationship , changing knowledge and take advantage of the opportunity to change opinions with teachers and researchers from different Schools about the quality of life in a qualified urban space.

Diogo Mateus
Head of EUSS 2011

"If we open a quarrel between past and present, we shall find that we have lost the future"
Winston Churchill, 1874 - 1965

1. Societies at turning point

Children born today may live until 2100. Cities must be prepared for them. How should that be done? And how new paradigms and new basis of city life should be combined with the struggle to overcome current crisis?

Our solidarity with new generations obliges us to change. Changes should include new political approaches, new technologies, new concepts and new paradigms. Energy, agriculture, transportation, green space, regional development, urban design and housing, will all need to change. We are now living an ecological overshoot, consuming more resources than the planet can replace, dredging down the stock of natural resources. Assuming present trends, the World in 2030 will have 14% more population and will need 50% more food, 45% more energy and 30% more water.

It's no longer bearable the unquestionable fact that "we are living as if we have an extra planet at our disposal. We are using 50% more resources than Earth can provide. Unless we change course that number will grow very fast – by 2030, even two planets will not be enough"[1].

Society is at a turning point, the transition from the end of the Industrial Age to the New Age. The progression was from Agropolis to Petropolis. Now the transition is from Petropolis to Ecopolis. During Agropolis and Petropolis the rhythm of innovation allowed long term experimentation. Now innovation shall be tested during a few times.

"Business as usual" presents several global risks that can severely threaten human society.

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[1] http://www.worldwildlife.org/pages/living-planet-report-2014

2. Cities population and demography

Spatial Planning embraces valences in different areas, through social sciences, dealing with sociologic and demographic different behaviours of in the territory. By observing 200 years period of migration from rural to urban areas, unparalleled world population growth, present and future, can be concluded. Today's reality of human settlements is urban. In 2007, 50% of the population lived in urban areas. In 2050, 66% is estimated (figure 01).
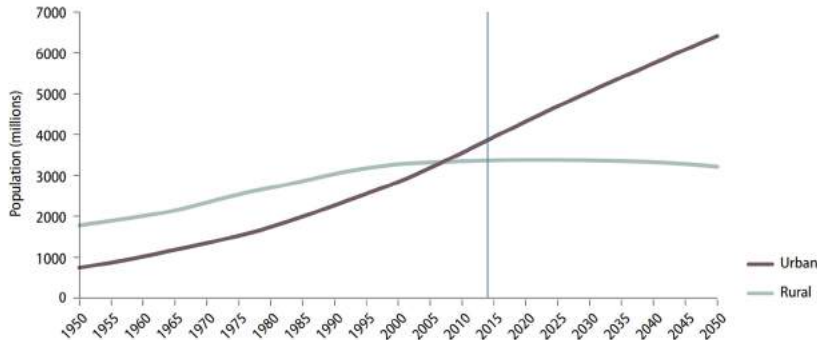
Figure 01: Urban and Rural population (source UN 2014)

It took 300 milion years to reach the first billion, 130 to add second billion, 30 years to add third billion, 15 years to add fourth billion, and now each billion come every 12 years period, including for future trend (figure 02). Due to globalization of economy, new complex agglomerations network were created. United Nations expects the world to have in 2030 even higher concentration of population in mega cities, big cities and medium-sized cities, with unbalanced spatial distribution (figures 03 and 04).

Figure 02: World Population in increments of 1 billion (source UN 2014)

The number of people living in cities in each country of the World in 2010, together with the percentage of the population in countries with large urban populations.
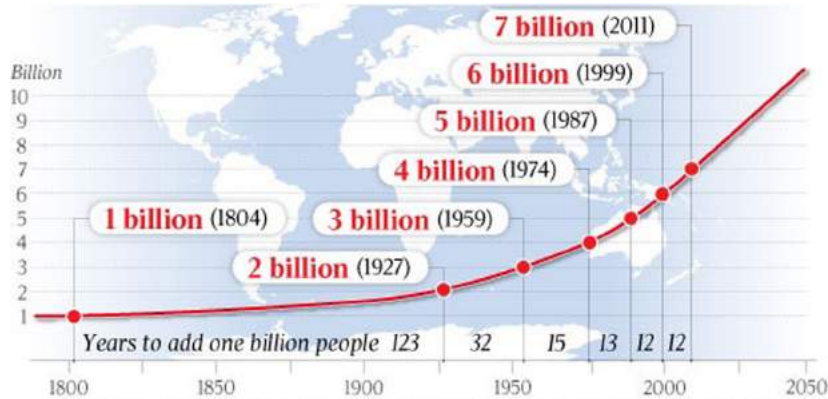
Figure 03: Global urban population growth in 2010 (source Business Insider)
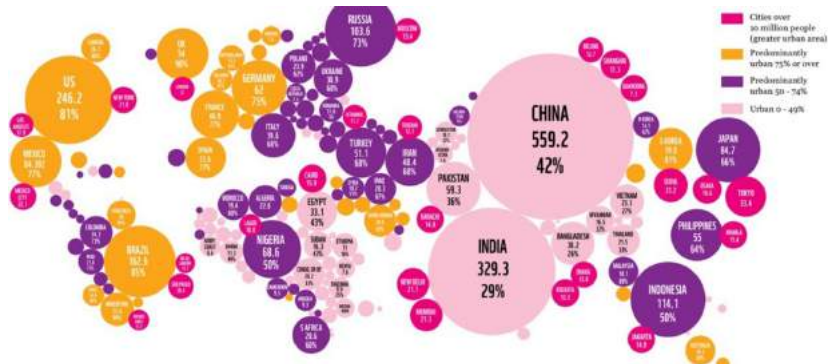
Figure 04: Small Cities Population Growth By 2050 (source UN)
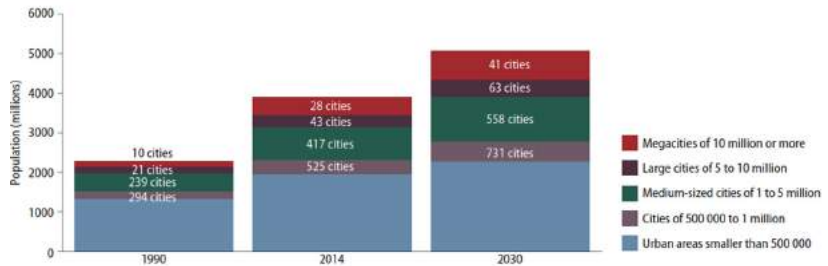
Cities with more than 10 million people, classified as megacities, strongly challenge urban sustainability goals. The growth of population, their aging patterns and migration challenges Cities and Regions all over the world. Solutions become urgent (figure 05).

"Observe our cities, is to see our future. But based on what we have seen so far, that future does not look promising", statement from Ismail Serageldin, Vice President of the World Bank.

Growths and Declines of Working-Age Populations (Ages 20-59) Relative to 2010

| ■ Below -10% | ■ -10% to 0% | ■ 0% to 10% | ■ 10% to 30% | ■ 30% to 60% | ■ Greater than 60% |
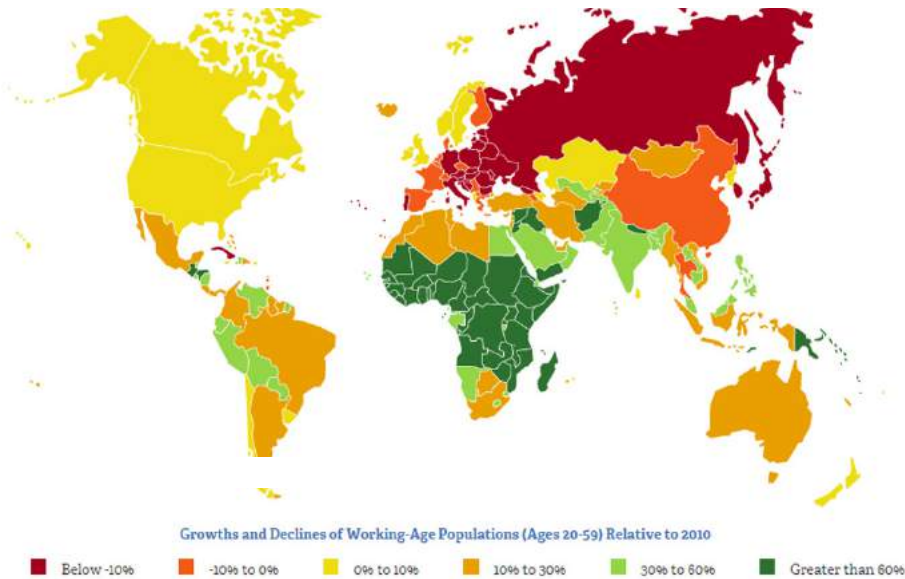
Figure 05: Growths of working-age populations (ages 20-59) relative to 2010 (source UN)

3. Cities growth and evolution

Through last 200 years, several breakthroughs at society level supported growth and ensure development for modern societies and their cities. *Both Social Changes and Technology Evolution* allowed progress with high concentration of people and activities in cities.

SOCIAL CHANGES WERE SHAPING CITIES

(e.g.) Increasing life expectancy; family units shrunk because of birth rate decline; one-person households increased; working hours are diminishing and more flexible; number of hours devoted to culture, sports and leisure are increasing; mobility of work places obliges to a flexible housing market; number and size of travels are increasing; new lifestyle choices.

TECHNOLOGY EVOLUTION TRANSFORMED CITIES

(e.g.) Steam engine, sewage collection and disposal systems, radio, rail road, metro underground, internal combustion engine, automobile, airplane, jet engine, steel, elevators and skyscrapers, motorways, new glasses, television, real estate financing, solar cells, microchip, high-speed trains, space flight, personal computer, credit card, mobile personal phone, world wide web, containers ships, shopping centres, light mobility systems, recycling (RRR) systems, optic communication cable.

In the past popularization of new technologies was a long process. Now, due to globalized information networks, production structures and international trade, popularization of new technologies is extremely fast. Planning is more uncertain.

4. Main drivers of urban change

Nowadays, there are five main drivers of changes in our cities and towns that are leading cities' future discussion.

MAIN DRIVERS

(1) GLOBAL AND LOCAL DEMOGRAPHY, based on migrations, population evolution and composition; (2) TECHNICAL INNOVATION, based on information technology, communications grids, big data, biological, biochemical, genetic and materials science technologies, robots, thinking machines; (3) ECOLOGY THREAT, based on the relationship between humans and the Earth's ecological system, mainly atmosphere and climate balance, energy matrix, consumption, natural resources and biodiversity; (4) SOCIAL EVOLUTION, based on changes of lifestyles, family structure and relations, working conditions, mobility, housing, leisure, culture and education patterns; (5) ECONOMIC AND POLITICAL CHANGES based on new balances, interconnected holistic global/local economy, different relationship between capital, labour, markets and governments and new forms of democracy.

It will be a revolutionary change based on the speed of transformations and on interrelationships almost unlimited between them, like never happened during human history. Again, uncertainty in these circumstances becomes bigger. Spatial planning is classically focused on people´s life, upgraded in the last decades by including future generations. The challenge might be regaining and updating Spatial Planning mission and their planner's role.

5. Cities and planning evolution

Since ever, societies were settled on cities. Such outstanding invention during history had moments of rethinking around urban problems and threats. Planners argued models and theories, leading or anticipating cities future and people's expectations.

Facing the need to plan and organize new cities of the Roman Empire, with "*De Architectura libri decem*" (Ten books of Architecture), Vitruvius (70bC/15bC) guided cities design for its network expansion around the Mediterranean. These solutions took years to construct, to test and to adapt. Nowadays this time was dramatically reduced, and we have to deal with more variables.

Facing hinterland consumption, with "*Cities in Evolution*" in 1915, Sir Patrick Geddes (1854 – 1932) introduced the concept of "region" into planning, coined the term "conurbation", and established *survey* before *planning*. Later, modernism applied: survey, analysis and plan[2].

Facing industrial impact on health and quality urban areas, with *"garden cities of tomorrow"* in 1898, Ebenezer Howard founded the Garden Cities Movement. Proposed new suburban towns, of limited size, planned in advanced, with benefits of both town and country. The proposal was that Garden Cities would constitute a network of towns surrounded by agriculture and nature.

Facing cities' growth, with *"masterplan for Broadacre City"* in 1934, Frank Lloyd Wright proposed dispersed housing, with highways built crossing agrarian fields, high-rise office buildings, and residential quarter of the ratio of one acre per residence. It influence the growing suburbs sprawl in American cities.

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[2] Environmental impact assessment was introduced in the 1960's. Sustainability appointed new methodologies. In the near future new ones will appeared based on the main planning subjects: Spatial and sectorial holistic integration, planning and ecosystems, planning and community involvement and empowerment, appropriated solutions (applying global principles to local solutions) and revitalizing urban tradition. Global Impact Assessment will be a component;

Nowadays, this model is unsustainable due to low density sprawl and car use dependence, responsible for high commuting costs.

Facing cities' growth and profit from skyscraper's technologies, modernism movement appear, first with a new vision for "Urbanism" in 1928, and later (after CIAM[3]) with *"The Radiant City"* in 1935, Le Corbusier introduced zoning for mono-functional use. Initially this model aimed better living conditions for the residents of crowded cities, but later influences major European cities under World War II reconstruction or urban expansion. It also aimed to answer to systemic and functional demand, to solve inadequacy of existing urban infrastructure to a new emerging urbanization reality. Due to functional segregation patterns, leading to systemic and social pathologies such as congested networks and absence of liveable and vibrant public spaces, this model is strongly contested since the sixties.

Facing London reconstruction requirement due to severe bombing of World War II, with the County of London Plan (1943; co-authored by John Henry Forshaw) and the Greater London Plan (1944), Sir Leslie Patrick Abercrombie (1879-1957) tried to avoid a big concentration of population by resettling the population to news towns, self-sufficient communities connected by an improved network of roads and railroads. With a new visionary planning concept for new towns, he influences "new towns act" in 1946 and the creation of new towns around the world.

Facing many US city neighbourhoods decline, opposing modernist planning era, with *"the life and death of large cities"* in 1962, Jane Jacobs argue another urban planning theory advocating *"four generators of diversity"* that *"create effective economic pools of use"*, changing the way of thinking in planning for future generations of planners. Also, with *"a city*

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[3] Congrès International d'Architecture Moderne, translated: International Congress of Modern Architecture;

is not a tree" in 1965, Christopher Alexander criticizes the tree diagram, where each part interacts with the whole through a hierarchical and pyramidal relationship, proposing alternatively the *"open structure"* model named *"natural"* city, settled over time and structured as a *"semi-lattice"*.

Facing the need to *"replace the polluted, bulldozed, machine-dominated, dehumanized, explosion-threatened world that is even now disintegrating and disappearing before our eyes"*[4], with *"design with nature"* in 1969, Ian L. McHarg pioneering the concept of ecological planning, showing how to design and build better structures in a healthier relationship between the built environment and nature.

Facing the planet limits, a theoretical revolution was made by introducing sustainability concept, greatly associated with the publication of *"the limits to growth"* in 1972 by Donella and Dennis Meadows, launching the debate on limits to support human economic expansion. After, the Report from UN-WCED, known as *"our common future"*, in 1987 Gro Harlem Brundtland, targets multilateralism and interdependence of nations in the search for a sustainable development path. Institutional global recognition comes in 1992 at Earth Summit (UN Conference on Environment and Development), on the Rio Declaration on Environment and Development *"that recognizes the integral and interdependent nature of the Earth, setting of principle and responsibilities to guide future development and safeguard the common environment"*. The document became known as Rio Declaration.

More recently, sustainable strategies were proposed for *"cities of tomorrow "* in 1998 by Peter Hall, along with *"cities for a Small Planet "* in 2000 by Richard Rogers. Institutional documents followed such as *Charter of Leipzig* (2007), or *Declaration of Toledo* (2010), although this last one is more focused on cities regeneration.

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[4] Lewis Mumford ecstatically put it in his Introduction to the 1969 edition;

Growing urban global problem and financial crisis led to the emergence of a variety of concepts, incorporating sustainability, adjusted to changing realities, namely: compact cities, carbon free cities, self-sustainable cities, integrated resilient cities, efficient cities, and analytical cities or smart cities. This last concept integrates tools possible due to new technologies.

Four authors that refresh us with new theoretical frameworks in terms of cities' future: François Ascher recalls the start of the third era of hyper-modernism based on networks communication and the end of urbanization era; Peter Hall recovers the importance of local regeneration projects and actions in favour of best cities and better quality of urban life; Andreas Faludi suggest new future for planning and the role of states and individuals in building a policy agenda, contribute to the European Spatial Planning main documents; and finally Susan Fainstein retrieving the utopian concept of the *fair city* of Plato, and incorporating on today's cities challenge fairness, in opposition to inequality and exclusion

6. Urban planning main issues

The current crisis can be an opportunity to make the necessary changes. These changes will challenge Spatial Planning.

How to think the future? As the Industrial Age produced new urban models, theories, methodologies and practices, other models will be produced during the coming Age. How to create them? How to create better quality of life? How to deal with urban transformation recreating towns and cities with humanity, to the citizens, happiness and solidarity as they go about their daily urban life? How to deal with urban transformation? How to solve the relationship between personal wishes and collective objectives? How to integrate sectorial focus in a holistic way? ...or how to

achieve integration between several scales approaches?

To look for new methodologies is necessary, namely: to analyse why the usual solutions are not enough; to solve the new problems, such as global warming, lack of biodiversity, healthy urban conditions, and alter the energy matrix; to structure the doubts so that ignorance can be turned in doubts; to consider the history of planning, to rethink the traditional solutions and to note how, when and why, they are failing or not; to deal with uncertainty; to consider that global solutions shall be adept to local conditions, that is appropriated solution; to be sure that law doesn't solve all problems.

Therefore, that will be the new role of spatial planning?

Spatial planning, in the past, in a much resumed way, assumed as: monumentalist when it was important to give a good image to the centre of important cities; *hygienist* when public wealth was very important in the relation with urbanism; *expanding housing* when it was very important to promote better housing conditions; *modernism* with the idea of disconnection between cars traffic and pedestrian systems, opening large freeways for cars, and the creation of new materials, such as steal and quick elevators, allow the construction of higher buildings; *regulatory*, when it was important to regulate the planning, the design and the construction; *functionalism*, when urban function were the focus; and *strategic*, when the operational proposals required a special focus in the most important subjects. Today, neither of those approaches can be brought as best solution, even if all of them are important knowledge to create solutions that tackle problems locally. Still *"more of the same is not enough"*.

Now, Spatial Planning should consider stepping further on main issues.

URBAN PLANNING MAIN ISSUES

Eco-urbanism; Climate change; Biodiversity; Participating Democracy; Cohesion, economic, social and territorial, the three basis of Lisbon Treaty; The values of Spatial Planning.

Spatial Planning should recover its great civilizing role to integrate territorial, technological, social, economic, and environmental policies, visions, strategies, targets, programmes, plans and actions. Spatial planners have to go further than study actual situation, and aim to comprehend, and perhaps control tendencies for future scenarios, in order to ensure and pursue a new vision of cities and regions.

7. Spatial Plannig Agenda

A transition of ages is always a long and difficult period, in which it is necessary to overcome major problems, solving the short term ones in the scope of the long term transition. The way to an Ecological civilization on a healthy planet obliges us to seek new solutions. This unprecedented moment is an opportunity to rethink policies, institutions, objectives, methodologies, models, to renew focus and every day practices.

During the last century, philosophy, sciences, arts, technology, policies, economy, society, citizens' rights, family structure and working conditions changed deeply. Changes are required also in planning: new theories, new objectives, new movements and new methodologies. New paradigms follow these changes. Today's Spatial Planning agenda at European Level acknowledge this concern, and lays on two major enlightened documents.

With institutional origin, *"in 2013 Barcelona General Assembly of ECTP-CEU approved in April 2013 - The Charter of European Planning*[5]*."*

THE CHARTER OF EUROPEAN PLANNING 2013

The Vision for Cities and Regions – Territories of Europe in the 21st Century: (1) Integrated & connected cities and regions (territories); (2) Social Cohesion & Connectivity (3) Economic integration &connectivity (4) Environmental Connectivity (5) Spatial integration: synthesis

With experts and researchers origin, *"during the 10th Biennial of European Towns and Town Planners, keynote speakers and participants from several countries with different experiences and expertise, concluded that in the near future, spatial planning should consider 10 great challenges, 10 principles and 10 permanent practices"*.

THE CASCAIS DECLARATION 2013

10 GREAT CHALLENGES: defending the relevance of territory, avoiding climate change, improving biodiversity and preventing losses, ensuring sustainable energy management

ensuring food security supply, avoiding social tensions and promoting social inclusion of population, reducing the ecological footprint, promoting integrated and strategic urban regeneration, upgrade planning through networking systems, and valuing the public space, towards friendly cities;

10 PERMANENT PRACTICES: applying metaterritorial and metasectorial governance, making continuous and integrated approaches, applying sustainability in action, making balanced decisions, strengthening the role of EU (spatial policy & planning), actively looking for community involvement and empowerment, dealing with uncertainty, shortening the distance between theory and practice, applying multi-term approaches, and think globally, compromise regionally, act locally.

Our culture is changing. We will look for better and not for more, for sustainable and durable and not for consumable, for a more intelligent economic model incorporating scientific knowledge, technology, quality, cohesion, environment, cultural values, social values as well as territorial values, which are, planning values.

Spatial Planning is a key component for the New Age.

8. Technology and smart cities

Planning on uncertain future always required more advanced instruments. Smart cities are a vast field of innovations possibilities to plan and manage cities. Still such a global name where *"it fits all about technology"* needs some thinking, since it's one of cities evolutionary major improvements. As detailed in *HABITAT III ISSUE PAPERS, 21 – SMART CITIES, New York, 31 May 2015* (not edited version 2.0), in preparation for Habitat III Quito October 2016, *"many definitions of "smart city" exist, and "smart" approaches have been understood differently by different people and sectors"*. Still, common understanding can be establish on SMART, based on urban system performance, on technology use, even if only embrace one of urban thematic (e.g. mobility, namely smart mobility), introducing innovative infraestruture solutions and including process dimension (e.g. to engage citizens, towards smart participation).

We are crossing planetary capacities mainly in climate change, biodiversity, carbon cycle. In a few years is expected to reach more domains. If we don't behave according to our natural limits we will not ensure safe existence. We shall apply smart technologies in a smart and strategic way to have smart solutions for people and living conditions (in the economy, in the mobility and in the environment with smart governance), that is Smart Planning. Smart planning is a full staged process with objectives,

strategies, and goals. Smart technologies are the tools of smart planning. Each territory will adopt the global principles and the local solutions according to their characteristics. This is the *appropriated solutions.*

The idea that technology can deliver for all cities standard solutions can lead to big errors. Smart cities shall adopt scientific method and shall be tested, after analysis, diagnosis, and impact studies. In most cases smart technologies are applied in a top down way. Smart technologies can also help using a bottom up way.

All cities are consuming and transforming flows of input . Also , are always producing flows of outputs . It is necessary to have updated statistics of cities ' metabolic flows to promote strategic ways of optimizing inputs and outputs , profiting from recycling and reusing . These strategies will bring new infrastructures and consuming patterns.

The metabolic approach is essential to understand and to act in cities and in the relationship between cities and hinterlands. Applying "material flow analysis" is a helping methodology integrating Spatial Planning and environment, towards circular economy and systems, recycling and maximising renewable, with minimum pollution and wastes. Therefore, new infrastructures will appear in the future.

It is important to transform current linear economy in a circular one. Cities and towns will develop in a different economy with the application of innovative technology.

Until today we are not creating growth without adversely affecting environment. From now we must change, maintaining growth, but with new technologies not affecting environment.

NEW INFRASTRUCTURES NEEDED

(e.g.) Local small scale renewable energy technologies can substitute centralized energy systems; smart grids and meters can benefit local communities; flood control, upgrading existing systems; clean public transport substituting existing ones; buildings can be adapted instead of being demolished and reconstructed; retrofitting of buildings to reduce energy demand; turning buildings into power plants to collect energy on the facades and roofs; avenues can be redesigned to pedestrians and bicycles, can have different uses during hours of the day; dry sewage systems can save water; fitting water capture and grey water recycling into homes to save 30% of water consumption; local sewage treatment can substitute central ones; water desalinization can save energy transporting fresh water from long way; solid waste in anaerobic digesters to provide energy and compost.

SOCIAL INNOVATION AND SOCIAL PATTERNS

The pattern of consumption can change, from the property of the car to the mobility as a service, from the actual products consumption to sustainable ones, from owned used to share based using websites, application and networks platform's, from traditional democratic representative models to innovative forms of governance closer to direct democracy.

The Big Disaster is that currently most of the solutions adopted are *"business as usual"*, non-sustainable and non-resilient, applied in developed countries in the past decades.

9. Information, participation and governance

According to the *Democracy Index - Economist Intelligence Unit* in 2014, 52 countries are considered democratically deficient regimes with authoritarianism standards, while only 24 countries are identified as stable democracies.

It is assumed democracy as a timeless condition where there is an evolutionary process, identifying several forms of democracy. In the present context of urban transformation and the emergence of new lifestyles served by a multitude of technological possibilities, the questions are:

a) Doesn't immobility tend to the decay of democracy?

b) Or will democracy continue its evolutionary process?

This question is in the public debate[6].

Today's, democracy tend to be threaten, due to: rising abstention rates; increasing schooling did not bring correspondence in strengthening civic / political; lack of education and training mechanism for political citizenship; birth of new model of *"network society"*, with massive and fast access to information; and also *"individualism society"*, redefining social relations.

Nevertheless, historical changes have been made towards democracy and individualism: historical, religious and cultural reasons lead to the liberalization of European societies; growth of literacy and education - important for citizenship in freedom; originality of Western individualism that is related to the notion of *"freedom and rights"* helped build democracies; and reinforcement of individualism in freedom leads to pluralism and free association.

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[6] Conferência Política e a Democracia, Maio de 2015: A história virtual do futuro da Democracia, por Micael Sousa;

However, *Public* and *media* attention have severe impact in urban life: despite the widespread withdrawal of political life, still exist causes that mobilize citizens; related to issues of proximity and impact on people's lives, eventually leading to punctual wraps, not continued in a regular and constant exercise of political citizenship.

The television uniqueness becomes statement: there is no democracy without access to information; television remains the main cultural instrument and Media influencing family life, although it might be concerned in creating consumers rather than educating citizens.

The *"Removal of citizens from political life empties the traditional power of forces in society" (Moises Naim)*. Emptying political citizenship leads to democracy degeneration.

What is the future of democracy?
"Politicians are slaves to public opinion. So the important thing is to help transform the dominant public opinion, rather than convince politicians."
Thomas Piketty - author of "The Capital in the XXI century"

The freedom and rights of the people are so directly related to the possibility to vote as the representative legitimacy mode. However, in the background there is a need to schedule the opportunity to intervene in the city's decision, placing in citizens the responsibility to participate. Like *Robert Putman* demonstrated in 1993, involving citizens (civic engagement) in urban life is an essential challenge that contributes to the city progress.

The solution may be to place civil society at the centre of life policy, a natural process of Democracies. Here, the information and communications technology have advantages: access to the massive amounts of information, in real time or asynchronously; reduction of distances and communication

times; possibility of interactive computerized communication, marketing potential and audio-visual media to bring new and attractive information; computerized accessible social networks; way to involve people and ability to test the direct and semi-direct democracy.

Yet, there are risks in the use of ICT, on the Internet, namely: control by new entities and internet independence loss; degradation of human relationships; excess informative direction (mono culture), isolating users of more general forums and society; and anonymity that takes the disclaimer attitudes.

This model based on ICT possibilities has already proven to benefit democracies in specific issues, such as deliberative referendum of city life matters or participatory budgets with collective projects.

It is also worth mentioning the support semi-direct and civic advisory from the combination of the new ICT, facilitating information sharing, the elements to be analysed in various initiatives and decision-making, discussion forums and online consultation or even online voting for particular issues (possibly non-binding character).
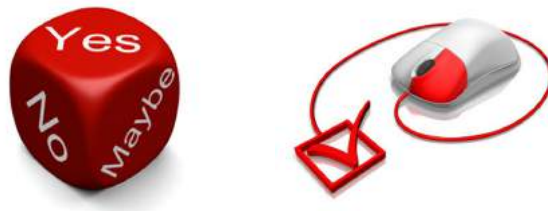
Figure 06: Participation in a click, approaching the decision to ease a game

Is trending to direct democracy an ideal for the future? In the nineteenth century, *Stuart Mill* argued that direct democracy would be ideal, but there practical limitations dictated the need of representative option.

Direct democracy has always been impossibility even in ancient Athens, where all citizens had presence in *Pnyx* but voting was by representation and appointment. The possibilities of new information and communication technologies can help achieve the principles of direct democracy through software tools built for this purpose. The future of democracy may involve the progressive tendency to mode and more direct options exercise of citizen participation.

It is possible to test urban experience of direct democracy supported by cyberdemocracy solutions, starting with the small scale, creating local pilot areas deliberation: neighbourhoods or areas of well-defined users: to favour connection with existing local authorities; creating permanent debate by computer social networking, support decisions on public interest cases, or simply in the discussion and sharing of information.

In this context, citizens will favour more ways to increase the representation and direct democracy, encouraging participation in urban life and the city's choices, itself a challenge of urbanism: tend to better governance. Technologies stimulate this new reality.

10. Conclusions

BETTER CITIES AND SUSTAINABLE FUTURE

In order to achieve common objective, better cities and sustainable future, it is important:
- Creating safe, healthy, liveable cities, now and in the future;
- Remaking the relationship between Humanity and Nature;
- Having consume patterns compatible with World ecosystem's;
- Promote Social Inclusion;
- Creating New Green business and opportunities;
- Promoting regenerative cities;
- Creating a better governance;
- Mobilizing technology for these and other principles.

SMART CITIES

As in the past, it is important that cities' planning and management adopts strategies with smart technologies and infrastructures that:
- Contribute to a sustainable and resilient relation with Nature;
- Create growth without affecting environment;
- Are flexible and can be change according to necessities;
- Adopt the scientific method and test the validity of application to each territory instead of adopting standard solutions;
- Include the application to social problems, such as poverty, discrimination and inequality;
- Contribute to a sustainable and resilient metabolism;
- Transform linear economy and flows in circular ones;

Today's urban planners embrace wider experience, building bridges between different areas of expertise, that due to smart cities possibilities, offer new conditions to better and faster decisions, based on update big data. Therefore, the future urban planner, is wide knowledge based, and open to new platforms of understanding and respect, since several themes have proven their importance on dealing with cities management, and only a holistic approach seems to bring some enlightenment on how should we prepare our cities, our societies for tomorrow's future. Therefore:

SPATIAL PLANNING

A new holistic science of Spatial Planning is arriving. Spatial Planning must:
- Regain their main concern: PEOPLE and NATURE;
- Re-centring on environment and ecology problems: ECO-URBANISM;
- Improve governance methods: more DIRECT DEMOCRACY;
- Revitalize urban quality of life: REGENERATIVE CITIES and TOWNS;
- Benefit from technology, towards cities tending to be SUSTAINABLE AND RESILIENT.

Bibliography

ACEMOGLU, Daron; ROBINSON, James. Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Crown Business, Reprint edition (2013). 544 pages. ISBN-10:0307719227.

ASCHER, François . L'âge des métapoles (French). Publisher Nouvelles éditions de l'Aube (2009). 392 pages. ISBN:9782815900171.

BOURDIN, Alain. L'urbanisme d'après crise (French Edition). Editions de l'Aube (2011). 160 pages. ISBN:9789722417068.

BRENNER, Neil et al. Cities for People, Not for Profit: Critical Urban Theory and the Right to the City. Publisher Routledge (2011). 296 pages. ISBN0415601789.

CASTELLS, Manuel. The Rise of the Network Society, The Information Age: Economy, Society and Culture Vol. I. Malden, MA; Oxford, UK: Blackwell. (2009) ISBN 978-0-631-22140-1.

DYE, Thomas R. . Understanding Public Policy (14º Edition). Publisher Longman. Boston (2012). 384 pages. ISBN0205238823.

FAINSTEIN, Susan. The Just City (1 edition). Publisher Cornell University Press (2011). 224 pages. ISBN9780801476907.

FALUDI, Andreas. Cohesion, Coherence, Cooperation: European Spatial Planning Coming of Age? (RTPI Library Series, 1 edition). Publisher Routledge (2010). 224 pages. ISBN041556266X.

FLORIDA, Richard. The Great Reset: How New Ways of Living and Working Drive Post-Crash Prosperity. Publisher HarperCollins, New York (2010). 240 pages. ISBN0062009052.

FREEMAN, Julie; QUIRKE, Sharna (2013). "Understanding E-Democracy - Government- Led Initiatives for Democratic Reform". JeDEM - eJournal of eDemocracy and Open Government. Disponível em: http://www.jedem.org/.

FUJITA, Kuniko. Cities and Crisis: New Critical Urban Theory (SAGE Studies in International Sociology). Publisher SAGE Publications Ltd (2014). 344 pages. ISBN1446275310.

GINSBORG, Paul (2008). "A Democracia que Não Há - O que fazer para proteger o bem político mais precioso dos nossos tempos". Editorial Teorema.

GIRARDET, Herbert. Creating Regenerative Cities 1st Edition, Publisher Routledge (2014). ISBN0415724465

GORE, Al. The Future: Six Drivers of Global Change. Publisher Random House Trade (2013). 592 pages. ISBN0812982894.

HAJER, Marten; DASSE, Ton. Smart about Cities: Visualising the Challenge for 21st Century Urbanism. Nai010/pbl publishers (2014). 183 pages. ISBN9789462081482.

HALL, Peter. Good Cities, Better Lives: How Europe discovered the lost art of Urbanism. Publisher Routledge (2013). 356 pages. ISBN0415840228.

JACOBS, Jane. The Death and Life of Great American Cities. Editor Modern Library, New York: 1993 [1st Edition, 1961]. 458 pages. ISBN0679600477.

MCHARG, Ian L. . Design with Nature. Editor Garden City, New York, Publisher Natural History Press (1969). 208 pages. ISBN 047111460X.

NATIONS, United. On HABITAT III Issue Papers, 21 – Smart Cities. Not edited, version 2.0, New York (2015).

PARR, Adrian; ZARETSKY, Michael. New Directions in Sustainable Design (1st Edition). Publisher: Routledge (2010). 280 pages. ISBN0415780373.

PUTNAM, Robert D., LEONARDI Robert, NONETTI Raffaella Y. Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press. (1993) ISBN 978-0691078892.

ROGERS, Richard. GUMUCHDJIAN, Philip . Cities For A Small Planet. Icon Editions. Publisher Basic Books (1998). 196 pages. ISBN0813335531.

SASSEN, Saskia. Expulsions: Brutality and Complexity in the Global Economy. Publisher Belknap Press (2014). 304 pages. ISBN0674599225.

SECCHI, Bernardo. Prima lezione di urbanistica (Italian Edition). Publisher Laterza (2007). 211 pages. ISBN8842060607.

SOUSA, Micael (2014). Reformar a democracia e o aprofundamento da cidadania. Concurso de ensaio: a sociedade civil e o exercício da cidadania. Concursos Montepio 2014

TARROW, Sidney. Making Social Science Work Across Space and Time: A Critical Reflection on Robert Putnam's Making Democracy Work. The American Political Science Review, Vol. 90, No. 2 (1996), pp. 389-397 Stable URL: http://www.jstor.org/stable/2082892.

TASKFORCE, Urban [Chaired by Lord Rogers of Riverside]. Towards an Urban Renaissance, Urban. Editor E & Fn SPON. Publisher Routledge (1999). 328 pages. ISBN185112165X.

TEIXEIRA, João et al. A Centenary of Spatial Planning in Europe. Editor ECTP European Council of Spatial Planners. Osman Publishing (2013). 249 pages. ISBN9994931482.

Images and figures

A challenge

In the context of the European summer school 2011 held in Lisbon at Universidade Lusófona most participants were requested to give a lecture related to the subject of urban quality. The challenge of producing an essay on the subject is also an opportunity to develop some further ideas from those discussed during the summer school. Although most of the theoretical framework is brought from Portugal, I take this opportunity to focus on practical issues concerning urban quality related to the Portuguese reality and particularly to the Lisbon Metropolitan Area. Despite the fact that urban quality can be approached from many different points of view, I will basically focus in this essay on planning tools, especially on how plans are designed in order to achieve urban quality. I will approach the matter of urban integration to develop the concept of urban quality versus plans.

Why does urban integration arise as my focus on urban quality? As I will try to demonstrate, it is because history shows us that urban quality has been related to much differentiated sets of values, and according to those values, city planning tried to focus on different solutions. Nevertheless, what brings together all this diversity is that at each moment of the history of cities urban quality has been part of the solution to problems of cities. Depending on what has been defined as urban quality through centuries, different skills and disciplines were called upon to play a central role in the effort to turn our cities into more enjoyable places.

My current research on Lisbon Metropolitan Area is related to urban integration, which implies a discussion of urban forms, urban structures as well as urban quality. The option to discuss these issues in a metropolitan context has two main reasons: firstly because metropolitan areas are richer in examples than other urban areas; secondly because it allows us to differentiate scales of approaches. Two decades of professional experience in this area became an opportunity to discuss the relation between plans

and planned territories and how the former contribute or could contribute to urban quality.

The meanings of urban quality

In order to approach the concept of urban quality, I propose to look at what urban quality meant throughout the history of cities. From places of trade and social interaction to fortresses, cities have served multiple and diverse interests. The fascinating part of it has to do with the ability to adapt and recycle spaces, materials, etc. At each key moment of history, cities have moved forward, with new actors inducing changes and adapting to new circumstances. Behind or sometimes ahead of these changes, the improvement of living conditions in cities were the fuel to promote increased quality. Urban quality has been an aim in the long history of cities. It concentrated the qualities that mankind tried to achieve, putting all its efforts into creating a better artificial world.

During this long urban history, perceptions of urban quality have changed. Cities represent the answers to different needs at different times in history (hydraulic systems, transportation infrastructures or defensive structures), but they also express spiritual values or signs of power. A wide spectrum of factors can contribute to urban quality. This has become apparent because presently we make an effort to identify urban quality as a characteristic of cities that covers the needs, values and aims of a large segment of society, hopefully all the members of our societies. This is a new fact. In the past, great works of engineering were only possible because a large amount of people, enslaved or low paid would put their energies into building. Today we expect technology to be able to ease the human effort, while many more individuals are enjoying the improvements, instead of working to achieve them. Before we identify what urban quality means, it is necessary to discuss what we can expect to achieve in terms of quality

for our cities. It is interesting to realise that the greater our means to improve our cities (these days less in financial terms, but as abundant technical skills), the less we ask ourselves what urban quality means. Even when we talk about planning paradigms we usually refer to broad concepts like sustainable development or governance. The discussion of urban quality remains absent, avoided, out of planning debates, or it focuses on details related for instance to urban design.

Both wide and specific, the concept of urban quality reflects more than the intrinsic quality of each city. At the same time it is not a reflection of broad concepts such as "quality of life". Can one find cities with high levels of quality in countries where, for instance, there is a shortage of civil rights or democratic rules? Urban quality might take different shapes not only through time, but also according to different geographic contexts within a contemporaneous world.

Urban quality as a volatile concept related to dominant paradigms

Urban quality had a different meaning at different moments of the history of cities. Going back on time one can find a change of paradigms associated with urban quality. Probably since the Renaissance urban quality started to be related to aesthetic values as a result of the combination of built structures. We can even refer to earlier examples, in the middle ages and in Roman and Greek classical periods. Nevertheless, at that time quality was more focused on the building artefact than on the combination of built and non-built elements at an urban scale. Public spaces emerge as the combination of buildings, circulation and open spaces. The composition of public space is commonly based on the same principles as stage scenarios. Recently rediscovered visual perspective was used as a tool to compose urban spaces in a tri-dimensional way. Abstract representations of urban spaces gave way to visual values such as symmetry, proportion or scale.

During centuries compositions of cities were subjugated to these values, even adapted to ways of living. Composition rules implied the establishment of hierarchical relations in which buildings gained an important role in the urban landscape. Since medieval times civil and religious buildings were a sign of wealth, prosperity and power of cities.

The industrial revolution changed the scale of cities and introduced new paradigms into urban quality. Before this was achieved, the industrial revolution contributed to huge concentrations of population with impacts on their quality of life, both good and bad. One of the most negative impacts was the worsening of living conditions of a large part of the urban population and with that, the propagation of diseases. If wages allowed considerable improvements of quality of life of parts of society, the fast demographic growth provoked the increase of death rates, due to epidemics, mainly in large cities. Medical sciences discovered ways to deal with these new phenomena. The transfer of this knowledge to the way new cities started to be built led to the emergence of new living standards and, implicitly, new paradigms of urban quality. Urban quality became a concept linked to health and sunny, ventilated spaces. They started to be developed within new healthier buildings and were later translated into the city as a whole mainly with the modern movement (after some earlier attempts of the garden city movement).

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One of these dimensions was related to the increasing speed of transportation and what possibilities that offered at a large scale. Another achievement was the ability to build high rise buildings with easy access to their upper levels. The height of buildings was not only a symbolic achievement anymore, it actually turned into spaces that could be used and enjoyed by human beings. The Modern Movement attributed so much importance to this achievement that it "declared" ground flours useless for living purposes. Civil engineering developments enabled cities to produce dedicated structures for the comfort of urban populations (I am writing this in the year that London celebrates the 150th anniversary of its first "tube"). The efficiency of facilities became a sign of urban quality at the turn from the XIX to the XX century.

Later, the perception of cities as part of global systems became a contribution to the discussion of new issues. At the turning point when urban population became dominant in our world, the discussion on how we can live within the availability of natural renewable resources turned into a crucial issue. Today, urban quality includes not only what we see and experience, but also what today's urbanization process means for

planet Earth in the future. It is true that Cities have been sustainable for centuries, but it is also true that we never lived like at present on the verge of not making them sustainable anymore. Energy production provides for different needs, including lighting systems which are part of the charm of cities. Energy is also spent in many other ways that make our cities not just more beautiful but also more practical, according to standards of living of the western world.

Complexity of life in cities promoted new patterns of living, but also new conflicts and tensions. Different and non dominant groups claim a variety of things from cities. Wealthy individuals prefer to live in car-free city centres and families with children prefer quiet suburbia. At least we were taught this in our university days. But are today's' challenges still relevant to catering for these preferences? Or are we dealing with realities in which patterns are not representative of dominant groups to whom we deliver plans?

Social sciences rose from the late XIX century and spread during the last hundred years. The way we solve problems among social groups and we ease conflicts between ethnic or racial factions of society have become our major tasks. Social sciences became closer to city's issues due to the fact that a considerable part of what we assume as urban quality has to do with social equity, institutional relations or governance and democracy. Inequality and injustice became terms related to (lack of) urban quality. Jordi Borja refers to most of these aspects in his book *La Ciudad Conquistada* from 2003.

Urban quality and visual qualities of cities

What about beauty? What has beauty, a word that has fallen out of fashion, to do with urban quality? According to Jorge Liernur (LIERNUR, 1997), the lack of beauty, or ugliness we experience in our cities (Liernur, as

an Argentinean architect, expresses it from the South American city's point of view) is the result of unfinished social processes. Looking to cities in Latin America and its recent history of independences, revolutions, democracies and dictatorships we can find some resemblances between the history of Brazil or Mexico and the sense of "unfinished" in cities like São Paulo or Ciudad de Mexico. That is what ugliness is all about: a good part of lack of urban quality of our cities.

In other parts of the Latin world, such as Europe's south, one can also find signs of this lack of urban quality. But is it a matter of ugly spaces, ugly buildings? Some southern European cities contain some of the main examples of good contemporaneous architecture. Portugal has two living architects who were awarded with Pritzker prizes and a long list of other well known architects worldwide. Several of their works are in Portuguese cities, giving shelter to differentiated uses and being the result of both public and private initiatives. Also main Portuguese cities attract works from foreign famous architects (Casa da Música, Porto, from Rem Koolhaas, Centro Cultural de Belém, Lisbon, from Vittorio Gregotti, are probably the most famous examples already finished; other interventions are expected from Richard Rogers and Renzo Piano, among others). But where are these buildings located and how do they contribute for urban quality? Away from this "star system" the Portuguese situation has changed enormously over the last three decades: from a small number of buildings signed by architects, the situation has almost changed into the opposite, a vast number of works signed by those who are better prepared for the job.

The way paradigms have changed has an impact in terms of what we call urban quality. It also helps us to remember that today it is almost impossible to have a single definition of urban quality. We can define urban quality as the combination or the sum of former experiences of living in cities, but also as the opportunity to identify new challenges.

The reaction to actual cities is not always positive and combines

evaluations made according to each one of the following criteria. The *New Urbanism* movement, and the work of Andrés Duany and Plater – Zyderck for instance, which tried to create a model integrating functional, social and ecological issues, lack the aesthetic side of urban quality. The aesthetics approach to urban quality is predominantly concentrated among the followers of Leon Krier's school of urbanism. Problems arise when one focuses on specific territories and tries to apply principles from different schools. "Difficult" territories hardly match the conditions in which models and principles can be applied.

A debate beyond dichotomies

Most of the territories that we deal with on a daily basis are often framed by the dichotomy of city and anti–city. In order to bridge gaps generated by this dichotomy thinking we propose: a revision of concepts; an analysis of plans; and finally a discussion on how we can update criteria used to design plans to increase urban integration. We know that most of the paradigms which have emerged from the past are still valid today. Post – modernity theories taught us that conceptualisation inherited from modernity needed to be moulded into different frames. The positive approach of the modern movement is no longer seen as an answer, but more as part of a problem that needs to be solved. Some dichotomies that simplified interpretation of territories too much need to be revised. The way we approached our territories in terms of city and ant–city is a clear example to illustrate on how modernity contributed to the perception of "emergent territories" as part of a problem instead of part of the solution (figure 1).

It is also necessary to underline the inclusion into the discussion of urban quality of other tools than those that enable us to transform urban territories in physical terms. Immaterial issues beyond urban grids and

Figure 1 - The case study of EUSS11 in Odivelas: dichotomies present in the lack of urban integration – legal / illegal city; central and peripheral conditions (SILVA, 2010)

MUNICIPALITY LIMITS
FREEWAY
NEW SUBWAY STATION
SHOPPING MALL
LEGAL SUBURB
ILLEGAL SUBURB
SUBURB'S REGENERATION
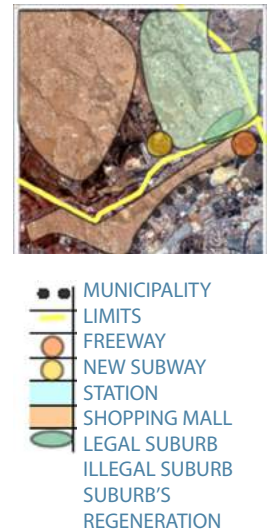
tissues, public and private spaces or the construction of infrastructures tend to have an underestimated role in the study of urban territories and the issue of quality.

A set of urban values to be revised

In his book *Zwischenstadt* first published in 1997 and translated into English in a 2003 edition entitled *Cities without cities* Thomas Sieverts identifies a set of concepts that, according to the author, deserves reflection to be able to intervene in the "transitory city". In his dense work, Sieverts discusses the actual definitions of six concepts. In his discussion of urban-ness, centrality, density, mixed use, periphery and ecology, Sieverts clarifies some theoretical borders, enhances some definitions that are not always evident and transforms the input of these concepts into territorial problems.

We can definitely perceive different assumptions of concepts when confronting diverse contributions. According to Sieverts, the concept of urban-ness is independent from the physical form of cities, despite the fact that many authors refer to it as a city ideal related to the XVIII century.

It is common to several approaches of those concepts that scale is a determinant factor. Concepts like density or mixed use are definitely linked to scale. The benefits of these values sometimes need to be linked to specific scales and sometimes we even have to combine different levels in order to use the full potential of certain definitions.

These concepts are approached in terms of their potential, not by themselves, but by what we can protect when we use them. The use of density can be a way to protect natural spaces - instead of simply affecting them; peripheries are not just complex spaces without a pre-conceived shape due to the fact that they are able to create surprising territories. They imply also the recognition of the advantages of some achievements

of modernism like the concept of centrality. The result of mass production implied specialisation, referring to geographical points as well as to the emergence of central qualities in peripheral spaces, could imply stimulus of mixed uses. But when referring to mixed uses Sieverts lets us know that often they are not well considered due the prevalence of zoning, real estate rules or simply intolerance.

It is true that despite of any reshaping of concepts, the physical result of men's intervention in urban territories is based on construction and above all, the construction of buildings. It is also true that most of these interventions are nowadays made within the frame of plans. But can we measure or evaluate urban quality through architectural quality or the quality of plans? Following our previous ideas, if concepts like urban-ness are linked to other than built features, and if buildings are only a small part of physical urban settings, then architecture is definitely an important element to take into consideration when we talk about urban quality, but it is only one among several others.

Presently plans tend to be more technocratic than in the past, with a growing number of (most of the time necessary) new data, new inputs and new disciplinary approaches. Getting more complex doesn't mean necessarily getting more efficient. Conversely, in a considerable number of cases plans are applied to territories with a non-preconceived shape. Nevertheless plans can present change for the future, but not necessarily implementation of such changes. Urban quality being the basis of many of these planned changes can still be lost within the increasing complexity of planning tools.

Urban quality has, at the physical and at the non–physical level, two important ingredients. The first one is the need to respond to daily needs. We tend to think that urban quality is mainly the result of big features, buildings, collective spaces or events. That refers to urban quality more related to competition at a world level than to the delivery of facilities at

the local level. Large scale investments can improve the quality of a city by attracting other investments, but this can happen without affecting other levels of quality, especially the ones that affect everyday life of most of us, the normal city users. This differentiation in terms of scale of interventions is usually related to specific agents. When trying to achieve the easiness of change at a small scale one depends almost unperceivably on levels of cooperation from different urban agents.

Evaluating quality based on plans

The case of the Lisbon Metropolitan Area shows us how paradigms based on traditional urban design values tend to be an impossible solution. Not because those values are not valid anymore but because evidence shows us that to make them operational is sometimes an impossible task. A simple analysis of Lisbon suburbia, combined or not with new centralities, based on different densities or preconceived models, is enough to understand that fragmented and unconsolidated public spaces need to be part of the solution instead of being considered the problem. These matters are crossing almost all territories of the metropolitan area of Lisbon.

What do we need to see beyond the analysis of physical structures? We can evaluate the functional interdependence of different elements that compose an urban space. Spatial development has been keen to create structural elements, most of the time mixed with the construction of accessibility. Infrastructures, thus these elements are more than structures. Structures, and that's what is lacking most in contemporaneous urban spaces, are more than infra-structures. Urban structures are the city while infra- structures support the city.

Plans are not by themselves a condition to achieve urban quality. To have or not to have plans is a fragile way of identifying the quality of an urban milieu. Over the last two decades the Lisbon Metropolitan Area, like

the country as a whole, made a considerable effort to increase the number of planning tools. The role of plans has been very relevant for urban development. The high number of urban and detailed plans produced in the last two decades might be interpreted as a most genuine and spontaneous concern with urban quality by local authorities. But one of the most evident conclusions of the analysis of these types of plans and the context in which they were produced reveals some lack of criteria for many aspects. Urban plans and detailed plans should play different roles in urban territories. While the former should focus on the design of structures and the shape of whole urban areas, detailed plans should focus on the design of public and private spaces in a part of a city or in a neighbourhood. Following the principle of hierarchy, urban plans should lead to detailed plans. Urban plans should contain larger areas while detailed plans should deal with smaller areas.

Despite that, plans are being used with unrelated criteria and plans are used as alternatives (one or the other instead of one and the other). The concept of integration is reduced to the level of a physical connection between two places. The concept of mixed use is absent from most of the solutions.

Plans seem to be more focused on problems than on solutions. The Lisbon Metropolitan Area is characterised by a major urban centre, around which gravitate most of the urban developments of several smaller municipalities. Main urban spaces are concentrated in the city of Lisbon, together with historic and better preserved urban centres of other municipalities. Some plans were designed for peripheral areas with garden cities as the suburban image of Greater Lisbon. Greater Lisbon, a concept common in Europe after the second world war (the plan of Abercrombie for Greater London and the *Plano Diretor da Grande Lisboa* are both designed in the nineteen forties) is probably the last attempt to define a vision through plans for this southern European capital.

Planning became an activity in which an incredible number of professionals invested. The 1970s and 1980s were times of emergency planning. Here are some highlights on the Portuguese situation: the sudden change of regime with a revolution introducing democratic rules in society; the independence of African colonies and the civil wars that affected most of the then recent new countries, provoking a flux of war refugees to Portugal amounting to about 1 million new residents in a country of less than 10 million inhabitants; a mass concentration of those refugees in the (then Greater) Lisbon; the return of Portuguese emigrants from Europe and some African and American countries due to the improved living conditions in Portugal to which the entrance into the European Union had contributed. The restructuring process of productive systems, the nationalisation of major industrial companies, and the de-industrialisation which occurred after the entrance of Portugal to the common market affected mainly industrial settlements in Lisbon and its suburbs expressed in terms of commuting and settlement patterns. What happened in the meantime in terms of spatial development? A suburban wave covered planned areas and transfigured the visions of the garden city from the early forties (figure 2).

URBAN PLAN   **MILITARY MAPS**   **MILITARY MAPS**
(ALFRED AGACHE, 1936)   **60'S**   **90'S**

Figure 2 - Transfigured suburbia, Carcavelos: from the Garden City vision of the 1930s to the shapeless dormitories of the 1990s

The Fordist organisation of the city reached its limits, creating congestion of accessing the city centre and lack of facilities in the suburbs. With the end of production in large Fordist factories, companies started to move through the territory creating new urban patterns based on the characteristics of their activities. The large commuter streams started to lose their importance and new accessibilities combined with better living conditions made relations between places of residence and work more volatile.

During the following decades the transition that led to Lisbon's Metropolitan Area was mainly determined by events, a good part of them non-planned. The lack of land planned for housing contributed to the emergence of large scale illegal settlements, as a result of speculative processes. For that reason, planners allocated an exaggerated amount of areas to housing, in keeping with the high demographic growth expectations of the 1970s and 1980s. Illegal settlements were a non-planned answer to the demands in Greater Lisbon, while the Metropolitan Area slowly emerged. The 1980s created the conditions for the emerging network of new settlements that would constitute the metropolitan area.

Where were those new settlements located? They emerged in several types of spaces attracted by new accessibilities which had increased due to the rapid growth of public investment, and in peripheral locations on non urbanised land. These locations were cheaper due to the peripheral location of the land and the new infrastructure financed with European Union structural funds. This combination revealed to be "lethal" to the metropolitan area as a whole. Old town centres were collapsing, legal suburbs survived under great demographic pressure; investment was concentrated in new places; and the illegal areas started to demand important financial support for the construction of infrastructure. Two iconic facts occurred at the end of the 1980s: the neighbourhood of Chiado, part of the historical centre of Lisbon burned down in 1988 in a

context of semi-abandonment, while one of the largest shopping malls of The Lisbon Metropolitan Area (Colombo Shopping Centre) was inaugurated in a close periphery of the city.

Spatial planning was an activity which - among other tasks – was supposed to provide better management of resources – infrastructures, locations, accessibilities, etc. In this context, plans were expected to combine functions and places by taking advantage of the best potential of structural elements. Beyond those potentials, others can be immediately identified, such as flows generated or jobs created. But planning should take into consideration those potentials that might not be so important for investors, but could be crucial for the areas surrounding the city, as well as the public interest. The best management of resources, I would say, should imply to look at structural or infrastructural elements (like the ones mentioned above) as an opportunity to integrate areas of non structured suburbia, semi-occupied illegal settlements and abandoned old centres.

During the 1990s resources were distributed and spread throughout the metropolitan area instead of being concentrated and integrated to combine sprawled areas with structural elements. Why did this happen? As opposed to other periods of history, plans were less used to provide visions and focus on solutions, than to approach immediate problems.

The 1st generation of land use plans (1990 – 1999) happened to be a mass production line of plans, designed under an environment of prosperity associated with the early years of European Union membership (1986 – 1995), combined with a feeling that, apart from legal restrictions, such as *REN* (the national ecological reserve) and *RAN* (the national agricultural reserve), every use was virtually possible everywhere. Why this? Because being land use plans the tool to define the "dominant use" of each part of municipalities, they appeared to validate locations disconnected from pre-existent occupations of land.

On top of it deep changes occurred in Portuguese society and planning

instruments permitted fragmented occupations in vast metropolitan spaces. The lack of integration between cities needing maintenance and urban regeneration investments, unfinished isolated new development, and isolated constructions created a sense of chaos that emerged exactly in the period when municipalities were most prolific in terms of plan production (figure 3).

TRAÇADOS DE PADRÃO ORTOGONAL
PONTOS FOCAIS

Figure 3 - Odivelas: recent interventions (marked with circles) next new infrastructures and fragmented settlements with no sense of integration

Consolidated urban settlements, unconsolidated developments and isolated constructions, representing different typologies are per se a ground for diversity, to say the least. If we add the fact that new developments and isolated constructions were erected without any clear criteria and independently from urban structures, then we are very close to what is normally assumed as lack of legibility. Legibility is frequently seen as a quality, expected to be found in our cities (LYNCH, 1968).

Infrastructures appeared not to be enough to give a sense of place to urbanised spaces, although they would provide some coherence in the medium to long term, as many authors have been stressing (among them Steve Graham in *Splintering Urbanism*). Improving the quality of public space, can definitely contribute a lot to urban quality. But how and why should we apply such improvements? How can we distinguish the need of strategic interventions from the grand urban projects that superpose new structures on pre-existent occupations?

The two levels of planning and two purposes

In the Portuguese case, metropolitan plans - as regional visions - are traditionally related to moments in which large infrastructures are to be implemented (SILVA, 2012). This happened in the mid 1960s, when the Plano Director da Região de Lisboa was designed for the occasion of the construction of the 1st bridge over the Tagus River. During the 1990s and the early years of the 21st century the Plano Regional de Ordenamento do Território for the Lisbon Metropolitan Area coincided with the construction of the 2nd bridge over the Tagus River and with the works to renovate the eastern part of the city for the EXPO'98. More recently the regional plan was altered to include large scale investments like a 3rd bridge over the Tagus River, a high speed railway network and a new airport (figure 4). In 2011 these projects were suspended due to the financial crisis, and in 2012 the proposal for the new version of the regional plan was abandoned.
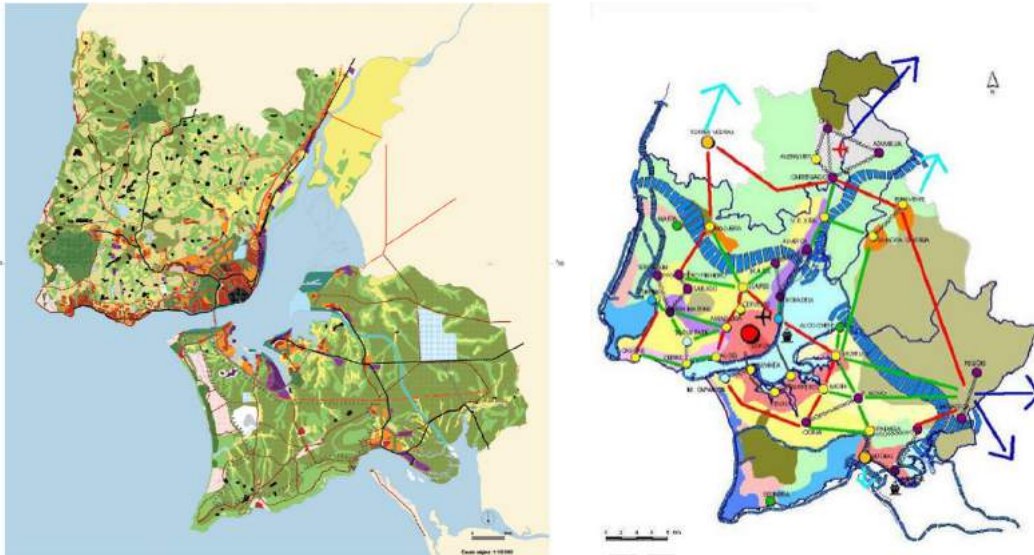
Figure 4 – Regional visions of Lisbon stimulated by large scale infrastructures: Lisbon's Regional Plan from 1964 (left) and Lisbon's Regional Plan from 2002 (right)

In parallel, local planning was used as a tool to provide efficient answers to specific problems, such as the improvement of illegal settlements, the regeneration of old suburbia or the renovation of abandoned industrial areas. Since 1995 a special law eases the improvement of illegal areas. Since the early years of this century urban programmes inspired by the EXPO'98 experience were designed to regenerate and / or renovate abandoned areas; and since 2012 a new legal framework has been devised to deal with urban regeneration.
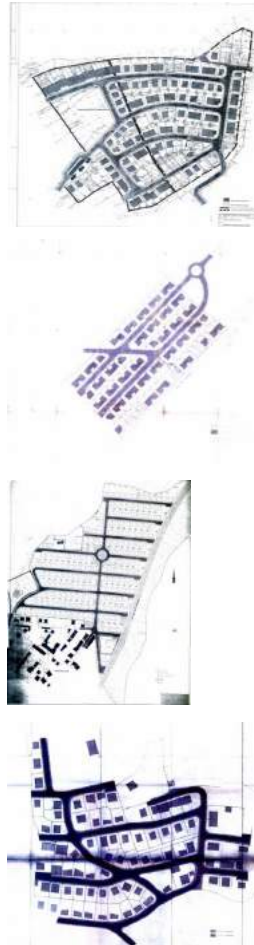
Many studied examples show that interventions have been mostly designed with a special focus on problems, rather than on solutions (figure 5). Although this is understandable, taking into consideration the proportions of some of these problems, not working at a much broader scale and thinking of solutions for urban integration represent lost opportunities to achieve what has been described above as urban quality.

When we look at the production of plans during the last decades for the Lisbon Metropolitan area, we perceive that some municipalities which are more prolific in terms of production of urban and detailed plans are not necessarily the ones associated with urban quality. The lack of urban integration portrayed by non-consolidated developments, apparently senseless combinations of architectural typologies or misfit urban spaces matches Jorge Liernur's description of a result of unfinished social processes. Aesthetics meets urban spaces but not necessarily through physical form. Unreadable landscapes (figure 6) can gain new meanings by interpreting settlements and processes underlying them. Interpretation can be the basis of designing visions and supporting more (smarter?) planning tools.

For these Portuguese suburbia cases, to deal with lack of urban quality might mean to attribute less importance to the physical shape. An alternative approach might focus on the understanding of spatial development processes (with its actors, and social, economical and political constraints) to build visions that can then and only then inform plans. What makes spatial planning more than a tool to solve conflicts and a solution to a better management of resources? In the many different conditions experienced by Lisbon Metropolitan Area, plans should be expected to provide structure to newly urbanised areas, using structural elements to give shape to unstructured spaces. If this was not possible in periods of rapid territorial changes, it is something that we can aim at when territorial transformations are slowing down.

References

BORJA, J., (2003), La Ciudad Conquistada, Madrid, Alianza Editorial S. A.

GRAHAM, S; MARVIN, S., (2001), Splintering Urbanism, (1st edition), London and New York, Routledge

LIERNUR, J., (1997), «Toward a Disembodied Architectural Culture», Anybody, pp. 196-201, Ed. Cynthia C. Davidson

LYNCH, K., (1968), The Image of the city, (5th edition), Massachusetts, MIT Press

MOTA, J., SILVA, P., (2006), «Dealing with ugliness: Proposals for the re-evaluation of an industrial site "Oliva" factories at the city of São João da Madeira – Portugal», 2nd Planning Schools Congress, Mexico City

PAGE, S., PHILIPS, B., (2003), «Telecommunications and Urban Design», in City, vol. 7, nr. 1, April, pp. 73 - 94

SIEVERTS, T., (2003), Cities without Cities, (1st English edition), London, Spon Press

BORJA, J., (2003), La Ciudad Conquistada, Madrid, Alianza Editorial S. A.

GRAHAM, S; MARVIN, S., (2001), Splintering Urbanism, (1st edition), London and New York, Routledge

LIERNUR, J., (1997), «Toward a Disembodied Architectural Culture», Anybody, pp. 196-201, Ed. Cynthia C. Davidson

LYNCH, K., (1968), The Image of the city, (5th edition), Massachusetts, MIT Press

MOTA, J., SILVA, P., (2006), «Dealing with ugliness: Proposals for the re-evaluation of an industrial site "Oliva" factories at the city of São João da Madeira – Portugal», 2nd Planning Schools Congress, Mexico City

PAGE, S., PHILIPS, B., (2003), «Telecommunications and Urban Design», in City, vol. 7, nr. 1, April, pp. 73 - 94

SIEVERTS, T., (2003), Cities without Cities, (1st English edition), London, Spon Press

Figure 6 – Odivelas, an attractive area: nevertheless, different initiatives framed by planning tools don't meet in the territory

1. Introduction

This paper introduces quantitative and qualitative indicators to evaluate the quality of urban life and design. Furthermore, it discusses their validity and contribution to urban planning needs.

As cities keep growing in size, it becomes more and more important that urban expansion takes place in a controlled and planned way, so that cities can satisfy the needs of its population. This becomes particularly relevant in a world where half of the global population is already living in urban areas. Urban planning is the set of tools through which interventions, in the context of urban design, attempt to create urban spaces that contribute to the quality of life of its citizens. This can be defined as the relationship of inhabitants with the different elements that constitute urban space. Urban design determines, directly, the physical components of urban space, and indirectly, its socio-economic, political and cultural elements, influencing the relationship between the urban environment and its components. Unplanned growth leads to environmental degradation, traffic jams, urban sprawl, pollution, low access to basic services and infrastructure, loss of identity, disintegration of communities, pockets of poverty, etc. Also more and more, within a network of global cities, they compete to attract investment and qualified human resources. Thus, urban quality of life has become a main topic of strategic city planning.

2. Literature Review

The 'urban quality of life' theory originated within the sustainability framework. The concept is defined as the perceptions, feelings and experiences of individuals within the space in which they live. By adding to the social, economic and environmental components of sustainability cultural and personal factors affecting quality of life, Wish (1986) proposed

the following basic factors of urban quality of life: economic vitality, feeling of place, cultural activities, good quality housing stock, easy access to services like health, sports, education, shopping, child-care, social organisations, need of forming a sustainable environment, security and privacy. The concept was further developed by several scholars during the 1990s (Brown et al., 1993; Felce and Perry, 1995; Cummings, 1998; Parfect and Power, 1998) with several others implementing operational approaches to the subject (Findlay et al., 1998, Rogerson et al., 1989; Savageau and Loftus, 1997). Cummings (1999) defined quality of life in both an objective and a subjective manner, defined by seven important characteristics: welfare, health, productivity, privacy, security, population, and emotional welfare. Objectively, Cummings' objective criteria relate to culture while the subjective ones are covered by perceptions. Kamp et al. (2003), emphasise that urban quality of life is associated with several components, such as personal and communal development, health, security, physical environment, and natural resources (Fig. 1).
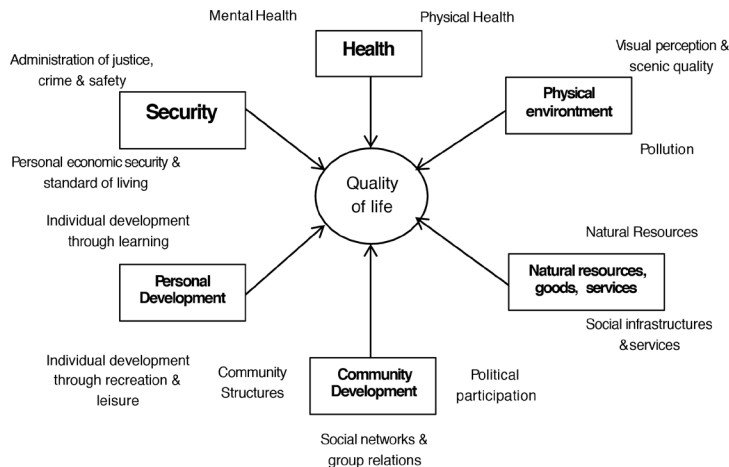
Figure 1 - Quality of life components (Kamp et al., 2003)

McRea et al. (2006) studied the strength of the link between subjective and objective indicators of urban quality life. Knowing that subjective and objective indicators of urban quality of life are rarely related to each other, they tried to link them by using Geographical Information Systems (GIS) to locate respondents to the B2003 Survey of Quality of Life in South East Queensland and to gather objective indicators about their urban environment within the region with regard to services, facilities and overcrowding. Structural Equation Modelling (SEM), showed that the strength of the relationship between these objective and subjective indicators can be weak, and suggests care should be taken when making inferences about improvements in subjective urban quality of life, as more in-depth research is needed to link those indicators.

These last approaches led to the study of Portuguese urban quality of life. Some important points drawn from the previous studies are: (i) quality of life in cities can be described by dimension; (ii) dimensions are associated with particular aspects of living in an urban context; (iii) quality of life dimensions can be described by indicators, which can be objective or subjective; (iv) dimensions and indicators can be combined through the attribution of different levels of importance (weights) based on a subjective judgment. This theoretical and applied framework permits different combinations of dimensions and associated weightings to lead to different definitions, more or less personal, that can be customised to the interests, motivations and preferences of a social group, a company, an institution or a single citizen.

3. A model for Assessing Urban Quality of Life in Portuguese Cities

In 1998, a brief research study about quality of life in the eighteen major Portuguese cities was performed by a research team in the Department of Civil Engineering at the University of Minho. This study aimed at responding

to the degradation of quality of life in urban areas and to contribute to broader goals of attaining global sustainability.

The methodology followed in this study, including the quality of life evaluation model, is based on the following seven steps:

1. Identification of the dimensions to be considered. Initially, studies on quality of life in cities were consulted, as well as national newspapers, in order to understand the nature of the problems and the motivations of the urban population, which resulted in an extensive list of potential dimensions to be considered. Secondly, a telephone survey of a sample of 50 people was undertaken, resulting in a final set of nine dimensions: climate, commerce & services, crime, unemployment, housing, mobility, architectural heritage, purchasing power, and pollution.

2. Definition of weightings for the dimensions. A sample of 150 people, distributed over the country, was surveyed by phone in order to establish the set of weights representing the relative importance of the dimensions.

3. Creation of indicators that describe each dimension. The selection of indicators resulted from the judgement of the research team, taking into account the relevance of the variables included and, also, the availability of data.

4. Definition of the scoring scale for the indicators. In order to make indicators comparable, a normalised score for each city and indicator was developed. Given by the difference between the value of the indicator for the city and the mean of the 18 cities considered, divided by the standard deviation of the 18 cities. Denoting the value of the indicator for a city by the mean of the values of the 18 cities by $\mu[I]$, and the respective standard deviation by $\sigma[I]$, the score for the indicator is given by:

$$Score_i = a_i \frac{I - \mu[I]}{\sigma[I]}$$

Where a_i is a variable that assumes the value +1, when higher values of the indicator *i* contribute positively to the quality of life, and the value -1, when higher values of the indicator contribute negatively to the quality of life.

5. Definition of weightings for the indicators. The attribution of indicator weightings within each dimension resulted from the judgment of the research team, as presented in the next section. It should be stressed that the subjective attribution of weightings does not affect the generality of the model, as the weighting set can be adjusted according to the nature of the study.

6. Definition of the aggregation equation for the indicators. For each dimension and each city, the score is given by the weighted average of the indicator scores:

$$Score_d = \frac{\sum_i Score_i \times \omega_i}{\sum_i \omega_i}$$

, where ω_i is weighting of indicator

7. Definition of the aggregation equation for the dimensions. For each city, the score is given by the weighted average of the dimension scores:

$$Score = \frac{\sum_d Score_d \times \omega_d}{\sum_d \omega_d}$$

, where ω_d is weighting of indicator d.

The complete set of dimensions, indicators and weightings as resulted from the national survey and the research team's options (Mendes, 1999) is presented in table 1.

CLIMATE			0.08 7
Winter climate index		0.33	
Summer climate index		0.33	
Rainfall index		0.33	
COMMERCE & SERVICES			0.11 7
Banks		0.14 3	
Bank branches per 10.000 hab.	1.00 0		
Commerce		0.14 3	
Retail shops	0.20 0		
Retail shops per 10.000 hab.	0.20 0		
Hypermarkets	0.30 0		
Hypermarkets per 10.000 hab.	0.30 0		
Sport facilities		0.14 3	
Indoor sports arena per 10.000 hab.	0.20 0		
Outdoor sports field per 10.000 hab.	0.20 0		
Indoor swimming pools per 10.000 hab.	0.20 0		
Outdoor swimming pool per 10.000 hab.	0.20 0		
Athletics tracks per 10.000 hab.	0.20 0		

Table 1 - Dimensions, indicators and weightings

University and Polytechnic		0.14 3	
University graduation courses University *numeri clausi* Polytechnic graduation courses Polytechnic *numeri clausi*	0.40 0 0.40 0 0.10 0 0.10 0		
Museums		0.14 3	
Number of museums	1.00 0		
Health		0.14 3	
Hospitals per 100.000 hab. Hospital beds per 100.000 hab. Number of physicians per 10.000 hab. Number of pharmacies per 10.000 hab.	0.15 0 0.60 0 0.20 0 0.05 0		
Social Assistance		0.14 3	

Number of youth-activity facilities per 10.000 hab.	0.05 0		
Capacity of youth-activity facilities per 10.000 hab.	0.20 0		
Number of elderliness-activity facilities per 10.000hab.	0.05 0		
Capacity of elderliness-activity facilities per 10.000 hab	0.20 0		
Number of kindergartens per 10.000 hab.	0.05 0		
Capacity of kindergartens per 10.000 hab.	0.20 0		
Number of houses for aged people per 10.000 hab.	0.05 0		
Capacity of houses for aged people per 10.000 hab.	0.20 0		

The application of the evaluation models, together with the particular weightings set presented in the previous section, resulted in a ranking of cities. Table 2 presents the ranking and scoring for each city and each quality of life dimension.

Rank	Cities	Clim. Score	Com. Serv. Score	Crime Score	Unempl Score	Housing Score	Mobil Score	Patrimon Score	Purchase Score	Pollut Score	FINAL SCORE
1	Lisboa	0.9	1.54	0.24	0.39	-2.69	-0.91	3.26	3.31	-1.86	0.38
2	Guarda	-0.18	-0.08	0.88	0.75	0.91	0.05	-0.58	-0.51	0.76	0.26
3	Coimbra	-0.07	0.58	0.80	0.66	-0.62	0.55	0.41	0.06	-0.36	0.23
4	Bragança	-0.64	-0.10	1.15	0.22	1.23	-0.31	-0.37	-0.54	0.41	0.16
5	Castelo Branco	-0.0 9	-0.02	1.20	0.03	1.00	0.27	-0.65	-0.49	-0.15	0.15
6	Santarém	-0.07	-0.41	0.54	0.50	0.44	-0.09	0.04	-0.50	0.48	0.12
7	Aveiro	0.39	0.18	-1.04	1.05	0.20	0.13	-0.61	0.02	0.16	0.05
8	Viana do Castelo	-0.05	-0.60	0.13	0.72	0.40	0.12	-0.20	-0.67	0.38	0.04
9	Évora	-0.09	0.01	0.10	0.00	-0.66	-0.27	1.28	-0.23	0.32	0.04
10	Leiria	0.39	-0.51	-0.69	1.29	0.56	0.23	-0.65	-0.33	-0.01	0.03
11	Faro	0.93	-0.01	-1.36	0.31	-0.12	0.42	-0.58	0.32	-0.17	-0.06

Rank	Cities	Clim Score	Com. Serv Score	Crime Score	Unempl Score	Housing Score	Mobil Score	Patrimon Score	Purchase Score	Pollut Score	FINAL SCORE
12	Porto	-0.05	0.97	-0.03	-0.58	-1.66	-0.19	0.52	1.76	-1.08	-0.07
13	Braga	-0.51	-0.16	-1.06	0.41	0.37	-0.04	0.15	-0.20	-0.18	-0.13
14	Vila Real	-0.64	-0.24	0.29	-0.48	0.37	0.04	-0.47	-0.65	0.25	-0.15
15	Viseu	-0.51	-0.51	-0.60	-0.03	0.45	0.24	-0.40	-0.48	0.29	-0.15
16	Beja	-0.09	-0.13	1.03	-1.21	-0.64	-0.22	-0.41	-0.41	0.44	-0.18
17	Setúbal	0.93	-0.37	-1.90	-1.08	0.16	0.18	-0.31	0.08	-0.13	-0.32
18	Portalegre	-0.53	-0.13	0.32	-2.96	0.30	-0.19	-0.41	-0.54	0.46	-0.41

The results obtained in the first phase can also be observed in Figure 2. As can be seen, eight cities are below the average score and ten are above it. Lisbon leads the ranking, while Portalegre occupies the lowest position of the studied cities. This classification still holds until the 6th town if the survey is focused on comments by 65 lecturers of the University of Minho. Regardless of the survey respondents, the differences in the rank-order are very small. Contrary to this situation, in a recent study carried out by ISCTE and a newspaper, there were drastic shifts in the rank order of some of the cities which are listed in both of the two sets of quality of life evaluation, namely Braga and Bragança (shifting places of 3 and 13). Portalegre is nevertheless the last in both systems.
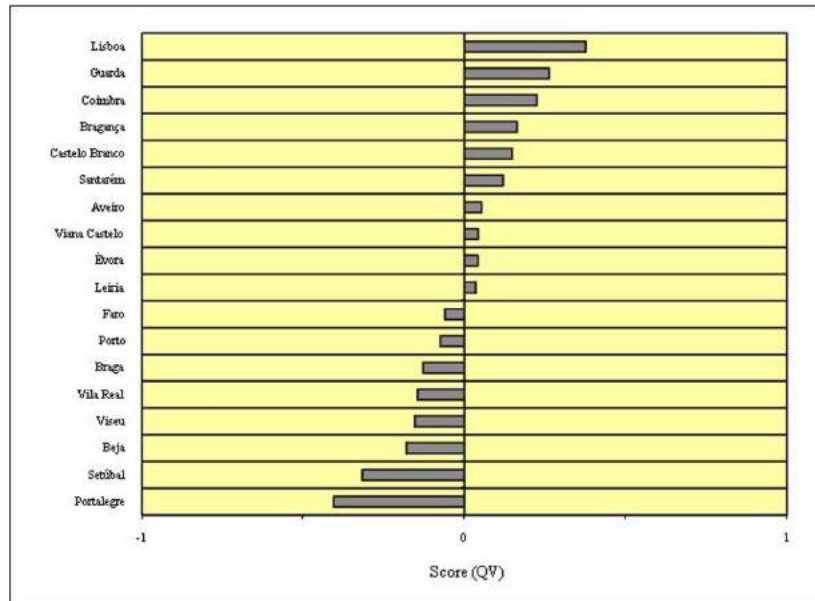
Figure 2- Quality of Life: ranking and scoring (national poll weights)

While the evaluation model developed at the University of Minho for the scoring of the indicators describes nine dimensions, namely climate, shopping and services, crime, unemployment, housing, mobility, built heritage, purchasing power, and pollution, the model of another Portuguese higher education institution (ISCTE - University Institute of Lisbon) misses important dimensions such as built heritage, air and noise pollution. Apart from this, there is no set of weightings as all the indicators are given the same weight and added arithmetically.

4. GIS Mapping

To complete this model, a GIS approach was used to compile and analyse both the quality of life scoring and urban pollution in order to get the GIS Mapping to perform a spatial analysis (Figures 3 and 4).
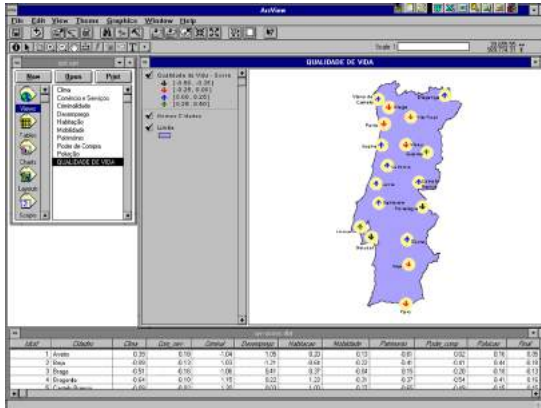
Figure 3 - Quality of life scoring: GIS mapping
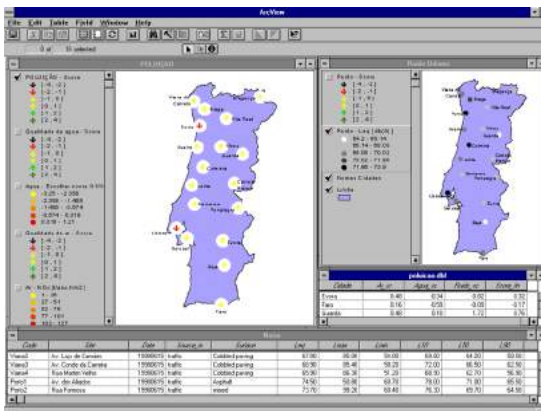
Figure 4 - Urban pollution: GIS mapping

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The GIS approaches have already been developed by several researchers such as Gomes and Lins (2002), studying quality of urban life in Rio de Janeiro using the Geographical Information Systems (GIS) integrated with Multi-Criteria Decision Analysis (MCDA) to aid spatial decisions. One of the main advantages is the ability of GIS methods to clarify the decision making process and provide structure to a non-structured decision process; even so, further research should be developed. Apparicio et al., (2007) reported that using several spatial databases in GIS helped his study identify various combinations of advantages and disadvantages, within the urban living environment in which Montreal's public housing buildings have been located, according to three dimensions: the social environment, the physical environment, and the accessibility of services and facilities.

5. Critical Analysis of the Model

The application of the developed models, together with the particular weightings adopted, resulted in a city ranking, with Lisbon in the first place, as the most attractive city in terms of quality of life, and Portalegre in the last place, as the least attractive town. Leiria is the average city, as its score is close to zero. This classification seems to find justification in several practices that have been tested among European cities, where Lisbon and Évora are given as examples of good practice (Deelstra, 2000). The evaluation process was meant to be as sound as possible, therefore subjective options were based on a national poll and compared with a more specific survey directed at professionals with a higher level of education. It is argued that it is not possible to cut across the different systems under analysis and so each analysis is valid as long as it is kept as a closed system, where the scores are taken in relative terms. Likewise, cross-comparison analyses are not easy to establish between different systems of comparison or different countries.

6. Missing Updated Indicators for Sustainable Communities?

It has been argued before that the urban quality of life concept emerged from the sustainability framework. Therefore increasing the scope of the study to encompass broader sustainability concerns can deepen the understanding of the core subject of urban quality of life indicators, as well as showcase some of its limitations.

The drive to reach sustainability is stronger than ever, both cost efficiency and increased levels of quality of life depend on self-sustained, self-reliant communities. Technologically, there are multiple ways of reaching the intended mark and, inevitably, the number and nature of indicators is equally diverse, inevitably overlapping fields of research, introducing more complex models and raising important issues to the fore, previously relegated to the background. Classic indicators of Quality of Life or more precisely Quality of Urban Life, grew to encompass an ever expanding field of communication based utilities. The ability of communities to encourage and stimulate innovation and businesses that foster integration of all members of the community, and which manage to interact successfully with their members is equally important as attracting new people, fostering its growth and influencing other communities with possibly far reaching consequences. A successful community will spread its values and positive trends to a broader audience than simply its members. Potentially, they can add momentum to other communities to strive for maintaining and critically working toward a model of constant improvement.

Low-Carbon Cities and Sustainable Cities indicators can be diverse. The first deals principally with carbon foot-printing of urban environments, the second with the long term sustainability of cities as a whole. The exact indicators chosen to describe and quantify the carbon foot-printing and sustainability can vary depending on several factors, including strategies used to reach the ultimate goals of carbon neutrality and sustainability.

As a reference, Table 3 shows some of the most recent indicators in use by various groups taken from a small sample of Sustainable Cities' Indicators in use as of January 2012 grouped according to different categories.

Table 3 - Sample of Sustainable City indicators

Category	Indicator	Description
Environment	Water consumption[7]	Average total daily flow of water per person
	Green Space/Tree Planting[8]	Area predominantly vegetated or planted (forests, parks, gardens, etc.)
	Visual Polution	Number of cases of graffiti removal per year
	Waste Management/ Diversion	% of waste recycled, composted, etc.
	Ozone	Average annual ozone levels
	GHG emission reduction	Current % of GHG emission reduction achieved in reference to the base year defined in target
	Biodiversity/ Urban biodiversity monitoring program	Numbers of species of animals and plants/ Existence of a comprehensive urban biodiversity monitoring program in the city
	Water quality/Tap water and surface water quality	Existence of a water source protection program
	Household spending on shelter	% household expenditure allocated to shelter
Economic	Unemployment rate	Unemployment rate, all, seasonally adjusted
	Education	% of population who does not have a high school or higher diploma and % of the population who does
	Voter participation	Rate of participation in the most recent municipal election
	City Councill	Representation of gender and visible minorities on city council

7 Corporate Knights, Company for Clean Capitalism, Canada, http://www.corporateknights.ca [Accessed January 2012].

8 Jozsa, A., Brown, D., 2005.

Governance	Emission reduction target	Municipal GHG emission reduction target for the municipality as a whole
	Density	Number of people per square km of the city area
	Green transportation use/Cycling accessibility	Number of people in the city using a "green" mode of transportation to work: public transit, walking, biking, carpooling, etc.; number of km of cycling paths
	Congestion	Number of parking spaces
	Local food production and access	Number of year-round and seasonal farmer's markets operation in a city and the area allocated by the city to community gardens
Infrastructure	Green buildings	Residential or commercial retrofit programs for buildings (existence / support)
	Renewable energy	Incentives for renewable energy production and consumption (existence / support); annual consumption (%) of renewavle energy compared to other sources
Social	Life satisfaction	% of people who describe themselves as "satisfied" or "very satisfied" with their life
	Crime rate	Rated of homicides and hate crimes occurring in a city
	Health and access to care	Number of people in a city who are obese and number of people who report having access to a regular medical doctor
	Cultural events	Number of major cultural events/festivals held in an outdoor or community space, with a cultural focus, with an accessible cost (region dependent)
	Hazards and Natural Disasters	Number of natural disasters (ice storms, flooding)

Although the goal of reducing carbon emissions in cities is relatively straightforward to understand, the techniques and methodologies implemented have produced ever more complex indexes, which take into account the carbon balance, proper planning, the continuous improvement of any given city toward the carbon neutrality goal. All have become important factors to compare the performance of different urban centres. As an example, Table 4 is a small excerpt of indicators developed for use in Chinese cities (Price, L. et al., 2011).

Table 4 - Excerpt of indicators developed for use in Chinese cities, Prince et al.,
project supported by the China Sustainable Energy Program of the Energy Foundation (through the U. S. Department of Energy)

Category	Indicators	Description
Macro Indicators	Energy consumption	Final energy used for a given year divided by GDP
	CO_2 Emissions	CO_2/GDP
	Primary energy use	Primary energy consumption per capita
	Consumption-based carbon emissions	End-use carbon emissions
Municipal level	Electric power	CO_2 Emissions per power produced
	Residential	Residential final energy per capita
	Transportation	Transportation final energy per capita

The work and effort put into the indicators makes an important contribution towards the goal of lowering carbon emissions and developing sustainable cities and are of paramount importance. The numerous methodologies being developed help keep the sustainability discussion diverse and multilateral, with multiple participating countries most of which have their own concurrent models. This feature underlines the global commitment to the sustainability and impact of urban environments.

The examples shown in both tables are, of course, only a fraction of such indicators currently being used to gauge sustainability and the carbon foot-print of cities. Most indicator tables however are heavily influenced by factors such as the country of origin, the researchers involved (architects, engineers, environmental analysts, alternative energy experts, urban planners, etc.), the purpose of the underlying study, etc. Without going into the scope of the problem of integrated interdisciplinary research in this field (a subject discussed by other authors, such as Shmelev, S., and Shmeleva, I., 2009), it is still clear that the filtering of the subject through multiple disciplines, multiple cultural backgrounds and disparate national priorities, will produce varied indicators. Despite the multiplicity of indicators already produced, some researchers are taking different approaches altogether, such is the case of Intelligent Cities.

Even before Finland introduced broadband as a fundamental constitutional right[10], it was stated that broadband was having the potential to become the new globalising and people-empowering force of the twenty first century. This statement is supported by recent political and social events in 2011 where several movements were almost completely organised by using social media. Indicators like the penetration of broadband, innovation, digital inclusion and advocacy, have become a reasonable means of measuring the success of a city.

Funded by Canada, the Intelligent Community think tank defines a

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[10] http://www.bbc.co.uk/news/10461048 [accessed: January 2012]

number of indicators based on key competitive factors in what is known as the "Broadband Economy". These indicators are broadband connectivity, knowledge workforce, innovation, digital inclusion, marketing and advocacy. The first, equates the access to broadband a necessity as essential to business and the economy as clean water and energy. The ability of a community to expand its positive impact to other communities is vital for the propagation of good practices. The caveat is that the potential dilution of the cultural heritage of local communities, and spreading less positive technologies and practices, even non-intentionally, must not be understated.

The indicators reward municipal support for high-tech start-up companies, tech job creation, and appropriate implementation of technologically sustainable solutions which create jobs or save taxpayer money.

The question remains whether these new indicators are really charting new paths to quality of life and lasting prosperity for the citizens. For the time being, most models, independently of variation, are moving towards increasingly organic patterns following technological advances but not ignoring societal or human needs.

7. Indicators for Urban Design

Turning away from technocratic city development models to serving more human-centric priorities has long been defended by many urban planners. Below is a classical model by Jacobs and Appleyard of the theoretical elements forming the base of urban development planning models.
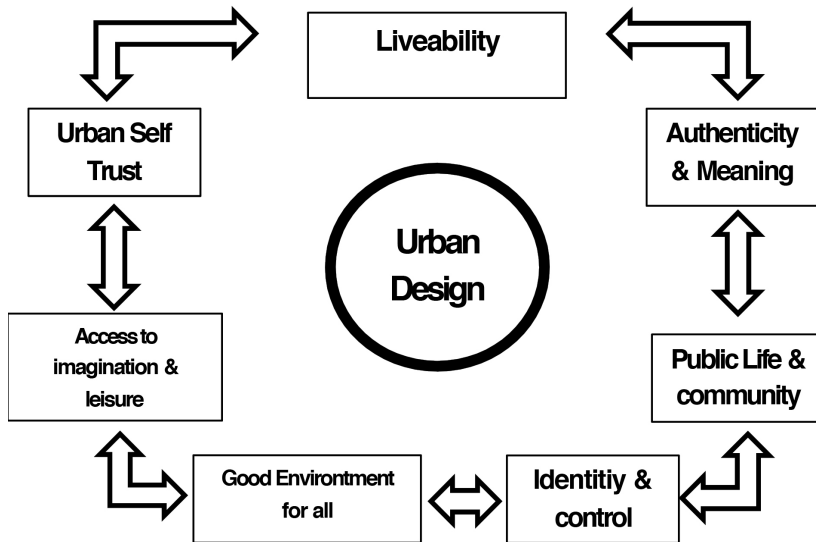
Figure 5 - Schematic diagram of the principles of urban design theorists, including the views of Jacobs and Appleyard.

Jacobs and Appleyard opposed the cost effective, grey skyscraper block tendencies which pervaded the decades of 1970s and 1980s, defending a set of characteristics which they considered to be vital for positive urban living (Jacobs and Appleyard, 1987: 171-174). Their manifesto against high density public and private development projects is now fully supported by current trends prioritising a high quality of life standard. The practice of continuous renewal of cities also leads to a loss of heritage as the places and buildings of a city which have become living material memories, thus bearing meaning and value in themselves as elements of place.

A series of qualitative and quantitative indicators may be used to characterise urban space and evaluate urban design.

A qualitative assessment may evaluate the urban structure, the street system, the existence of facilities and open spaces, or the diversity of land uses, for example.

The urban space may have an open or closed structure. Open can be axial or organic. Grid structures can be regular or irregular. The grid is often used for flat land while organic grids are the more sustainable choice for sloping areas. However, most often cities show a mix of both. Only cities planned from zero such as Brasilia, or extensively planned cities such as Barcelona, may be closer to pure categories. It is important to emphasise that urban design must be adapted to the territory. San Francisco may serve as an example of an urban regular grid structure badly adapted to its topographic environment. Urban structure (see Table 5) may determine car dependency and therefore pollution; conversely, it can make urban spaces more liveable, support public transport, facilitate population access to services and leisure, make cities safer, promote more efficient cities, etc.

Table 5 – Urban Structure Indicators

Urban Structure	
Axial	~
Organic	
Irregular Grid	
Regular Grid	~

Urban space is characterised by its street pattern (see Table 6) which is one of its major characteristics. Street patterns structure the city, serve as a support for infrastructure and condition accessibility. It can be non-linear, discontinuous, diagonal, organic, orthogonal. Cul de sac which is common in suburban developments and is an example that limits accessibility.

For example arterial streets may integrate or divide, traffic may be distributed more evenly, over-concentration in city centres may be avoided by the promotion of alternative uses; in neighbourhoods it may be appropriate to upgrade unsafe parts and enhance historic areas.

Table 6 – Street Pattern Indicators

Street Pattern	
Non-linear	
Discontinuous (cul-de sac)	v
Diagonal	
Organic	
Orthogonal	

Additionally, urban space is valued through the existence of, and the location of public facilities, public spaces, green areas and focal points (see Table 7). Numerous studies are defending the positive contribution of public amenities to the overall comfort of neighbourhoods and their inhabitants, as well as generating higher real estate values.

Table 7 – Spatial Enhancement Indicators

Saptial Enhancement	Total surface area	Location within neighbourhood
Public Equipment	B	B
Public Spaces	B	B
Green Areas	B	B
Focal Points of Interest		
Natural		
Artificial		

Finally, another set of indicators helps characterise the design of urban space (see Table 8). Urban space may be framed or non-framed, articulated or non-articulated, cohesive or without cohesion, varied or monotonous, and may possess self-identity or not.

Table 8 – Spatial Analysis Indicators

Spatial Analysis	
Framed (typologies/building heights)	V
Non-Framed	
Articulated (street network)	
Non-articulated/ Segregated	
With cohesion (pedestrian connections with surrounding space)	V
Without cohesion	
Varied (different plot sizes)	
Monotonous	V
Self-Identity (Neighbourhood sense perception)	V
Without self-Identity	
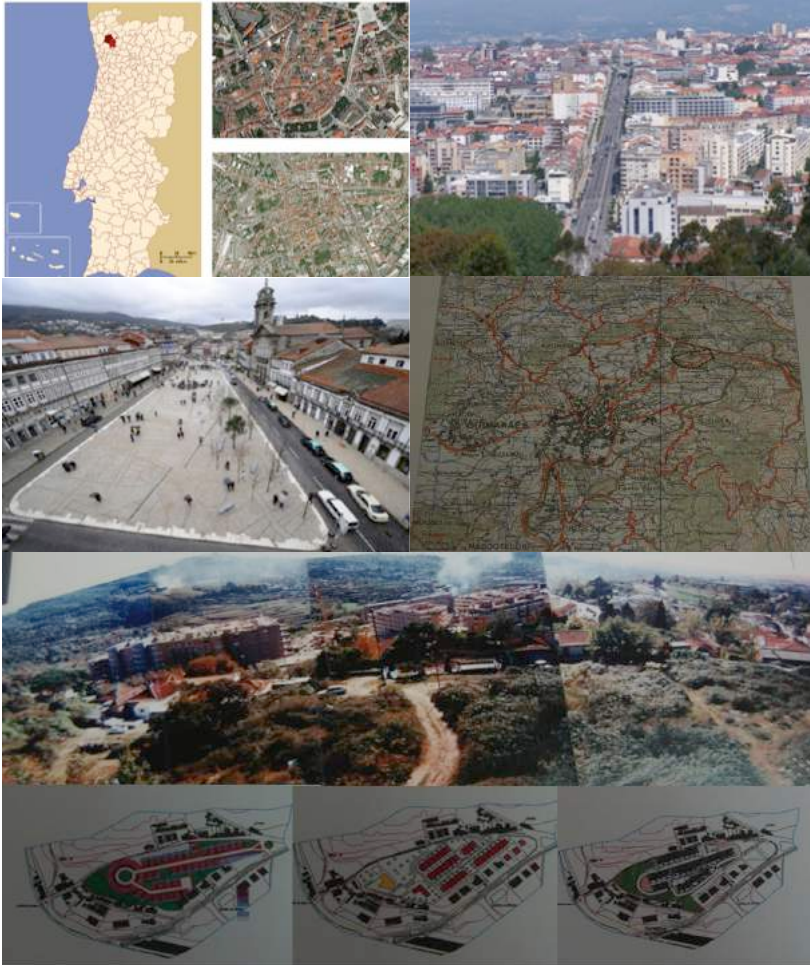
Figure 6. City centres of Braga and Guimarães and the municipalities location in Portugal

Figure 7. Braga Pedestrian City Centre areas (before and after urban intervention)

Figure 8. Guimarães Pedestrian City Centre areas (before and after urban intervention)

Figure 9. Map of Guimarães comprising site area

Figure 10. Three urban design proposals in Guimarães

Urban design may be assessed via quantitative analysis (see table 9) or, via qualitative analysis by assigning a value to different qualitative indicators of urban space.

Table 9 – Urban Design quantitative assessment

Typologies	Public Green Areas	Public Equipment	Infrastructure	
			Streets	Parking
Housing Single Unit	1288 m²	1610 m²	-----	130
Collective Housing	1930,6 m²	2413,2 m²	-----	133
Commercial	186,2 m²	166,2 m²	-----	22
Sevices	186,2 m²	166,2 m²	-----	26
Total	3447,4 m²	4176,4 m²	PT ≥ 9,7 m FR =6,5 m P = 1,6 m	311

The land occupancy index can also be collected by using approved detailed plans, giving a general overview of the types of buildings present in the selected area. For example, in the post-EXPO'98 development phase, it is possible to identify the distribution of land occupancy in the following figure.

Table 10 – Synthesis of Occupancy Areas

Location	Total area of plots	Gross Surface Area (m²)								Parking Places		
		Housing	Services	Commerce	Public Equipment	Tourist Equipment	Urban Infrastructures	Industry/ Storage	Total	Private	Public	
											Inside Plot	Outside Plot
PP1	278.7 60	219. 551	398. 929	104.8 71	21.51 0	34.1 83	4.99 5	0	784.0 39	13. 443	797	13.017
PP2	282.315	69.4 64	87.103	33.92 6	169.9 56	0	0	0	360.4 49	3.5 72	2.899	530
PP3	177.0 43	249.029	87.541	24.06 9	41.61 1	0	1.20 1	0	403.4 51	6.2 53	556	2.760
PP4	353.5 33	643.971	37.9 18	26.58 9	68.61 0	0	18.0 73	25.48 2	820.6 43	11.648	2.0 58	1 .0 55
PP5	71.46 5	57.4 50	14.9 85	3.400	5.000	0	0	0	80.83 5	1.1 38	0	190
PP6	429.3 67	0	8.50 0	805	23.80 3	4.00 0	0	0	37.10 8	408	0	2 .3 16
PR	181.5 84	0	1.50 3	5.010	493	0	0	210	7.216	50		80
CFR	1.774. 067									0	0	83
		1.23 9.46 5	636.479	198.6 70	330.9 83	38.1 83	24.2 69	25.69 2	249.3741	36.512	20.734	5 .6 07

9. Synthesis

As concluding remarks, in the first place, urban planners need to be professional. This means being informed, involved in professional networks, both formal and informal, both national and international, as well as endowed with updated training and life-long learning especially from past urban experiences, both failures and successes. This is what EUSS – European Urban Summer Schools are about and that is why we are here.

In the second place, urban planners must be committed to urban quality of life. Openness to and respect for local needs and wishes should be a central tenet. As an example, some forms of participatory planning have acquired much relevance in the last years. The methodologies described in this chapter to assess urban quality of life show how this can be achieved more easily, with user-friendly, interactive forms of GIS applications that should be available in specific sites dedicated to the quality of life topic.

In the third place, urban planners need to be open minded. Flexibility, innovation, persistence and creativity must guide our work. Urban planning requires an integrative and holistic vision that understands the different interrelations that produce urban space and their impacts on the quality of life of inhabitants. We need to apprehend better the consequences of urban interventions, and understand the city as a dynamic entity that changes continually, and evolves accordingly.

In an interconnected and fast changing world, we - as urban planners - need to frame our activity within the wider territory focusing on a long term perspective.

We need to commit ourselves to alleviate through urban design, the socio-economic and environmental problems in the city. It is not a matter of bringing happiness according to the old leit-motif of a planner playing God, but a matter of helping to bring comfort to urban dwellers. It is among our priority tasks to contribute to try and find a balance for a city

that attempts to be economically competitive, socially integrative, and environmentally friendly, and therefore sustainable.

In this context of fast changing cities, urban planning needs appropriate information in order to adjust urban interventions to evolving needs. The development of appropriate indicators appears as a central need because it enables us, urban planners, but also politicians and all other involved stakeholders as well as citizens to monitor the past and present trends in a more efficient way.

References

1. Apparicio, P., Seguin A.M., and Naud, D., (2007), The Quality of the Urban Environment Around Public Housing Buildings in Montre´al: An Objective Approach Based on GIS and Multivariate Statistical Analysis, Springer Science and Business Media B.V, 86:355–380, Dordrecht.

2. Brown, R.I.; Brown, P.M.; Bayer, M.B. (1993), A quality of life model: New challenges arising from a six year study. In D. Goode (Ed.), Quality of Life, Brookline, New York.

3. Cummings, R.A. (1998), the comprehensive quality of life scale-Fifth Edition. In Proceed. Of First International Conference on Quality of Life in Cities, Singapore, 67-77.

4. Cummings, R. A. (1999). A psychometric evaluation of the comprehensive quality of life scale. In L. L. Yuan, B. Yuen & C. Low (Eds.), Urban quality of life: Critical issues and options (5th ed., pp. 32–46). Singapore: Singapore University Press.

5. Deelstra, T. (2000) The resourceful city: Examples of good practice in Europe. To be published

6. Felce, D.; Perry, J. (1995), Quality of life: Its definition and measurement, Research in Developmental Disabilities, 16, 51-74.

7. Findlay, A.; Morris, A.; Rogerson, R., (1988), Where to live in Britain in 1998: Quality of life in British Cities, Cities, 5(3), 268-276.

8. Gomes, E.G. G., and Lins M.P.E, (2002), Integrating Geographical Information Systems and Multi-Criteria Methods: A Case Study, Annals of Operations Research 116, 243-269, Kluwer Academic Publishers, Netherlands.

9. Kamp, I., Leidelmeijer, K., Marsman, G., & Hollander, A. (2003). Urban environmental quality and human well-being towards a conceptual framework and demarcation of concepts; a literature study. Landscape and Urban Planning, 65(1), 5–18.

10. Lourenço, J.M., et. al., (2000), Evaluating urban quality of life in Portugal, pp.143-153, Report on Present and futures measures to achieve sustainability on international and local levels, Austrian Research Center Seiberdorf.

11. McCrea, R., Shyy, T., & Stimson, R. (2006). What is the strength of the link between objective and subjective indicators of urban quality of life? Applied Research in Quality of Life, 1(1), 79–96.

12. Mendes, J.F.G. (1999), Onde Viver em Portugal, Ordem dos Engenheiros, Coimbra, Portugal.

13. Perfect, M.; Power, G. (1997), Planning for Urban Quality: urban design in towns and cities, Routledge, London.

14. Rogerson, R. J.; Findlay, A.M., Morris, A.S. (1989), Indicators of quality of life: some methodological issues, Environment and Planning A, 21 (12), 1655-1666.

15. Savageau, D.; Loftus, G. (1997), Places Rated Almanac. Your guide to finding the best places to live in North America, Macmillan, New York.

16. Senlier, N., Yildiz R., Aktas D., (2008), A Perception Survey for the Evaluation of Urban Quality of Life in Kocaeli and a Comparison of the Life Satisfaction with the European Cities, Springer Science and Business Media B.V, Dordrecht

Preamble
Waiting for the Bus: a way into quality of urban design

The humble London bus shelter illustrates connections between quality of space and quality of life, the theme of EUSS 2011. London bus shelters are designed by architects. Their brief emanates from the planning system. The bus stop area and spaces linking it to its surroundings fall into the realm of urban design. Their wider context depends on a multitude of values influenced by diverse protagonists.

The planned objective of a bus shelter is to accommodate persons who are using buses. Its function is to provide shelter, a roof, somewhere to sit, a view to see the bus arriving. The functional requirements devised by the bus company and its controlling transport department are for people to get on a bus and alight as fast and as economically as possible. When bus conductors were withdrawn to save a second salary, machines were installed for passengers to buy tickets in advance, thereby accelerating the process of entering and stepping off the bus. Another economic criterion is to produce the bus stop as cheaply as possible. It has to be vandal proof to prevent expensive maintenance and repairs. Moreover, it has to generate income. For this reason it offers space for advertisements. A prototype applied London-wide generates economies of scale, although it may not satisfy local conditions.

Information available at the bus stop about buses, their frequency of passage, their arrival time, their routes and destinations is an improvement for passengers. Other functional prescriptions emanate from health and safety concerns regulated by politics and the state. An example is the need of the bus stop to protect the waiting passengers from passing traffic. Implicit (socio-political) conditions are to make the travelling public

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feel safe, for instance by preventing vagrants from using the bus shelter as temporary accommodation. Together, such physical, functional and legislative performance specifications provide the brief for the design of London bus stops.

The resulting design is a roof and a vertical protection against the weather, glazed to feel safe and to see the bus arrive. A very narrow, high and sloping bench prevents lying down and sleeping on it. For economic reasons the roof is detached from the walls letting rain fall on sitting passengers. The bus shelter opens inward towards the pavement to prevent waiting passengers from stepping into street traffic. Optional electricity supply provides lighting for passengers' safety and to show bus arrival times. Parts of the shelter are obscured by advertisement while parts onto the street and oncoming traffic are transparent. Unfortunately, the ticket machine and the post which shows the bus lines, routes, timetables and destinations are obscuring the view. Situated closely together these objects are obstructing access to, and exit from the bus.

The result of this design is that passengers get wet when it rains, cannot see the bus arrive and have difficulties in getting on and off the bus, especially when it stops away from the pavement and obliges passengers to step into a gutter full of storm water: all in all a dysfunctional design, not fit for purpose, an aesthetic clutter repeated throughout the city.

1º dia - London bus shelter and street furniture obstructing view, photos Judith Ryser

The humble bus shelter encapsulates the complexity of urban design and the importance of its wider context. Thus the purpose of our contribution to EUSS11 was threefold:

- increase knowledge and skills of students;

- apply a practical urban design tool to two concrete projects at the workshop;

- explore wider connections between design, cities and people.

We were discussing contemporary urban design criteria and interdependence between architecture, urban design, planning and use of space as contribution to the knowledge, skills and ability of design students.

Our key questions for professional practice of urban designers and planners were:

-       which urban design and planning criteria may lead to better urban places?

-       what are the relations between physical form, functional structure and social aspiration to improve quality of life?

-       which spaces are contributing to urban quality: public, private and links between them?

-       how is urban quality generated and at what scale: neighbourhoods, districts, cities, metropolitan regions and beyond?

1. Tool Kit of Urban Designers

The bus shelter example shows the importance of reconciling potentially contradictory sectoral and functional requirements, as well as integrating design at various scales, from street furniture to neighbourhoods and the city as a whole. Academics and practitioners have elaborated a number of planning and urban design tools to understand the built environment

on the one hand, and to provide guidance for physical – spatial design interventions on the other hand. They aim to contribute to the improvement of the quality of urban space and the quality of life of those who use it. Design tools constitute a vast resource. Besides relating to the human scale, their appropriateness depends on a wide range of contextual aspects, such as the fine grain of a specific built environment and its relation to the wider context.

2º dia - Quality of urban space: Rio project, Madrid, Spain, photo Teresa Franchini

Urban design techniques developed during the second half of the 20th century were instrumental in introducing sustainability into the production and regeneration of cities. Shaping urban spaces is about the relation between physical form and functions structures, about how physical attributes are affecting the use of the public realm. Increased awareness of the interdependence between planning, urban design and the use of public space have led to internationally applied design criteria.

Planning criteria

Planning criteria have evolved alongside organic changes in the built environment and society. The latest planning principles for the transformation and adaptation of the urban fabric and the provision of a good quality, sustainable urban environment include the following seven characteristics: compactness, high density, mixed development, sustainable transportation network, diverse housing supply and tenure, environmental conditions, and good urban design[12]. More generally, sustainable planning concentrates on four key issues: urban fabric, urban structure, environmental conditions and formal definitions of sustainability.

A sustainable 'urban fabric' provides a balance between buildings and open spaces. Open space networks are composed of natural and artificial elements to satisfy different uses at various scales, and sustainable 'urban form' means compact built up areas. This is more likely to be achieved by 'the compact city'[13] than urban sprawl, by regenerating and recovering abandoned, underused or degraded urban areas, while protecting urban heritage. High densities are assumed to attract necessary urban amenities and economic activities as part of a viable urban fabric. However, the concept of residential high density varies with cultural context - relatively low in northern and central Europe and quite high in Mediterranean cities, albeit with changing trends.

Sustainable 'urban structure' is related to the functional aspects of the city, the linkage between uses (activities) and accessibility (transports). Neighbourhoods are considered the basic units of civic life and social integration where urban activities are best accommodated in well-balanced mixed uses comprising housing, workplaces and services. Housing constitutes the major part of urban environments. Mixed housing types and tenure promote social diversification, while optimum use of urban infrastructure is achieved by concentrating productive and service activities in centres and sub-centres located around transportation nodes.

[12] Classics and contemporary authors on urban design are among many: Gordon Cullen, 1961, The Concise Townscape, Architectural Press; David Gosling, 1996, Gordon Cullen - Visions of Urban Design, John Wiley & Sons; Francis Tibbalds, 1992, Making People Friendly Towns - improving the public environment in towns and cities, Spon; Andy Karski, on Francis Tibbalds http://www.rudi.net/books/9943; Matthew Carmona, 2003, Public Place, Urban Spaces - the dimension of urban design, Architectural Press; Ron Kasprisin, 2011, Urban Design, the Composition of Complexity, Routledge.

[13] Richard Rogers was spearheading this concept as head of the Urban Task Force: Towards an Urban Renaissance, 1998.

Sustainable 'transportation networks' are composed of different interactive modes, giving preference to public transport, cycling and walking and favouring alternatives to private individual means of transport. Pedestrianisation is a core concept in achieving sustainable micro-urban structures. They are best combined at neighbourhood level with good access to a centre with mixed uses at high gross density, where priority is allocated to pedestrians.

Although 'environmental aspects' have formed part of the urban planning agenda since the 1970s, the movement towards urban sustainability gave a revival to the environmental dimension. Core matters in any urban project include energy efficiency in buildings, infrastructure and services, with emphasis on renewable energy, resource recycling and new green technologies for buildings and infrastructure.

Urban design criteria

The formal success of this type of urbanism rests on good quality urban design expected to foster a sense of belonging among residents of integrated and well connected neighbourhoods. Current criteria of good urban design encompass identity, continuity and enclosure, ease of movement, legibility, character quality of the public realm, connectivity, accessibility, visibility, diversity, permeability and adaptability, security[14].

More specifically, 'character' signifies places with their own 'identity'. Landscapes inform such urban areas which preserve natural features and integrate existing buildings with valuable urban components. They include local forms, architectural style and construction details to reflect their specific urban fabric.

'Continuity and enclosure' mark a clear delimitation between public and private spaces. In design terms this amounts to buildings aligned onto the street. Such streets and their active facades define the urban environment, create activities, generate movement and facilitate social control. Set-back buildings create valuable urban spaces while changing continuity of use; rear facades define inner courtyards, communal spaces; sense of security form relationships with other buildings and public spaces. Partitions and other design components facilitate change of levels and access to buildings; they also provide privacy and shield unsightly places, such as parking areas and waste disposal [15].

'Ease of movement' ensures external 'connectivity', local 'accessibility' and 'permeability'. Design contributes to fluid movement by providing multi-modal spaces which are shared or segregated depending on local needs. Besides accommodating all modes of traffic, traffic calming does not only contribute to security but creates a better public realm. 'Permeability' and 'legibility' of the whole communication system are the essential

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14 By Design, Urban Design in the Planning System: Towards Better Practice. Commission for Architecture and the Built Environment (CABE) 2000.

15 e.g. Jan Gehl, 2010, Cities for People, Island Press

aspects to solve by providing recognisable routes for residents and visitors.

Key to desirable neighbourhoods is the 'quality of the public realm' which needs to be attractive, accessible and secure. Living ground floors with dynamic activities contribute to that, as does good 'visibility' which facilitates natural surveillance and a sense of 'security'.

'Good urban design' includes a favourable micro-climate adapted to local weather conditions, adequate street furniture, paving and greenery. Design can provide diversity, variety and choice. It should foster a mixture of compatible uses in buildings and open spaces, together with mixed forms and types of public and private buildings.

'Legibility' is perhaps one of the most interesting criteria, since it represents the point of view of the city users. Early in the 1960s, Kevin Lynch and Gordon Cullen advised urban designers about the need to create stunning images to favour the development of the 'imageability' concept - or the faculty to remember urban landscapes - and to manipulate the urban elements to achieve impacts on people's emotions [16].

Legibility achieved through recognisable routes for residents and visitors enhances quality of urban life. It can be provided by elements of urban images - nodes, edges, landmarks, boundaries and barriers. Active uses of main routes and focal points represent the identity and vitality of a place.

'Adaptability' of buildings and spaces means that they are capable of conversion with other purposes. Adaptability of public spaces becomes apparent when they are hosting a diversity of uses, such as festivals, events or markets. Diverse uses of public spaces enrich urban quality, together with buildings of simple shapes, floor heights and depths with adaptable ground floors [17].

[16] Kevin Lynch, 1960, The Image of the City, MIT Press; Gordon Cullen, 1961, The Concise Townscape, Architectural Press

[17] Kelvin Campbell, 2011, Massive Small - the operating programme for smart urbanism, Urban Exchange. This essay is revisiting the basic building blocks of integrated urban design.

4º dia - Example of urban form based on current urban design criteria: Kronsberg District, Hanover, Germany. Source: La ciudad sostenible. Manual de Diseño, Instituto para la Diversificación y Ahorro Energético. Ministerio de Economía, 2002

Social use of the urban realm

The social dimension is an important aspect of urban design. Human behaviour is situational; it is embedded in physical space [18]. Decisions about the urban environment which are aimed to enhance the use of the city are affecting groups as well as individuals and their quality of urban life.

Three types of activities occur in urban space: 'compulsory', 'optional' and 'occasional' [19]. Together they constitute the basic demands of the urban realm which provide accessibility and security to facilitate easy use of the city. Urban routes form the basic condition of accessibility, together with interesting destinations. While many routes lead urban dwellers from origins to destinations, they may choose selected routes which offer them intermediate spaces for optional activities. Such route networks form part of a social system of movement.

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[18] Kevin Lynch, 1960, The Image of the City, MIT; Gordon Cullen, 1947, Townscape Casebook, Architectural Review. For a more theoretical approach see Manuel Castells, 1972, The Urban Question, Arnold.

[19] Quentin Stevens, The Ludic City, Routledge, 2007

Sustainable cities are those capable of fulfilling user needs. This includes urban spaces which offer comfort, appropriate physical and environmental conditions and active links to provide opportunities for social interaction. However, spaces for proximity do not necessarily bring about interaction. Elements of discovery, such as markets, exhibitions, spectacles and social events may break routines and liven up passive links. Adjacent to pedestrian flows they provide opportunities for relaxation and observation. They can become places to stay where explicit elements such as benches or chairs, or implicit spaces such as steps or low impediments are encouraging formal and informal interchanges.

5º dia -Example of a space fostering concentrated and diverse urban activities at the neighbourhood level: centre of Manchester, photo Teresa Franchini

Vocational professions like planning, urban design and architecture contain a considerable hands-on dimension. The planning and design criteria presented above reflect that. They are captured in assessment tools - indicators, rank orders, or similar metrics to assist designers in designing better quality places for better quality of life. Whether proscriptive, prescriptive or advisory, these tools form part of 'conventional wisdom' of planning, urban design and architecture. Not all professionals choose to use them though and alternative approaches persist or are rediscovered

like those of Christopher Alexander [20] or Jane Jacobs [21] who retain their followers. This diversity gives rise to healthy continuous debates on urban design, its purpose and its tools.

2. Quality of Space – Quality of Life: Towards an Evaluation

Focusing on quality of space and quality of life in times of economic austerity constitutes a particular challenge for professionals of the built environment, politicians and local communities. In cooperation with local practitioners, elected representatives and academics the hosts of EUSS11 selected two sites with generic complexities: one a cosmopolitan fringe settlements in a large, fast growing metropolitan area; the other a sea resort with high seasonal population fluctuations.

The workshop provided a framework to explore the definition and meaning of 'quality of urban space' and its relation to 'quality of life', and offered an instrument to identify and evaluate what is essential about quality of space, which mechanisms are transforming it, and what trends would enhance it. At the workshop the students had the opportunity to apply a specific urban design instrument to understand the two given sites, evaluate their potential, make explicit assumptions about their use, and propose spatial – physical designs to improve quality of space and quality of life for their users. Beyond that, it enabled them to explore interactions among people, links between people and their environments, as well as connections between urban design and the complexity of cities.

The evaluation tool

The workshop offered students a hands-on opportunity to experiment with a simple design evaluation tool. The objective of using a matrix was

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[20] See for example Christopher Alexander's Eishin Campus near Tokyo and his writings on The Nature of Order.

[21] Jane Jacobs' Life and Death of Great American Cities written in the 1960s is experiencing a strong revival.

to explore the existing physical conditions of both the site on the outskirts of Lisbon (Arroja) which is in need of social and cultural integration and the site on the coast (Sintra) which has to accommodate large temporary population fluctuations. The succinct audit encompassed both quantitative and qualitative criteria. It aimed to capture the quantitative conditions of the physical context, together with the qualitative characteristics assumed by the students ex ante and verified during site visits through the perception of inhabitants and visitors. Identifying desired trends helped to clarify what the physical context could contribute to the quality of life in these sites.

The audit was conceived as a process. Students would establish relevant thematic subjects for each site and - related to each of them - indicators, thresholds to be fulfilled, current trends and those which were desirable. This evidence base would enable students to evaluate the existing circumstances and assist them in devising interventions to improve the quality of space and thus the quality of life of inhabitants and visitors.

Matrix of analysis and evaluation

Thematic subject	Indicators	Thresholds	Existing situation	Desired tendencies

Four categories for each thematic subject established ex ante and post hoc site visits [23]

Examples

Thematic subject	Indicators	Thresholds	Existing situation	Desired tendencies
accessibility	walking distance to public transport stop from home	600 m	1000 m	1000 m
	ease of movement on pavements	avoid slopes above 1% not more than 1cm of difference of level between slabs	broken paving stones	repair pavement resistant to wear and tear
	ease of movement on pavements for special needs	provide bubble surface for blind people at crossings width sufficient for wheelchairs	bollards across pavements cars parked on pavement	prevent cars from accessing pavement
security	public-private space integration	avoid barriers and access control	poor lighting in streets	promote better street furniture
	inclusive uses	activities for all ages	good situation	maintain
liveliness	compactness	100 inhabitants/ha	low density	increase
	commercial centre	catchment area: 600 m radius	small commercial activities	maintain & promote
	urban animation	day and night people flows	scarce flows	Promote better flows with more animation

The role of design tools and observation

Whatever kits of tools designers are using, it is important to acknowledge that it matters little what they think personally about the built environment and its uses. Their task is to observe people and how they are using the city and in particular the public realm [24]. In combination with design tools observations help them to understand the city and reasons for urban change as prerequisites of designing places for a better quality of life. Designers can also learn by experiencing urban places and spaces as evidence base for their design. Engaging with the built environment and how people shape and use it can contribute to a wider (theoretical) body of knowledge. It should be kept in mind that observation and urban design are embedded in a wider context of planning and the dynamic of cities as a whole.

3. Connections between Urban Design, Planning and the Complexity of Cities

Even a brief acquaintance with the two sites selected for EUSS11 has highlighted the many interdependencies between the local level and the broader spatial and geo-political context. The specific problems encountered on these sites for which design solutions are sought are linked integrally to the socio-economic development goals of the country, their dependence on the wider European region and their exposure to global competitiveness and political pressures. Interventions aimed at redressing the specific deficiencies of the two sites need to be realisable within local constraints, but their long term success depends on broader urban regeneration strategies. It is thus important to understand the dynamic interplay between the local level and spatial as well as socio-economic transformations at broader scales.

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24 See for example the film by William H Whyte, 1979, on the use of New York plazas.

25 e.g. Georges Perec, Peter Kellner, Walter Benjamin.

26 e.g. Michel Foucault, Gilles Deleuze, Jacques Derrida, Pierre Bourdieu, Richard Florida, Francis Fukuyama.

27 e.g. situationists led by Guy Debord, the postmodernists dealing with design such as Also Rossi, Manfredo Tafuri, Robert Venturi, Rob and Leo Krier, etc.

Before entering a discussion on concrete urban regeneration, it is proposed to explore the interdependencies between quality of place and quality of life, the theme of EUSS11. Cities form the context of better spaces for better quality of life, but planned urban regeneration constitutes only a small part of urban change which is driven by a plethora of other forces. It is important therefore to gain some understanding of these forces and how they may constrain or enhance design interventions.

6º dia - 'Spontaneous' urban change: cohabitation between the poorest and the richest in Sao Paolo, source: Tate Modern City exhibition – from Venice biennale 2006

Understanding the city

Understanding urban complexity has gone beyond the reach of 'renaissance genius' such as Michelangelo Buonarotti or Leonardo da Vinci. Besides learning from practice the professionals of the built environment need to resort to a wide range of scholars working at an abstract level or at a meta-scale. Designers tend to seek inspiration from many different sources: the arts and literature [25], philosophy [26], as well as alternative movements [27]. However, the theoretical knowledge base of urbanists is rooted in both the natural sciences (mathematics, structures, material sciences, chemistry, geology, cartography, modelling, imaging, etc), and the social sciences, such as urban sociology [28], psychology, geography [29] and economics [30].

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[28] e,g, The Chicago School with Louis Wirth, Robert Park, William Thomas, etc; the Frankfurt School with Jurgen Habermas, Herbert and Peter Marcuse, Georg Simmel, etc; Marxist urban sociology with Henri Lefebvre, Manuel Castells, Istvan Szelenyi Sharon Zukin, Chris Pickvance, etc

[29] e.g. Ernest Burgess, David Harvey, Edward Soja, Erik Swyngedouw, Susan Fainstein

[30] e.g. Johan Heinrich van Thunen, Walter Christaller, William Alonso, August Loesch, Jane Jacobs, Arthur O'Sullivan, Philip McCann.

This amounts to an enormous body of knowledge often compartmentalised into academic fiefdoms. Fortunately, many contemporary urban thinkers are making their ideas freely available on popular media [31]. Thus an unprecedented amount of knowledge is accessible to planners and urban designers which can influence urban development as well as political agendas.

Planning and urban design have continuously borrowed models of thinking from science. For example, ecology and systems theory are being used to understand rapid urban growth, while other models from physics and information technology are trying to explain urban shrinkage, or the impact of city user networks on blurring city boundaries.

With links to such diverse bodies of knowledge and know-how, planning and design are hybrids, bridging science and action. Moreover, their tools and designs are tied to particular historic times. Their practices attract critique in the light of failures and new knowledge [32] and when they embrace paradigmatic changes they become new objects of academic research. Owing to such a dialectic planning and design practitioners can improve their understanding of urban processes by drawing on a growing and changing body of knowledge which they can put to use for urban interventions and to which they can contribute in turn.

Renaissance of cities

In a period of ever increasing and accelerating urbanisation and globalisation, cities have regained a prominent position [33]. As essential wealth generators, cities are attracting the development industry and the body politic, while providing great opportunities for the professionals of the built environment. Cities can and do benefit from the body of knowledge of design to their advantage.

31
David Harvey is a good example of disseminating knowledge on media such as You Tube, websites and blogs, as well as at public gatherings, besides their academic writing. www.youtube.com/watch?v=qOP2V_np2c0 or newleftreview.org/?view=2740 (the right to the city)

32
See, for example, Peter Hall. 1982. Great Planning Disasters. University of California Press.

33
See for example UN Habitat compendia on cities.

Many cities have existed over a long time and are mature; they change more than they grow. Urban interventions - spontaneous, planned or negotiated – can lead to greater disparity between places and the life chances of urban communities [34]. Often urban (physical) renewal can only take place after destruction of existing city fabrics and displacement of existing communities. This process affects a broad range of inhabitants with different needs which relate to diverse criteria of quality of life, thus this process may not necessarily produce balanced quality of place and quality of life throughout the city.

7º e 8º dia - Planned urban change: destruction and regeneration of a central London island block, photos Judith Ryser

Polarisation due to urban processes and economic, spatial - environmental, social - cultural evolution are not new. The poverty maps of London compiled by Charles Booth at the end of the 19th century provide a detailed record of social disparities and differences between quality of place driven by early capitalism and industrialisation [35].

34
    Some tutors at EUSS11 illustrated this process in their presentations, e.g. Pietro Elisei who studied the living conditions and built environment of the Roma in Romania.
35
    Charles Booth, 1889, London poverty maps.
http://booth.lse.ac.uk/cgi-bin/do.pl?sub=view_booth_and_barth&args=531000,1804 00,6,large,5

9º dia - Booth poverty map of London 1998, source: British Library

Contemporary interactive maps, generated by the Greater London Authority show how and where polarisation is changing [36]. While living conditions improved overall, polarisation increased in London, which is reflected in a patchwork of diverse areas ranging from wealthy wellbeing to multiple deprivations.
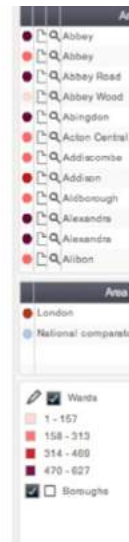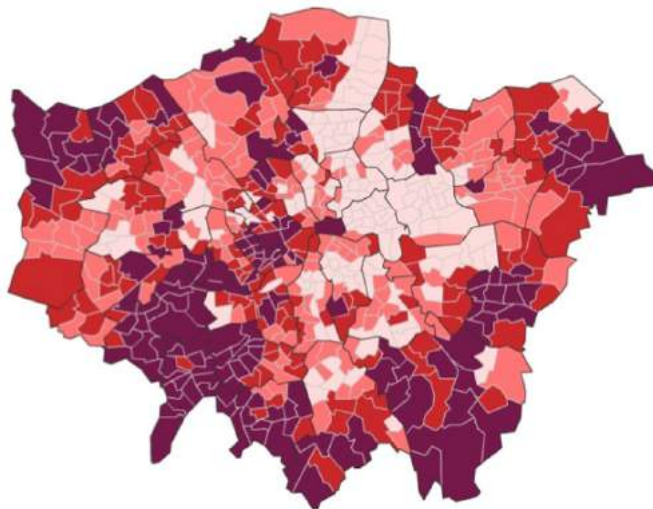
10º dia - Greater London Authority, datastore 'atlas': interactive map of spatial income distribution in quartiles 2007, source: GLA

[36] The datastore of the Greater London Authority is compiling an interactive Atlas, showing the spatial distribution of income inequality, multiple deprivation and many other factors of urban quality of life.
http://data.london.gov.uk/datastore/package/ward-profiles-2011

Urban regeneration

Urban regeneration aims to redress the most pressing urban deficiencies. However, the question of winners and losers remains critical, in particular whose living conditions are improving and whose are declining in the process of urban regeneration - before, during, after and in the long term. If the purpose of urban regeneration is to redress social and spatial injustice, it has to cope with inherent contradictions.

Can urban regeneration as practiced in neo-liberal environments by partnerships between the public and the private sectors really deliver sustainable, or more appropriately 'low (adverse) impact' development? Large scale urban regeneration projects with high political profiles are rarely accompanied by an independent and transparent monitoring process, especially one which evaluates not only narrow 'value for money' but broader impacts on existing populations and businesses, as well as quality of space and quality of life in these new urban environments. Annual reports to parliament by non elected development corporations are not providing appropriate scrutiny [37].

Evaluations are by no means easy and present many challenges. Measuring 'value for money' and improvement of quality of space and quality of life require a lot of clarification. Does value for money relate to the tax payers, profitability of the private sector, the land owner, the developer, the investor, other interested parties? Is quality of space and life meant to improve for those living, working and playing in the area, and/or the areas around them, or for those who move into these areas after regeneration? Is urban regeneration supposed to benefit the city as a whole, the nation at large? For example, the fact that no audits have been undertaken of the state of the local economy and society in the areas in and around the Olympic games 2012 in London, means that there is no base line to measure their legacy effects.

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[37] e.g. The London Dockland Development Corporation

Cities contain inherent contradictions between sustainability principles and economic growth, man-made environments and nature, city competitiveness and citizenry as a whole, openness and gated communities. These contradictions are at the heart of urban policy debates and regeneration processes. Economic growth tends to dominate any other development objective and, in times of recession, sustainability and social justice issues tend to lose importance. This shift also affects the balance between the man-made environment and nature, the city and the countryside, built up areas and open spaces within cities.

Tensions between cities and the diverse needs and wants of those who use them - residents (citizens, voters), the working population, visitors, transient people, etc - form part of urban life. Is there a system of government which can relate equitably to all of them and improve social and spatial justice? Who are the custodians of the collective good, of the public interest? Who holds decision makers to account, guarantees citizens

a say through public participation, shares out finite public assets equitably between all stakeholders? Who preserves urbanity by keeping the city open to all, and what role does physical urban regeneration play in all this? When proposing masterplans and urban design solutions for specific sites, these questions are equally relevant as design criteria and may contradict values embedded in planning and urban design tools. Most importantly, they may neglect 'the right to the city' of those with different values.

Gentrification, unintended consequence of urban regeneration?

Often, urban policies claim that by ameliorating the life chances of the least deprived sustainable urban regeneration is improving the quality of life of all citizens. Reality is not substantiating this, and in particular the presumed trickling down process lacks evidence. Gentrification is a likely result of urban regeneration and by enclosing and excluding great sways of urban substance from the public realm it is perceived as divisive and exclusive.

Gentrification contains key contradictions: social spatial (in-) justice, man-made environment vs nature, city vs citizens, openness vs gatedness. However, the impacts of gentrification are ambiguous. The question is whether gentrification is path-dependent on regeneration, whether it is

inherently adverse, or whether its divisive effects can be attenuated. It is clear that gentrification is making a major positive contribution to the improvement of the urban fabric. It releases a lot of energy and investment of individuals who are spending their time and money on improving derelict premises while often contributing to the improvement of the broader neighbourhood into which they move as a next step in their housing 'career' or to set up new innovative businesses.

13º dia - 'Organic' gentrification of run down inner city areas, photo Judith Ryser

Gentrification constitutes a social as well as a physical intervention in cities. It is often visible, in the shape of gated spaces and whole gated communities, but it also produces many less obvious infractions into the 'commons'. There is a need to balance the benefits of gentrification with its adverse effects on localities.

A path-dependent process of gentrification starts with the colonisation of derelict, abandoned sites, such as decommissioned factories or utilities by footloose artists and activists, sometimes accompanied by homeless or marginal people. The process may start with temporary events, one-off festivals, exhibitions, street markets and other events, organised by this faction of the creative industry, as part of transient urban life which enriches the city. Gradually, these premises are being occupied and

improved by those who live and work there. Often some sort of informal local economy is developing, based on innovative creativity of artists and social entrepreneurs. When such places start to show success, the erstwhile owners of the sites or the public authorities lay claim on them, evict the colonisers who have no title to land or premises, sell the sites off to private developers, often at very favourable terms, including recovering the costs of decontamination from the public purse. After lengthy conflicts, the foot-holders have to move on without benefiting from the value added which they have contributed to such sites by increasing their desirability and economic worth. A whole literature is honing these foot-holders [38] mostly without addressing their moral or pecuniary claims.

This leaves a host of questions for planning, urban regeneration and urban design. What happens to public ownership of land, premises and other urban assets and, in particular, to rights of way when they are being contracted out, sold off, privatised? What is the role of planners and urban designers in this balancing act between private property and public realm?

Spatial diversity, reflected in mixed development with different uses alongside each other forms a key ingredient of 'quality of space'. Conversely, private, development-led, profit seeking urban regeneration tends to create 'sameness'. The Broadgate office estate developed in the financial heart of London on decommissioned railway land is a typical example of privatising land, made and making it available to public use under great surveillance and private control [39]. Battersea power station expresses the generic conflict between citizens and custodians of citywide wellbeing regarding rights and responsibilities of public goods and public land, such as disused public utilities which remain natural monopolies even when transferred to private hands. In many cases decommissioned sites give rise to prolonged planning blight which may seep out to surrounding areas [40].

38 e.g. Richard Florida, 2002, The Rise of the Creative Class, and how it is transforming work, leisure, community and everyday life, Basic Books

39 http://www.britishland.com/index.asp?pageid=157

40   the urban development site is again back on the market, see http://www.guardian.co.uk/business/blog/2012/feb/15/battersea-power-station-development-housing/print.

14º e 15º dia -Battersea power station site and one of the abandoned projects with the highest tower in Europe by Rafael Vinoly. sources: http://www.insidehousing.co.uk/development/further-800-homes-planned-for-battersea-site/6516513.article; http://www.worldarchitecturenews.com/index.

16º dia A -Broadgate 1980s redevelopment site
16º dia B -Broadgate 'Mark II', Tower, 21st century redevelopment sources: http://www.kidsfunlondon.co.uk/kids-london/ice-rink/broadgate-ice-rink.html http://www.gardenvisit.com/blog/category/landscape-architecture/london-urban-design/

Considering the long term life expectancy of urban regeneration, many examples show that when carried out by private developers, regeneration developments do not tend to last. Broadgate is being demolished after only 20 years of existence, notwithstanding a large amount of embedded public investment, to give way to much higher densities for the same mono-functional (office) purpose. Thus, demolition adds value to land, reconstruction boosts the construction industry, new owners achieve greater yields through capital gains and higher rents. This process has become ambiguous though with securitisation which attracts corporate investors, including pension funds. 'Profit' is no longer clearly identifiable, as it diffuses across a wide range of changing stakeholders, including the general public through their pension funds. It is unlikely though that value added of this process is finding its way back into the public purse.

This process makes the physical fabric transient without lasting identity. Most critically, it reduces the public realm [41] and contributes to perceptual uncertainty and alienation. The design professionals are participating in this process, increasingly for the private sector and its value systems, and often in contradiction with the meaning if not the letter of public planning principles.
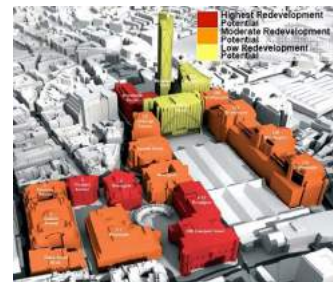
[41] See for example, Anna Minton, 2012, Ground Control - Fear and happiness in the 21st century city, Penguin Books.

4. Quality of Space and Quality of Life in Cities: Changing Perspectives of Planning and Urban Design Practice

The aim of this paper is to show the connection between practical design tools and a wider contextual understanding of cities as a prerequisite of urban design and planning interventions for particular sites. A brief historic perspective exposes the dynamic of this connection.

Sustainability principles form part of contemporary planning tools [42]. However, current austerity times are eroding them by attributing preference to development-led planning [43], this despite the recent property crashes and negative equity which leave behind unsustainable 'ruins before their time'.

Before that, planning criteria focused on 'hard' physical - spatial and functional aspects, urban form and fabric, land use, transportation, housing, neighbourhoods and environmental conditions, while including some 'soft' factors, such as quality of design, liveability and sense of belonging [44]. Earlier on, land use planning and development control resorted to prescriptive norms, rather than to more generic functional criteria open to interpretation, arguably more adapted to a constantly changing urban environment.

These few changes of the planning process show that planning kept incorporating new ideas, either from planning theories, or from practice and politics. Most new approaches focused on single issues. Examples are physical hierarchy and segregation between traffic modes [45], and urban renewal of large urban areas deemed redundant involving demolition and replacement [46]. Reaction against such top down authoritarian planning manifested itself in demand for public participation, but the planning system soon reduced that to public consultation, often only of accredited groups and at a late stage of the planning process [47].

[42] For example the latest London Plan 2011. http://www.london.gov.uk/priorities/planning/londonplan

[43] For example the Localism Act 2011 in the UK. Relaxation of planning has even become an integral part of national budget making (UK budget of 12 March 2012).

[44] These aspects had to be included in the Local Development Frameworks which were introduced in the Planning and Compulsory Purchase Act 2004 as statutory documents to be produced by the planning authorities, but may be superseded by the national planning policy framework currently under parliamentary discussion.

Akin to many other places, the two sites situated respectively on the outskirts of Lisbon and on the Portuguese coast were influenced by such ideological and/or technological changes to planning approaches and carry their traces in their physical fabric.

Similarly, urban design criteria underwent continuous change. Formerly considered as an aesthetic add-on urban design became a popular debating point [48]. While the boundaries between planning, urban design and architecture were shifting continuously, historic and environmental dimensions were gaining importance and led to conservation planning, followed by ecological and later sustainability concerns in urban design. Like for planning, present economic hardship is swinging the pendulum towards relaxation of design regulations.

17º dia - Regenerated inner city according to changing design criteria, Rua Augusta, Lisbon, Portugal, photo Teresa Franchini

[45] Colin Buchanan. 1963. Traffic in Towns. A study of the long term problems of traffic in urban areas, reports of the steering group and working group appointed by the Minister of Transport. HMSO. Shortened edition. Buchanan Report S228. 1964 Penguin Books.

[46] practiced all over North America and Europe, especially in the UK and France after the second world war and in the sixties during rapid urbanisation and mass immigration.

[47] See successive amendments to the 1947 Town and Country Planning Act in the UK.

[48] See for example the ongoing debate on the merits or drawbacks of skyscrapers. http://londonist.com/2012/03/boris-ken-and-the-london-skyline.php.

Nevertheless, design criteria derived from analysis and experimentation are worth preserving. Environmental determinism [49] has evolved into more subtle relations between spaces and their uses which have been researched intensely [50].

Studies of urban experiences focused on how people are using the city, moving through it, reaching destinations, carrying out tasks and moving on. These movements relate to social networks at home, at work and in life in general. Urban routes and intermediate spaces are relevant to that experience, such as the existence of interesting destinations. Research shows that selected routes are more enriching if they lead through intermediate spaces which give rise to optional activities [51]. By observing barriers and hurdles to these urban flows it becomes clear that urban route networks function best when they are integrated into local movement systems.

18º dia - Regenerated industrial land, Bilbao urban park creating new routes along the river, photo Teresa Franchini

[49] epitomised by Oscar Newman's defensible space theory (1972). Creating Defensible Space, 1996, HUD.

[50] e.g. Caroline Holland, Andrew Clark, Jeanne Katz, Sheila M Peace, 2007, Social interactions in Urban Public Places, Josef Rowntree. http://www.jrf.org.uk/publications/social-interactions-urban-public-placesFoundation.

[51] e.g. Ron Kasprisin, 2011, Urban Design, the Composition of Complexity, Routledge.

Other studies concentrating on user needs include comfort which involves physical and environmental factors and active links that provide opportunities for social interaction. Discovery forms part of user needs. Activities in the public realm can bring welcome variety and surprise and help break routines while passive links provide opportunities for relaxation and observation. Passive links adjacent to pedestrian flows constitute formal and informal, explicit and implicit places to stay [52]. From these studies it is clear that design criteria are not so much about how they can contribute to the quality of the urban environment, but how well designed urban places can influence their uses, and in particular the quality of life of those living, working, visiting and playing in these spaces.

19º dia - Agustin Lara Square, Madrid, regenerated public realm in the inner city, photo Teresa Franchini

[52] e.g. work of the Urban Movement Team at Urban Initiatives, http://www.urbanmovement.co.uk/

5.   Conclusion, Towards an Urban 'Intra-Language'

The interface between cities and society, between urban realm and urban quality of life contributes to the infinite fascination of cities. Cities cannot be captured by simplistic interpretations. Understanding an urban environment and how people are using it is a difficult task and necessarily based on assumptions and, as some would have it, on ideologies [53]. The complexity of cities means that expertise derived from intervening in the urban environment remains limited. Hence planners and designers need to relate to the insights of a wide range of social, economic and environmental scientists, as well as practitioners and planning instruments, such as the evaluation tools discussed above, in dealing with the complexity of cities and quality of life of those 'habiting' [54] them. Sharing knowledge across the professions helps putting design proposals into a broader context and a longer timeframe to make them more flexible and adaptable, thus resilient and sustainable.

In practice, planning and design are contributing to quality of life by conceiving user friendly places. The proof is that citizens identify with them by 'inhabiting' them and taking ownership of them which fosters welcome stability of space and place. However, it has to be remembered that urban spaces are produced by the development industry and increasingly managed by it according to different motivations and values. At present, the turbulence of the global economy, its repercussions on urban society and how the discontented are expressing their despair with the human condition are creating new challenges [55]. The way these movements are taking possession of the public realm to protest against the excesses of capitalism, the way they try to redress the erosion of urban quality of life constitute a new field of experimentation from which urban designers and planners could learn how to conceive better urban places for a better quality of urban life of the many.

[53] The Urban Question by Manuel Castells, 1972, Arnold, contains a number of critiques of according to him 'misguided' interpretations of urban structures and functions.

[54] 'habiting' is a term for all those experiencing city life, proposed by Henri Lefebvre in theorising the right to the city.

[55] Observe how the Occupy movement http://occupylondon.org.uk/ and the Indignados in Spain have used urban space and what their claims are for the public realm. http://en.wikipedia.org/wiki/2011%E2%80%932012_Spanish_protests

20º dia - Spontaneous 'taking ownership of urban space', 'sandy living room' during low tide on the Thames, photo Judith Ryser

Explanations of the interplay between space, place, use and users may always be tentative. All designers can do to contribute to what is inherent in, and perhaps the very essence of urbanity [56] is to combine their competence of measuring quantitative aspects of urban life in urban space with more qualitative characteristics and resort to their own experience while maintaining a dialogue with others in producing designs for urban quality of life.

Many urbanists consider it part of their profession to engage in raising awareness of the value of good design among decision makers of the built environment as well as the general public. This raises the issue of communication between the multitude of protagonists involved in the destruction, production, regeneration and maintenance of the built environment, and the need to construct some 'intra-language' between them. Maybe it is the destiny of the design professionals to pioneer such an 'intra-language' between urban stakeholders to create more liveable cities.

[56] e.g. Matthew Gandy (ed), 2011, Urban Constellations, Jovis. This collection of short essays covers a very broad range of space-user interactions.

Preamble

This paper tries to point out practical as well as conceptual open questions about the topic of Territorial Cohesion (TC). It focuses on practical problems met by the author in his daily work as town and regional planner, often carried out in EU convergence territories (ex. Ob. 1). It acknowledges the scientific statements developed by EU institutions in recent years as a frame of the picture representing the policies and instruments for Territorial Cooperation and Cohesion. In other words, the article is about "operational considerations" aiming at stimulating new attentions on how to make the debate on TC more practical than a thoughtfully considered essay providing a detailed storyline on the topic and its past and future transformations. [57]

These consideration address three critical points:

1) the difficulty of fully involving the local administrative levels in new and innovative opportunities for TC

2) a fluctuating "Europeanisation" in the realm of territorial cooperation (especially related to the urban dimension),

3) the uncertain perspectives on how to design effective and efficient future urban policies for 2014-2020, both at central and local level.

Territorial cohesion as a dynamic, evolving, but "locally rooted" concept...

In December 2011 I attended a conference on Territorial Cohesion. The precise topic of the conference focused on the links among territorial cohesion, the competitiveness and the new EU2020 Strategy (it is likely that such conferences are going to be carried out everywhere in Europe).

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[57] Recent literature on territorial cohesion focuses mainly on its background and various aspects of the concept's introduction in the EU policy discourse. Janin Rivolin (2010) offers a compilation of relevant official texts and Faludi (2010) endeavours to clarify how Cohesion policy relates to the debate on European spatial planning, also covered by Dühr, Colomb and Nadin (2010). (Faludi, Peyrony, 2011)

One of the conference guests (an academic) put a request to the representative of the Ministry (a person having a very important role): can you provide us with a precise and unique definition of "Territorial Cohesion"? The representative of the Ministry immediately answered back: you will find a precise definition of what territorial cohesion is in the conference proceedings!

As a town planner involved in the use and promotion of EU designed tools for territorial management and development, I was terrified by such an absurd dialogue, but it gives a good idea about the state of the art regarding this topic.

This anecdote is to emphasise how distant the conceptual thinking of researchers and policy makers is from the reality of "making" territorial cohesion, and applying integrated territorial and urban approaches "in the field".

Territorial Cohesion for many practitioners, researchers, city managers and politicians is still something insubstantial and slippery, but they have a need to package this concept. From the Urban pilot projects (1995), to the Urban I and II experiences (from 1994 to 2006), considering the ESDP (1999), until the Leipzig Charter (2007), taking into account the Green paper on Territorial Cohesion (2008) and concluding with the last Territorial Agenda of the European Union 2020 (2011), we can notice that the Europeanisation of regional and urban policy still remains actual. The question remains whether the Europeanisation of territorial policies has bred into a precise relationship between territories (cities, towns, metropolitan areas, regions), (elected/functional) needs, and EU promoted urban policies [58]. There seem to be some major and minor mismatches in this process of Europeanisation of Urban Policies.

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[58] We all know that the EU is not responsible for urban policies, but we even know as it has been one of the major protagonist in proposing innovative tools for urban renewal/regeneration (especially in the second half of the 90's).

I see three main categories of still open questions, which are containing and raising many other related and inter-connected problems:

1. In the current programming period EU investments into territorial cooperation (where it is possible to experiment with real integration) are minor when compared with those directed to competitiveness and convergence objectives (2,5 % of total investment operated through structural funds) [59]

2. The EU continues to lack competence for urban policies [60].

3. Even if it is clearly stated that sustainable town planning is rooted locally (it is always worth to remember the fundamental and effective RIO 92 slogan "think global act local") [61], national ministries or powerful regions tend to retain control over what could happen/ is happening in cities (this last point raises basic questions about the enforcement of the subsidiarity principle in the EU) [62].

The unstable condition of EU promoted urban policies/initiatives creates continuous doubts about what territorial cohesion should mean in practical terms for cities. This generates confusion and pushes people to ask for a precise definition. However, to formalise the concept of territorial cohesion into a set of allowed or prohibited initiatives is not the way to let this concept evolve.

If we accept that a sustainable development is locally rooted and based on needs, requests, ideas, initiatives of local communities, then there is a risk to confound the Community at state level with local communities. The cohesive "glue", without posing any risks to the sovereignty of nation states and regions [63], could be found in a set of shared and well-designed urban tool, EU promoted and locally implemented. It seems that the next programming period (2014-2020) is taking this path, and above all is preparing the ground for really implementing integrated approaches.

Instead of looking for a static definition of territorial cohesion, we have to think how to connect better the dynamics of local levels (towns, cities,

[59] […] the greatest investment ever made by the EU through cohesion instruments will be worth € 308 billion (in 2004 prices) to support regional growth agendas and to stimulate job creation. 82% of the total amount will be concentrated on the "Convergence" objective, under which the poorest Member States and regions are eligible. In the remaining regions, about 16% of the Structural Funds will be concentrated to support innovation, sustainable development, better accessibility and training projects under the "Regional Competitiveness and Employment" objective. Another 2.5% finally are available for cross-border, transnational and interregional cooperation under the "European Territorial Cooperation" objective[…]. Inforegio - http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/newregl0713_en.htm

[60] The precise status of urban policy in the EU […]has always reflected the balance of forces inside and outside the Commission between those who want to promote the urban agenda and those concerned to limit its significance. The essential story of urban policy in the EU is one of a gradual
increased recognition of the importance of cities – but always under the umbrella of regional policy. There have been key moments when the issue was pushed up the agenda – for example with the creation of the URBAN Community initiative in 1994 or the Urban Forum in 1998. But periods of advance have often been followed by periods of retrenchment - if not retreat. (Parkinson, M., 2005).

metropolitan areas, inter-communal systems…). Of course, in a specific territorial case this dynamic is very slow and needs to be triggered by external, supra-local inputs to progress the definition/evolution of the concept of territorial cohesion. Territorial cohesion does not consist of a well written sentence with clear bullet points, but it may be a set of methodologies for local and regional development, a set of development tools and specific urban policies (policies for regeneration, development, renewal, rehabilitation, culture, social inclusion). The toolbox for territorial cohesion is still too empty, especially at the urban scale.

The process of Europeanisation of urban and regional policies, with its mismatches, could still be summarised as follows:

• Europeanisation enriches and transforms the institutions (at all administrative levels) and makes their governance frameworks more complex;

• Europeanisation changes politics, policies and behaviours of single member states. [64]

The governance questions of town planning can be enriched by a supra-national actor. At least this would provide a viewpoint (trans-national, or relatively neutral) that can open other perspectives and add further financing for urban questions. What is relevant though is to enable cities to access funds for TC directly from the EU, that is permitting a direct dialogue between cities and a central, but composite, heterogeneous, multi-culturally generated polity.

Why did the EU stop the Community Initiatives orientated to cities? The fact of blocking such Community initiatives has been a bad sign of how some forces push to fragment the political and cultural construction of the European Union based on bottom-up experiences linked to real examples of community development. The evaluation of the urban experience was not bad at all. However, thinking about a Europe of cities, or a Europe where even small and medium sized cities could account for more is still

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[61] The original phrase "Think global, act local" has been attributed to Scots town planner and social activist Patrick Geddes. Although the exact phrase does not appear in Geddes' 1915 book "Cities in Evolution," the idea (as applied to city planning) is clearly evident: " 'Local character' is thus no mere accidental old-world quaintness, as its mimics think and say. It is attained only in course of adequate grasp and treatment of the whole environment, and in active sympathy with the essential and characteristic life of the place concerned. (http://en.wikipedia.org/wiki/Think_globally,_act_locally#cite_note-2)

[62] The subsidiarity principle is one of the central principles in the EU context, laying down that political decisions in the EU must always be taken at the lowest possible administrative and political level, and as close to the citizens as possible.

[63] It is worth remembering that many regions, especially in newest member states, in EU are functional and not elected powers…these open many questions on their rights to make decisions on relevant financial investments, as they are not expression of local communities living in their territories, but a sort of operational branches of the central states.

[64] This concept of Europeanisation of urban policies is faced in the previous EUSS book: Urban Change. See "Eu Urban Tools and Regeneration" (Elisei, P., pag.39).

likely to be too advanced a concept for the current political way of thinking and making Europe.

The ex-post evaluation of the Urban I CI (GHK, 2003) has shown that URBAN I was a success, both in terms of the substantive impact of the interventions and in terms of the delivery mechanisms adopted: *"The Urban Programme contributed to improving the quality of life in the target areas, and also had a lasting impact on structures at the local and city level, which have been sustained to deliver urban policy beyond the life of the programme. "*

"The area based approach to tackling urban problems has been an essential ingredient of the success of URBAN II. It is unlikely to have been as successful if the funding had been allocated and run as a regional programme. This is because the 'essence' of URBAN II has been the 'bottom up' approach where, in the best examples, a wide range of public, private and community sector partners have been energised around a set of locally owned challenges and solutions (EC, ECOTEC 2010)."

The rhetoric of cities like engines of growth and sustainable development (and currently even of sustainable growth) would be more operational and less abstract if the EU had continued to provide an easily identifiable line of policies like the 'Urban Initiatives' which could cope with the capability of being local instruments (cities proposing places and issues to solve) while giving concrete guidelines valid at EU scale (the EU providing a method based on lessons learned from best practices instead of nation states or development agencies, as many of these institutional actors do not know what is good for town planning).

Territorial cohesion and the economic crisis: is a real integrated territorial approach the solution?

The financial and economic crisis, a daily leitmotiv of the last years, is

confounding again the "magic" words in the dictionary of 'town planning' and 'regional development'. The last key documents issued by the EU/EC on territorial cohesion put again a very old-fashioned and evergreen word – growth - into the centre of the arena! The moral obligation to continue paying pensions, to support public spending (health, transport, education, justice, culture ...), to maintain a decent level of welfare has encouraged politicians and economists to oil the mechanisms that run the growth society.

This is a first important consideration to reassess: Why do we inspire our strategic policies, in a period of vulnerability, by just expecting the come back of an imaginative golden age of growth? Clearly, the return to the use of the term growth, in the middle of the post-modern, or, perhaps more likely, the late-modern times, has a romantic and nostalgic flavour. Of course the revival of this term raises some doubts about the ability of EU decision makers and policy designers to innovate, and raises the question: are there no alternative concepts that would dispense of the use of such an indigestible oxymoron as "Sustainable Growth"?

It was, and still is very difficult to construct a meaning for the 'sustainable development' concept, and to derive appropriate operational tools to implement it, considering that it is not free from internal inconsistencies and constrictions of connotations. Asking urban and regional planners to develop tools for 'sustainable growth' seems to be really a mission impossible! However, the task has become definitively more difficult, because, considering the EU2020 strategy requirements, growth must now be even "inclusive" and "smart".

Those who take care of the city and, more generally, the development of territories, know how unsustainable it is to keep pushing on the accelerator of consumption and investment just for the quantitative benefit of GDP. Yet, unfortunately, that seems to remain the only esteemed and respected welfare indicator.

As regards these last considerations, interesting argumentations are appearing in documents which are preparing the ground for the next programming period, specifically when considering the idea of proposing place based policies. "*A place-based policy* is a long-term strategy aimed at tackling persistent underutilisation of potential and reducing persistent social exclusion in specific places" (Barca, F., 2009) [65]. It is still not well known how the new regulations will be set up, but we can already notice from the first published documents that territory matters and, above all, that it is important to define methodologies for integrating funds, policies and strategies. Thus, planners should continue to work on defining feasible instruments necessary to put into practice the concept of "integrated territorial approach". One interesting proposal is coming from the Committee of the Regions. It proposes a revival of the Territorial Pacts, providing this definition: "A Territorial Pact for Europe 2020 is an agreement between a country's tiers of government (local, regional, national)". Parties signing up to a Territorial Pact commit to coordinate and synchronise their policy agendas in order to focus their actions and financial resources on the Europe 2020 Strategy goals and targets. The evident added value is the facilitation triggered by the pacts to realise a proper integration (vertical, horizontal, conceptual, relational, functional) at territorial scale: to link a specific area to a precise pact, to an explicit partnership, to a clear development idea (leading concept for development: a development driver). Integration seems to be, moreover, the very strong point of the new programming period (2014-2020), changing the concept of 2007-2013 mono-funds (that was not helpful at all for urban and regional development issues, especially the mainstreaming of structural funds for urban regeneration).

Recent proposals of the European Commission stated in the Common Provisions Regulation foresee diverse mechanisms to encourage integrated approaches [66].

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[65] It is important remembering , in the context of this article, that Fabrizio Barca, currently Ministry for Territorial Cohesion in Italy, has been one of the protagonists of the conceptual elaborations generated in the CNEL (Consiglio Nazionale dell'Economia e del Lavoro) during the 90's.regulation/newregl0713_en.htm

[66] COMMISSION STAFF WORKING DOCUMENT, Elements for a Common Strategic Framework 2014 to 2020 for the European Regional Development Fund the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund (2012). Mechanism's description is taken from this working document.

Mechanisms to facilitate the development of local and sub-regional approaches:

1. *Community-led local development*: Community-led local development (based on the experience of LEADER under rural development) can complement and enhance the delivery of public policies for all CSF Funds. It aims at increasing effectiveness and efficiency of territorial development strategies by delegating decision-making and implementation to a local partnership of public, private and civil society actors. Community-led local development should be implemented in the context of a strategic approach followed by public policy-makers, to ensure that the 'bottom-up' definition of local needs takes account of priorities set at a higher level.

2. *Integrated territorial investments for the ERDF, ESF and Cohesion Fund*: An Integrated Territorial Investment (ITI) is an instrument which provides for integrated delivery arrangements for investments under more than one priority axis of one or more operational programmes. Funding from several priority axes and programmes can be bundled into an integrated investment strategy for a certain territory or functional area. This can take the form of an integrated strategy for urban development, but also for inter-municipal cooperation in specific territories.

Mechanisms to encourage the development of integrated operations:

1. *Integrated Operations*: Unlike the current period, an operation may receive support from one or more CSF Funds and from other Union instruments.

2. *Joint Action Plans*: A Joint Action Plan is a new type of integrated operation implemented through a result based approach in order to achieve specific objectives jointly agreed between the Member States and the Commission.

Community-led local development and ITI are definitively very interesting innovations of the new programming period, as they move funds to local level management and partnerships. They could work if local administrations would be capable to insert them into local strategic development frameworks (e.g. Strategic Urban Agendas, Strategic Plans).

Further considerations

2) a fluctuating "Europeanisation" in the realm of territorial cooperation;
3) the uncertain perspectives on how to design effective and efficient future urban policies in 2014-2020, both at central and local level.

In considering the involvement of cities in territorial cohesion issues, Nation States should start to realise that urban sustainable development is something rooted at local scale. Central powers (especially states, but even powerful regions) must intervene by helping with tools (the richer the family of tools the better for local development) instead of ruling through command and control planning systems. Here is the "change of mentality" to bring into many EU Member States and regions: trust the local levels and explore with them innovative urban policies. The current programming period (2007-2013) has definitively pensioned off the Urban Initiatives and is proposing to mainstream the investment for cities into the Operational Programmes. This choice, is not bad or good per se, but definitively does not create cohesion in Europe. Indeed it increases the development gap between most advanced and less developed Member States. In fact, Member States having an advanced and organised territorial governance system (both vertical and horizontal) can benefit from this mainstreaming, as they possess the policy frameworks capable to canalise the EU funds effectively into suitable places (cities, neighbourhoods…) with appropriate methodologies (strategic plans, territorial agendas and

local urban policies). Other Member States, especially the recent post-socialist ones, do not have either a relevant planning tradition in designing urban tools (on the contrary, they have old-fashioned planning systems) or a developed governance framework (this is even the case for several Mediterranean Regions) to manage the mainstreaming of the structural funds. In other words, who is already organised can drive the use of the funds more easily into an already working systems. Those who do not own an adequate toolbox for urban planning will not have the possibility to learn how to structure effective and efficient urban policies. The Urban initiatives have been not just tools for specific policies, but even lessons for less advanced urban reality on how to create integration, how to give sense to the concept of integrated territorial approach. They have been a school of policy design for the less advanced urban planning systems and even for weak regional governance frameworks. In other words, they have been a way to bring Europeanisation at the decisional level that is closer to citizens. Consequently, if we involve cities we look for a strong Europeanisation; conversely, if we keep decision at a central level, we move to a weak Europeanisation.

Integrated and complex urban policies based on multi-actor partnerships are the way to solve major urban questions. It is essential to have the possibility to use and integrate financial means coming from different sources in a flexible way. If the regulation of future structural funds linked to the CSF (Common Strategic Framework) will maintain the current premises, Partnership Contracts will be adopted which will start the commitments of the partners at national and regional level. These contracts will be linked to the objectives of the Europe 2020 Strategy and the National Reform Programmes. They will set forth "an integrated approach for territorial development supported by all CSF Funds"[67]. This is definitively good evidence for the possibility of designing a good approach to urban development and regeneration in the next programming period.

[67] COM(2011) 500/II final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'A Budget For Europe 2020 - Part II - Policy Fiches', p. 5.

It is up to member states to create a clever framework for implementing the potential implicit in these "innovations" in the use of EU funds. What is important is to explore now how to combine this "new" interesting trend with urban needs.

Finally, if territory matters, if partnerships matter, if long term perspectives matter we, as planners, should not re-create situations, in the next programming period, that permit to let money flow into the cities to resolve urban issues (regeneration, requalification, development, housing, infrastructures) without having beforehand a strategic plan and framework that justify the coherence, sustainability, resilience, the "urban sense" of what that money is going to finance. It is necessary to start to mediate the financial/economic requests with real urban/territorial needs and potentialities. Only thus will these interventions "generate" territorial cohesion.

> Case studies reported in this box are based on author's experience on use of structural funds (mainly ERDF) in Romania (member state from 2007). Romania is among the poorest European states and present serious territorial and urban problems. The following case studies introduce three key topics not sufficiently faced by the policies put in place in the current programming period: a) presence of slums, not just inhabited by Roma in the periphery of major Romanian cities (urban poverty), b) difficulties of using funds in the context of shared and well-designed processes of strategic planning (scarce planning tools) , c) problems to face in regenerating and re-designing the public spaces/the buildings and the civic fabric of densely inhabited neighbourhoods built in the years of socialism (social polarisation and exclusion). The Romanian case demonstrates - but this is not completely new - that when a soft policy approach meets a weak planning systems (territorial governance system), the results are not so brilliant. Local politicians and civil servants completely changed the

rules of the game in the own favour, the EU counterpart accepted it: just the rapidity of disbursement is important. The EU permissive and weak input in the Romanian axis 1 has permitted the local administrator to disavow many of the town planning principles that have made the EU, in the last 20/25 years one of the most interesting actors in the design and proposition of urban policies. The lesson that is possible to learn from these town planning practices is that, when the EU approach becomes too soft in this field, we don't have anymore a bi-directional interaction, but a mono-directional management of ERDF funds operated by the member state and a strong re-distributive investment of public money, with scarce effects on citizens' quality of life: this is not a proper Europeanisation of urban policies and tools .

CASE A: The EU Phare Project Strengthening Capacity and Partnership Building to improve the Roma condition and Perception, RO 2004/016-772.01.01.01 (2006-2008) aimed to support the implementation of the National Strategy to Improve Conditions for Roma through training and institution building, research and through a public affairs campaign. One key task of the project was the involvement of Roma communities in the process of urban regeneration financed by the POR Axis 1.

CONCLUSION: though the Romanian ROP Axis 1 (fostering sustainable urban development) had at its disposal a consistent amount of funds for 'social infrastructures' (25% of around 1,4 bl. Euros), the areas reported in these pictures above [68] have not been considered in the financed projects. All the preparation work done in the context of the Phare project, together with many municipalities has not been taken into the axis 1: actually, there is no initiative of proper urban regeneration financed through the ERDF. All funds have been directed towards infrastructure, as unfortunately the equation "development=investment in infrastructure" sounds well to many politicians and even technicians: reasons of that are well known to the readers.

CASE B: It Is interesting to see how many Romanian cities, especially the small and medium sized ones, are changing their way of managing their urban issues and start to use the instruments of strategic planning. The case of Baia Mare is a significant one (the author of this article has been the project designer of BM strategic plan and of its Poster Plan [69]). It was possible in this city, that for many aspect it remains a workshop of urban experimentations (thanks to a restricted number of open minded administrators), to create "planning benchmarks" to use it as conceptual background for giving priority to local projects, but, above all, as context to access many other EU projects (URBACT, SEE, INTERREG, SMART CITIES and so on).

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[68] The pictures here represented have been taken by the authors in different Romanian Cities classified as development poles.

[69] The drawings here reported are taken by the Poster Plan, it is a documents created as a graphical vademecum of the strategic plan principles.

CONCLUSIONS: Cities that invest in planning have a feedback in terms of new initiated projects (at least the EU financed ones).The main problem faced by this plan is that the local resources are extremely limited and it is difficult, in the Romanian context, to launch PPP (Public Private Partnerships), or other forms of project financing to support the identified solutions. This happens for different reasons (political, administrative, cultural, financial…), but above all it lacks, at the level of the Romanian planning set of tools for urban development, the possibility of managing such procedure in the context of clearly ruled frameworks, in other words there are no instruments where to rest the constructions of complex urban development projects. If this last consideration is united to the existence of a weak and obsolete planning system, it is easy to understand how strategic plans result in good exercises of planning that in a way provide conceptual backgrounds for the political discussion (especially the poster plan); under another perspective, they are used by the city administrators as a captivating post card opening the way to the EU initiatives/financing, as a precious and organised synthesis of major urban issues to face… Unfortunately many of them continue to be unsolved.

SHORT BIBLIOGRAPHY

Barca, F., Barca Report, An Agenda for a Reformed Cohesion Policy: A Place-based Approach to Meeting European Union Challenges and Expectations (Independent report prepared at the request of Danuta Hübner, Commissioner for Regional Policy), 2009.

Commission of the European Communities, Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee: Green Paper on Territorial Cohesion Turning territorial diversity into strength, 2008.

Committee of the Regions, White Paper on Multilevel Governance, 2009.

Council of Europe, Regional/Spatial Planning Charter, 1983,
http://www.coe.int/t/dg4/cultureheritage/heritage/cemat/
versioncharte/Charte_bil.pdf

DG Regional Policies, Interim Territorial Cohesion Report, (Preliminary results of ESPON and EU Commission studies), 2004.

Davoudi, S., Evans, N., Governa, F., Santangelo, M., Territorial Governance in the Making.
Approaches, Methodologies, Practices, Boletín de la A.G.E. N.º 46 – 2008.

Elisei, P., EU Urban tools and Urban Regenaration, in URBAN CHANGE, The Prospect of Transformation, Edited by Judth Ryser and Izabela Mironowicz, published by AESOP, UN-HABITAT, University of Wroclaw, Wroclaw, 2011

ESPON: Governance of territorial and urban policies from the EU to the local
level, final report, ESPON, 2006

European Spatial Planning Perspective, 1999,
http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/
pdf/sum_en.pdf

Faludi, A. , Territorial cohesion: an unidentified political Objective Introduction to the special issue, (2005)

Faludi, A. , Multi-level (Territorial) Governance: Three Criticisms (2011)

GHK, EX-POST EVALUATION URBAN COMMUNITY INITIATIVE (1994-1999), 2003.

ECOTEC, Ex-Post Evaluation of Cohesion Policy Programmes 2000-06: The URBAN Community Initiative, 2010.

Ministerial Meeting of Ministers responsible for Spatial Planning and Territorial Development, Territorial Agenda of the European Union 2020: Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions, Gödöllő, Hungary, 2011.

Scott, A., Storper, M., Regions, globalization, development, Regional Studies, 37, 6-7, 2003.

Territorial Agenda, Leipzig, 2007.

INTRODUCTION

Urban quality of public space is becoming increasingly a key issue in recent urban planning processes. In the past, strategic master plans focussed mainly on the development of houses. More recent planning projects are trying to single out the importance of public space. Projects like Hafen City in Hamburg or Seestadt Aspern in Vienna have integrated quality of urban space in a way that makes the importance of the public realm more obvious and is receiving more attendance.

But the way people use public space and how they perceive public places is very different. This raises the following questions concerning urban quality:
- What is the reason for feeling pleasant of unpleasant in a public space?
- Why do we feel comfortable or unsafe?
- Why are places attractive and others not?

If we look at the realisation of quality we can ask ourselves the following questions:
- How do we experience quality of urban spaces?
- How can we define urban quality?
- What is the most deciding factor of urban quality?

The question is how we can define quality of public and urban space. This question has a long tradition in planning history and has been discussed frequently in planning practice and theory in the past. Depending on the historic context the perception of urban space and urban quality was different through time. Urban quality and it's perception changed under the influence of changes in society. Since 1900 the writings of urban planners and theorist like Camillo Sitte, Gordon Cullen, Kevin Lynch, Jane Jacobs and Jan Gehl were leading the development of a definition of urban quality.

In "City Planning According to Artistic Principles" published in 1889

Camillo Sitte (re)introduced the beauty of city planning. He describes this discipline by comparing the layout of medieval cities. With this approach he turned away from the pragmatically and technical efficient way cities where planned in the era of the rise of industrialization. In his studies he focused on the personal perception of public space.

In "Concise Townscape" published in 1961 Gordon Cullen developed a method which analyses the city in "Serial Vision". Based on a route through a city he shows different urban sequences by using sketches and combines them with theoretical components. In his method personal perspective and perception are leading the way in which the urban pattern is realised. His analysis is very much rooted in the physical way the city is used.

"The Image of the city" published in 1960 Kevin Lynch introduces a framework which focuses on the urban structure from the user's perspective. His framework focuses on the preparation of mental maps, which include five major aspects: paths or streets as the basic layer for moving around in the city; the edges as an indicator for physical barriers; the districts in the city which describe the personal surrounding of the inhabitant; the function and meaning of nodes and landmarks in the urban realm.

These three authors give a first impression of the differences according to which urban space can be analysed and interpreted. The ideas and methods of Jane Jacobs will be described more explicitly because they will form the frame for our practical cases in Lisbon.

THEORETICAL FRAMEWORK URBAN QUALITY
Jane Jacobs

In the 1960s planners and theorists started criticising the existing building development. "The Death and Life of Great American Cities" Jane Jacobs criticised pragmatic and functional urban planning, which

from her point of view was influenced by the wrong examples, like the garden city concept. Her opinion was that the main task of urban planning is to organise different functions to serve the needs and demands of the inhabitants. Especially the redevelopment of older suburbs destroyed the existing urban patterns and produced colourless new buildings and structures. Functional urban planning caused a separation of functions instead of mixing them, which is necessary to develop a vivid neighbourhood according to Jane Jacobs. In a vivid or qualitative neighbourhood the streets are a major element and act as the stage where living, working, recreation and retail are performing. This physical framework of urban space is the key to social cohesion.

Intending to counter practical functional urban planning and to improve the dominant planning doctrine Jacobs identified three "conditions for the working of the city" as a framework for the "four generators of diversity". These conditions and generators indicate the qualities of urban life and urban space at the scale of a neighbourhood or a small suburb. She identified the following conditions and generators:

Conditions for the working of the city

• Safety: The realisation of clear demarcations between urban and public space in order to foster intensive use of space which promotes spontaneous protection. Also people need to feel safe when using the public space, a sense of safety is key to a successful public area.
• Contact: Promoting meeting the neighbours and other urban users enhances information sharing. Mixed use is a key element in facilitating contact between urban users.
• Assimilating children: Developing non-matriarchal playgrounds and successful parks and playgrounds that are diverse and intensely used.

Generators of urban diversity

• Mixed-use: The suburb or city centre has to be a mix of areas which have more than one function, preferably a mixture of various different activities. The functions have to fulfil the needs and demands of the people, who are moving around in the city during different times of the day. Such intensified use of urban space promotes contact which enhances safety.

• Short building blocks. The urban pattern has to consist of mostly short building blocks, which offer people many occasions to cross the streets and to move around. The advantage is to create several different opportunities to move around, without imposing a fixed route. The city is different every time a person rounds a corner and every time it does this there are new opportunities to make contact.

• Buildings of various ages and states of repair in a dense mix. Buildings of various ages, buildings in various states of repair and variation of economic gain promote economically mixed-use. A working and liveable city houses not only offices and shops that can afford high overhead but also the traditional well liked local shops and bars which give so much urban quality to a suburb or a city centre.

• Varity of building structure. Within a suburb it is necessary that buildings next to each other are from various ages and in different states of repair to give a fine grained picture.

• Density. There should be ample concentration of people in a suburb or neighbourhood who have different reasons to be there. This does not mean that an enormous building density is necessary but that the public space facilitates and promotes enough activities, for both visitors and the people living in the neighbourhood, to provide density.

The four generators of diversity all aim to increase human contact in a neighbourhood in order to maximise the feeling of safety and thereby

creating the framework for the development of non-matriarchal playgrounds and parks. In other words the generators of diversity facilitate the working of the city, all within the physical framework. This framework consists of the streets, roads and built environment of a neighbourhood, in other words the public space.

Jan Gehl

Jan Gehl has observed and undertaken studies and publications concerning the development of urban space over almost the last 50 years in his hometown Copenhagen. Over a long period of time he shows changes in how people are using the city and its space. Until 1950 the usage of the city was dominated by working and trading, but it was also the place for living. It was absolutely necessary to use it. Since then, caused by the rising car access and the separation of functions, the meaning of the city has changed and function has mainly focused on shopping and retail. However, in recent years we can see a movement towards more recreational, cultural and also sport activities. Due to these changes the need to develop and improve urban quality is growing to provide places where people can meet. Aspects like healthiness, sustainability, liveliness or safety have become more important.

Over several years Jan Gehl developed a list of "12 key quality criteria of city space" to describe and rate the quality of urban life. Three of these 12 criteria specify protection, three enjoyment and six comfort.

Protection

The matter of protection has to be seen in a very broad way. One important point is traffic safety, especially from the children's perspective, which means offering good facilities for walking and bicycling.

People's security is of importance when evaluating urban quality. This means not only providing physical elements like lighting during the evening hours, but also a mix of functions to increase vividness of a place during the whole day. Another group of aspects which receive attention are the negative influences which affect sensory aspects. People have to be protected against the influence of the weather, like rain or the sun, but also against pollution which is caused by emissions.

Comfort

The criteria ensuring comfort are aimed to offer people opportunities to use the public space in various ways. People will make use of the city if they are given multiple offers for walking, sitting and staying. This makes it possible to meet each other, play, talk or exercise. The public space should not have the ambition to provide all the possibilities for these activities at once, but to offer a basis which can be used in several ways.

Enjoyment

Urban places can be designed in a mainly functional way. This is the basis to create a successful and attractive place which can be enjoyed by a number of people. But it needs more than function for urban places to be attractive. The relation between the buildings and public space is important for the user to feel comfortable. The places have to provide a high design standard, which allows the user to feel pleased, a part of the place and not a stranger in a built environment. Also good urban design has to create the opportunities to experience the surrounding in many ways. The public space is an important component of urban quality in the two case study areas, Arroja Odivelas and Praia das Maças. This chapter shows the analysis of two squares to provide an idea of the recent quality

of the public space and its recent usage in the study areas. The squares are analysed by using the different methods and indicators of Jane Jacobs and Jan Gehl.

Central Square in Arroja Odivelas

The square is located close to the former commercial centre of the post war settlement of Arroja. The surrounding of the public space is dominated by housing of the post war times. The urban grid is dominated by housing blocks with several storeys. They accommodate different types of flats which have a rather small balcony. The public realm is overtaken by traffic. The available area is mainly used for car parking. What determines the character and atmosphere of the area is that it is mainly a place where commuters live, which means that during the day it is quiet and not very busy. Besides the housing there are a few social functions, for example a school and a kindergarten. Also there is the possibility for outdoor activity, for example playgrounds and sport fields. Commercial activities can only be found at a very small scale. Shopping and retail has been moved outside the area and located along the important access roads. An artefact from former times is an old commercial centre which is located between the housing blocks. This centre can be reached from a square, which is also delimited by several housing blocks. The function and appearance of these places is generally quite poor and cannot be easily defined. The entrances towards the square are not logical and is not clear who should use the square. Nevertheless, the square in combination with the (commercial) building offers a spatial potential which could be used to improve the situation.

The perspective by Jane Jacobs

The first impression when visiting the square is the fact that it is surrounded by a wall of cars that are being parked around the square. This creates a clear boundary between the general public space and the square itself. When applying the conditions of the workings of a city to the Central Square in Arroja Odivelas the first thing we noticed when visiting the square is the complete lack of people using the public space of the neighbourhood during the day. The parking spaces surrounding the square are intensively used, indicating that at least during part of the day the public space is used by the people. As a direct result of the lack of people using the public space there is hardly a sense of safety. When combining this with the general sense of loneliness in the park and the neighbourhood we can conclude that the place is not attractive for children to play without maternal control. Therefore we can conclude that the lack of people using the public space minimises the contact between people and therefore has a negative effect on the feeling of safety and safety in general. As a result the neighbourhood and its square are not very well suited to be used by children as a play ground. The conditions of a well functioning city can therefore only be sparsely found or not at all.

In the wider surrounding of the square several mixed facilities can be found. But the square itself does not have much diversity. When we look at a little larger scale we can identify various different functions, like housing, parking and a nearby commercial area. Because the commercial centre is turning its back to the square it does not generate a lot of activity. The square does have potential to attract people who use the public space but in reality is this potential is hardly utilised.

The urban tissue does not correspond to Jacob's wish of small urban blocks. It is a mix of different building types and structures. Also the height and the orientation of the houses is not very clear, there are several

undefined front- and back facades. Due to the dominance of car traffic there are not many interesting and surprising locations in the area. In reality there is not enough room left for qualitative urban space because of this dominance of cars.

When we look at the state of repair and age of the buildings we do not see much variation. The buildings are almost all from the same post war period and they show no variation in quality and architecture. It is a very uniform and very purposeful build development. Therefore there is hardly any variation in age and state of repair, another of Jacob's key element for the quality of an urban space.

Due to the amount of buildings and apartments it is expected that there are enough inhabitants who could potentially use the public space in their neighbourhood. But the area lacks functions which could stimulate the use of the public space, not to mention attracting people from outside the neighbourhood. The lack of mixed use, or better put the lack of different functions, does not give people enough reasons to visit the area.

In the eyes of Jane Jacobs the place has a certain urban quality due to the density of people and to a lesser degree the variety of functions. But urban design and its translation into space is not very visible. As a result people use the square mostly for crossing instead of using the square as a place to stay and enjoy the public space. The square has potential but at the moment there are not that many conditions for urban diversity to be found.

To summarise we can rate the central square in Arroje Odivelas of average to low urban quality according to the generators of urban diversity and the conditions of the workings of the city identified by Jacobs. The square does have potential but the urban design does not utilise its potential fully. The urban space does not promote use by the inhabitants and therefore the place does not encourage people to have contact, the key ingredient to a successful urban space.

The square itself is not entirely accessible by cars and gives people a very secure impression regarding traffic. However, due to the poor urban realm, there is not much observation and social control by other people living around the square or passing by regularly. It is very doubtful whether the space is lit enough during the night and whether there are any dark parts. The local sensory climate is very much influenced by continuous sunshine. There is a lack of urban elements which would provide enough shadow to protect people from the sun on the square.

The square is not very inviting and does not offer a comfortable space for people to stay and enjoy. The only really positive aspect is that there is not much noise because of the segregation between traffic movement and the square. From this perspective the square has quite a good potential, but there is a lack of opportunities for possible activities. The public space is not providing a lot of possibilities to sit and to have social contacts or to stand and having interesting and changing views. Moreover, there are not many opportunities to be active, doing exercises or playing.

The spatial relation between the square and the buildings around it does not give people the impression to feel lost. Nevertheless, it was developed by taking the human scale into account. This is the only actual positive aspect which could give a user enjoyment. As the square is very much exposed to different negative influences of the climate, excessive sun and lack of shadow are important issues. The overall sensory experience is not very exciting. The urban furniture and the design of the urban greenery do not offer much spatial comfort for the users.

Overall, the rating by the Gehl system of this square is not very positive. The actual relation of the square and the surrounding buildings is positive, but there are not many positive aspects which would satisfy Gehl's criteria of comfort and enjoyment of protection.

Main Square at Praia das Maçãs

The village of Praia das Maças is located outside the metropolitan area of Lisbon along the seaside. The former fishing village has developed in the last years into a touristic place, which means that during the summer season it is a busy place which is filled with a lot of people and traffic. The Central Square is located In the centre of the village away from the coast line. Due to demand of access by tourism the main purpose of the square hash become parking. Besides the parking function the only additional use is the location of waste containers. The square has a triangular shape, It is formed on one side by buildings and on the other by the main road. The third side is not clearly defined due to a gap between the building lines. On the ground floor the buildings have different functions for commercial use, such as shops and cafes. The upper storeys are occupied by housing. The usability of the square by the public is very limited due to its traffic function. It is quite obvious that the square is more a reaction to the increasing importance of the car. It is thus not a planned square with spatial and functional connections between the housing areas in the village and the beach.

The perspective by Jane Jacobs

When we apply the conditions for the 'working of a city' to the main square of Praia das Macas there is a big difference between the two studied squares. In this case the square itself is used as a parking area. Because of this use no people are using the square in the way a square should be used. The north eastern side of the square is a closed façade consisting of commercial functions with apartments on the upper levels. The commercial functions on the ground floor are strongly related to the tourism industry in the village. The small shops, cafes and hairdresser

give the square regular activity during the day, but in the evening there may be hardly any people near or on the square. Taking the conditions for the 'working of a city' we can draw our first conclusion. The square does not facilitate contact between people during all hours of the day. Far from it, apart form the working hours there will hardly be any people on the square. This will influence the feeling of safety in a negative way. This negative feeling will be enforced by the dark corners and spaces of the square and the surrounding buildings. Therefore children will not be able to play there without maternal control or even with it for that matter. To summarise the conditions for a working city some can be found at the square but not nearly enough for it to be rated positively.

Several different functions can be found in the direct surroundings of the square.There are shops, cafes and a hairdresser and in the wider surroundings we can also find some other commercial and business functions. Most of the functions are located at the fringes of the square, on the north-eastern side. The only interaction between the square and the functions nearby is the fact that people park their vehicle on the square. There is only a low amount of mixed-use to be found.

The original urban pattern of the village was located to the side of the main street. This structure has been developed without the development of small and short blocks. On both sides of the main street we can find small houses next to one another sparsely mixed with other functions. The only exception is the large housing block located next to the square. Looking more closely at the square we suspect that this block was never part of the original urban fabric but was added later in order to provide needed extra parking spaces along the main street.

The state of repair of the buildings varies widely within the village, ranging from refurbished buildings to completely dilapidated houses. In general most of the buildings need some maintenance. There is also a great variation in ages of the building with the apartment block being

Lastly we will look at the density of people directly around and in the surroundings of the square. The amount of buildings combined with their size tell us that there are not enough inhabitants to label the surroundings of the square as high density. The village has still the original low density and rural identity and the local economy is relying on the yearly invasion of tourists during the summer season. The square cannot be used in several different ways, apart from the parking and does not provide any other usage.

Jane Jacobs would have rated this square as a square that lacks any of the qualities or conditions associated with urban quality. The square was not planned as a public space but seems to be a parking area that has been labelled as a square. The sole goal of the space is to provide the needed parking spaces for the commercial functions and for the tourists during the summer season and it does not promote contact between people at all. In short there are hardly any conditions for urban diversity to be found.

The perspective by Jan Gehl

The access to the square is focused towards its usage by car. Pedestrians are just about tolerated to use the square and get only a small space for themselves along the apartment building. There is social control by the inhabitants of the housing and also the users of the small enterprises in the basement. Because main usage of the square is for parking there is no protection against the influence of different weather conditions. There is a total lack of urban elements for the usage by people which do not come by car.

The square does not have any positive aspect and is not offering a comfortable space for people to walk, stay and enjoy the place. The noise caused by traffic is really a negative influence and downsizes the quality of the small enterprises. The square does not really have a potential

to be integrated in the urban structure. The focus is very much on traffic and parking which are dominating this space and considered necessary by the surrounding businesses. Along the friction zone there could be more space created for walking and other activities, which would have to be clearly separated from the parking zone. Thus, the views to the seaside could be more important than at the moment.

The spatial relation between the square and especially the apartment building does not give the impression of a real space. It was developed without taking the human scale into account, because of the focus on parking. The biggest enjoyment of the square is by the car while the needs of other users are neglected. Further, the square is very much exposed to the different negative influences of the climate; the sun and lack of shadow there are an important issue. The total sensory experience is not very exciting. There is no urban furniture nor any design of urban greenery which could improve the spatial comfort for the users.

The rating by the Gehl system of this square would have found positives aspects, which make the square a real urban liveable space. The actual situation of the square and its surrounding could be improved by a total change of the actual purpose by giving the cars less space and thinking more about other users.

CONCLUSION

The two approaches of Jane Jacobs and Jan Gehl originated in different planning periods, but they are still (again) very contemporary because they help to identify problems and frictions in the public realm. The complexity of both theories lies in the relationship between the different aspects that need to be combined to define quality of space. The difference between the two approaches or methods originates in the way they each define and observe the urban cluster. In her theory Jane Jacobs, one of the first urban

planners, described the workings of the city and the conditions of urban quality from the perspective of the users and inhabitants: how they use the public space in the city and how they interpreted it. She focuses mainly on the shape and form of the build environment and its usage by the people, whereas Jan Gehl's method is specifically orientated towards the quality and use of the public space by the people.

Both methods are quite similar and cannot provide a definite judgment of whether a public space is of high quality or not. But these methods can provide indicators on the actual quality and use of public space and therefore help us to focus on the major design problems and tasks of an area. Additionally Jan Gehl's theory identifies the importance of protection against the climate and safety in general. This is important in the case of the second square, Praia das Maças, where safety is of major importance due to the fact that the square is mainly used as a parking place.

By dissecting both the squares according to the theories of Jane Jacobs and Jan Gehl we can see that the result of both analyses is quite similar. Both places have problems with the usability, the relation between the buildings and the open space, as well as with providing enough spatial and functional connections at a larger scale. In short both analyses conclude that both squares are not that well integrated into the public realm.

The need and importance of using methods like those of Jacobs or Gehl is to provide a detailed and founded analysis of urban space. Usually the first impression when visiting and using a public space is based on our first emotional and personal evaluation. By dividing a place into several sections and functional parts before analysing them helps us to figure out where the problems are concentrating and where possible solutions can be created. Combining such methods, even if they were developed during different cultural and historical times, can offer professionals an understanding of the problems and potential of a specific urban space from the perspective of the user. The methods shown and their results

are not to be seen as a rule, or a set of instructions indicating specific and precise criteria or lists on how to improve an urban space. The methods and their use for the two squares have to be seen as a guideline on how to analyse, understand and improve an urban space.

Literature:

Franke, S. and Hospers G.(2009): De levende stad - Over de hedendaagse betekenis van Jane Jacobs, Sun Trancity.

Gehl, Jan (1987): Life between Buildings: Using Public Space.

Gehl, Jan and Gemzøe, Lars (2000): New City Spaces, the Danish Architectural Press. Copenhagen.

Gehl, Jan and Gemzoe, Lars (2004): Public Spaces, Public Life, the Danish Architectural Press.

Gehl, Jan et al. (2006): New City Life, the Danish Architectural Press.

Gehl, Jan (2010): Cities for People, Island Press.

Jacobs, Jane (1961): The Death and Life of Great American Cities, Random House.

Lynch, Kevin (1959): Good City Form, Harvard MIT.

Lynch, Kevin (1960): The Image of the City, Harvard MIT.

DEVELOPING A SYSTEM OF URBAN INDICATORS FOR MEASURING QUALITY OF SPACE AND LIFE IN PULA AND ZADAR, CROATIA
Branko I. Cavrić

Introduction

Measuring the quality of urban life has a long tradition in many parts of the world (Gahin, Paterson, 2001; Ghosh, Vale & Vale, 2006). These measurements were developed within social sciences first (Sawicki, 2002), mostly urban sociology, and then urban ecology as antecedents of inter-disciplinary urban studies (McDonald & Patterson, 2007, Wong, 2002). Their specialised applications in urban planning, management and governance based on principles of sustainable development (Flood, 1997) became a recent trend. What is to be said about measuring the quality of urban life nowadays, especially when fashionable urbanism is created by influences of globalisation, or 'glocalisation' emerge as a natural response? In this dynamic performance, where both major and small key players strive to achieve their interests, urban indicators are useful "instruments" for decision making. Today, many cities, regions and countries have decided to introduce them for monitoring and measuring the progress towards sustainability and improvements of spaces and human lives.

Urban indicators are simple instruments for multidimensional measuring of the well-being or quality of life in urban settlements which include natural, built, economic, social and political sustainability dimensions. In a technical sense, urban indicators are the presentations of information that show changes and trends in the course of time. In organised and functional settings, urban indicators are usually illustrated by diagrams, maps, graphs, schemes, tables, and figures, enabling people to see the trends in the simplest and fastest way. Nevertheless, there are many forms of transforming information into comprehensive indexes using audio-visual media, graphic design, the arts, the web and similar. Laurini (2001)

especially points out the prominence of multi-media and geographical information systems (GIS), which affect the extreme processing precision, presentation and information use in urban systems and e-government applications.

Contemporary systems of sustainable urban indicators assist in giving answers to several important questions such as: *Does our city become a better or worse place for living and working? Do its plans and programmes address citizens' requirements and needs? Do they contribute to the improvement overall of the urban environment? Do they affect displacements, in what sense and to what degree?* Naturally, all these queries require the availability of a very specific type of raw data generated first from different sources and then transformed into meaningful information, and subsequently into decision making indexes and indicators.

In practice, several specific indicators are usually organised in a series or complex group, i.e. a system, in order to be used on strategic and operative levels and within the defined development objectives, whereby some of the essential indicators' functions may overlap. One option is to use indicators in order to improve **awareness** of the needs for sustainable development in a city. The other function aids **monitoring** wherein the indicators have to be selected in order to describe situations susceptible to changes. Indicators in the process of **decision-making**, are used to implement adequate development methods and compare alternatives with their various effects. When used in **development control**, they provide the information on the distance from the proclaimed objective, combining the function of measuring the sustainable development progress with functions of the necessity to take actions. And finally, indicators are exploited as **reference points** for performances testing, i.e. benchmarking. However, there is no single unitary set of indicators for urban plan monitoring and evaluation (Wong, 1995), but some most common indicators descriptors are shown in table 1.

Table 1. Key Functions of urban planning indicators

Function	Description	Answers the question...
Description	• Describe condition or problems • Increase general understanding	"What are things like?"
Simplification	• Simplify complexity; provide a representation picture with significance extending to a larger phenomenon of interest	"What's the big picture?"
Measurement	• Measure characteristics of quality of life • Measure performance activities or services	"How much?"
Trend identification	• Establish baseline data • Identify trends or patterns • Show direction and improvement • Show disintegration and no change Two types: **1. Past orientation**. Indicators are chosen in the light of their "historic trend-identification properties" (i.e. showing how dimensions of an identified phenomenon have been changing). **2. Future orientation**. The indicator is a "forward-looking Instrument" used as a predictive forecasting device.	"How did we do?" "Where are we headed?"
Clarification	• Clarify analytical issues or long-term goals • Highlights areas of concern or improvement	"What is most important?"
Communication	• Translate data into terms understandable by a wide range of users	"How do we explain?"
Catalyst for action	• Stimulate public, stakeholder and political awareness, as well as Interest, and will to work towards change	"What next?"

Source: Hoering and Seasons (2004)

Hence, individual cities may get a clear idea of their positions in relation to other cities in the country or at international level, i.e. they may easily compare their own comparative advantages and shortcomings on the basis of which they can take relevant measures and activities. Basically, the choice of indicator framework could be guided by different conceptual approaches depicted in Table 2 (Niemeijer and Groot 2008 and 2008a, Hoernig and Seasons 2004, Sawicki 2002, Westfall and De Villa 2001, Innes and Booher 2000). However, the actual selection depends on the study area, the scope and spatial resolution.

Table 2. Summary of the most common indicator frameworks

Frame work	Indicator types	Focus
Conventional	• Economic • Social • Environmental • Urban metaphors	• Income, employment, production, growth, inflation • Social functions, conditions, interrelations, changes • Structure, functions and dynamics of ecosystems • Urban analysis and powerful-city based goals
Integrative	• Sustainability • Healthy Cities • Quality of Life	• Integrated environmental, social and economic issues • Public health principles • Assessment of individual well-being
Performance and policy	• Performance measurement • Benchmarks • Stakeholder consultation • Strategic planning	• Progress monitoring based on goals & objectives • Best practices among subjects in competition • Conflicting views of different players in policy arena • Norms and policy objectives
System and causal chain	• Pressure-state-response • Driving force-state-response • Driving force-pressure-state-impact response	• Human and economic activities pressures • Beneficial and harmful environmental impacts • Emissions, state and environmental changes

Source: Cavric (2011)

It is evident from previous reviews that urban indicators are an important tool for international, national and local benchmarking, stakeholder's communication and decision making. The need of their design and use, especially when relating to "urban" and "sustainability" issues, is becoming a worldwide trend. So extensive is the popularity of this phenomenon that a web search on the subject of indicators can yield more than 6 million hits, starting from UN agencies, the World Bank (2003) and OECD (1997) to over a thousand city portals.

Similarly to situations abroad, the cities in post-socialist Croatia are characterised by sharp disparities, contrasts and environmental degradation, particularly since the 1990s when significant socio-economic and political transformations occurred and urban Croatia found itself in the gap between the demands for faster economic development and demands for the protection of the urban landscape and natural heritage. Actually, Croatian cities today provide a live laboratory for tracing information on the quality of urban life and space in transition. Such a situation entails holistic and integral approach wherein local authorities should play the main role in resolving economic, social and spatial issues. Additionally, decentralisation of responsibilities from central to local level is carried out under influences of factors such as democratisation, demise of the centralised authoritarian system and absence of chronic financial constrains. Having accepted the capitalistic economic model the Croatian cities became emerging hubs in spreading development and environmental impacts. The capital Zagreb and its metropolitan region take the initiative, even though significant changes happened in coastal cities whose Mediterranean townscapes and hinterlands were exposed to stresses beyond sustainable carrying capacities.

With this in mind, it has been considered important to launch an urban indicators research project that aims to address emerging problems

and recommend successful a model for tracing and monitoring urban change at different spatial levels (e.g. metropolitan region, city, city district, neighbourhoods). Furthermore, the question was: which approach should be chosen? From the beginning, the idea was to create a balance between available time, technology, financial and human resources necessary for carrying out the project. It was also important to decide how to opt for a case study city whose development profile, spatial extent and urban form did not obstruct field survey efficiency, and visual and spatial foreseeability. Overall the basic motive was to test and combine the best aspects of analysed international indicators frameworks and to recommend a model suitable for the selected coastal cities of Zadar and Pula.

This initiative is especially significant in a situation when Croatia is adjusting to European administrative and governing standards. Indicators of sustainable urban development present one of the fields wherein adjustability and transparency with similar European initiatives and programmes is expected: new political arrangements, ethics and standards, new operational frameworks on the level of local authorities, methods of providing administrative services, communal strategies, promotion of local welfare, electronic administration, developing control, European dimension of urban and spatial planning and many more.

The primary objective of this chapter is to build on the results of a research report entitled: *"Developing the System of Indicators for Sustainable Urban Development in Selected Coastal Cities of Croatia"*, which was carried out for the National Foundation for Science, High Education and Technological Development (NZZ) of the Republic of Croatia in 2009. It also summarises the author's presentation and discussions during the XI European Urban Summer School on "Quality of Space – Quality of Life", hold in Lisbon (2011) sponsored by the Association of European Schools of Planning (AESOP).

Background to the case study cities

Geographic setting

The geographical setting of both cities has always represented an important component, changing incongruently with historic, economic and administrative conditions. Unobstructed access to the sea shore, wide rural hinterland, fertile land, favourable climate and enough room for controlled urban growth are comparative advantages compared to other cities of the Croatian coast whose spatial expansion is physically limited. Owing to the influence of a recently constructed modern motorways (A1, Istrian Epsilon), and possibilities for only 15 minutes travelling from the town centre to the motorway (at city exits Zadar I and II), the traffic location is markedly advanced securing undisturbed communication towards Italy, south Adriatic and the north of the country.

For example Zadar has slightly better national and local linkages. However the advantage of Pula lies in its proximity to good quality roads heading toward Italy, Slovenia and Austria. Comparative travel time by private car towards Zagreb is almost identical (3,5 hours), but in the near future and after completion of the Istria Epsilon link this time could be shorter when travelling from Pula to the Croatian capital. The other transportation systems, especially by sea and air, are also in the process of intensive diversification and modernisation. Direct weekly connections with ferryboats to Venice and Ancona in Italy, as well as a rising number of direct and charter air flights (e.g. Ryanair, SkyEurope, Germanwings, EasyJet) show diverse possibilities for extending the tourist season and for developing integrated traffic systems.
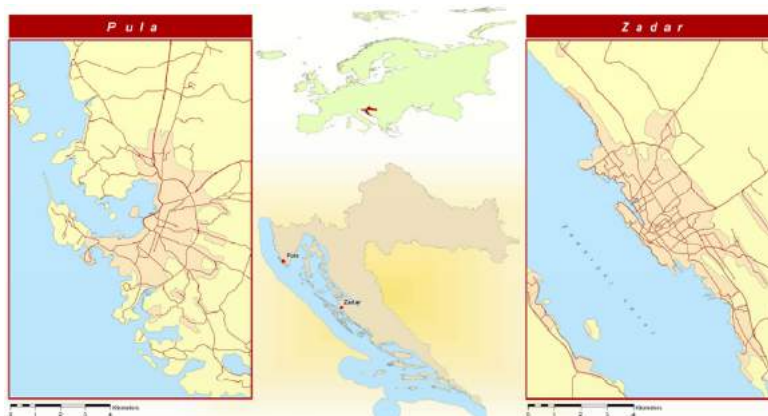
Historic brief

Both cities characterise a rich historic heritage which dates back to pre-ancient times. In their countryside traces from the Neolithic era were discovered, as well as numerous findings from pre- Illyrian, Illyrian, Greek and Roman periods. After the arrival of Illyrian Lilburns, the names Jadera and Jader are noted for the first time in the toponymy of these regions. In further historic developments, artefacts from the Roman epoch are especially interesting. At that time Pula and Zadar were distinctive Roman municipalities. The characteristic geometry of Roman town-planning regulations and remains of numerous artefacts are visible almost everywhere in central parts of the cities, especially on the peninsula, historical nucleuses of both cities were concentrated on the forum and around the arena. After the fall of the Roman Empire there

have been turbulent times when nature, disease, famine, and human destruction influenced the development patterns, socio-demographic change, economic and urban image of these two cities. They have been destroyed and re-built a few times. Zadar and Pula were often exposed to war raids and influences from Byzantium, Crusaders, Venice, Ottomans, Austro- Hungarian and Italy. The main marks of recent destruction came from offensive allied air attacks by the end of World War II, as well as from Zadar's shelling during recent conflict from 1991 to 1995. Only after World War II in 1947, were the cities annexed to Croatia inside former Yugoslavia, and after the 1990s patriotic warfare they became part of a newly formed Republic of Croatia.

Planning and development

The planning concept introduced in Croatia after its departure from the former federal state was supposed to bring a wind of change and to secure functioning of planning institutions at national, regional /sub-regional and local level. Although it was created to address challenges of the new political system the current planning practice shows numerous shortfalls. First, it continues a **"top down"** approach, despite the growing number of participants in the urban arena. Secondly, it does not support multidisciplinary tasks that are usually performed by formally educated planning professionals.

Unfortunately, planning education in Croatia does not operate under the AESOP umbrella and crisis in the planning field as independent trade is inevitable. All this heavily prejudiced the quality and format of the most recent planning reports and their implementation. Just a brief overview of these documents shows that they contain hardly anything from a modern planning doctrine. Inadequacy of general and specialist analysis,

application of modern GI technologies, absence of **"What If"** planning techniques and scenarios, lack of proper public participation, and out-dated implementation methods are only a small fraction of critics pointed at existing plans and the planning community. As a logical consequence the spatial and master plans of Pula and Zadar pertain the same syndrome of **"inadequacy"** when addressing matters of sustainable development. Instead of their widespread acceptance by the majority of city dwellers they are more oriented towards satisfying technical formats and interests of influential individuals and groups.

Currently Zadar and Pula are going through the process politically defined as a post-socialist transition, or in urban terms as post-modernisation that strives to ensure a harmonious connection of all city parts in a functional manner. A contemporary planning process needs to be based on principles of sustainability, free property market, global urban economy and great environmental concern. It is also expected that the current city image as a mixture of "historic and modern" should change sensibly, balancing different stakeholders demands by way of democratic public debate, adequate level of intervention, co-ordination and land-use development control. However, at the moment a free real estate market and rigid government intervention are the only instruments applied in city urban developments. Large land tracts of mostly abandoned military and industrial districts offer a good opportunity for future residential and MXD land use developments in both cities, nevertheless only under condition that illegal construction which contributed more than 30% of the new residential growth during period 1980- 1990s, is legally curbed. If not properly planned and utilised these disconnected and dysfunctional land patches will continue to act as ideal polygons for speculations fuelling shady development deals in the absence of good qualitative and quantitative planning instruments and their applications.

The fact is that only two implementation instruments (e.g. planning, location and building permits) inherited from the previous political system are still in use in urban planning practice. Any attempt for improvement is withdrawn by powers and lobbies only concerned with the protection of their interests. In most cases they are represented by webs of political and business allies. Unfortunately, this nuisance is observable in all larger and smaller centres of the Adriatic coast such as Opatija, Rijeka, Šibenik, Split and Dubrovnik. A similar situation prevails in Zadar and Pula, which are selected as a case study cities based on their connectivity, pristine environment, heritage and more room for expansion, placing them in the category of emerging south- east European costal tourist hubs.

In such state of affairs it was important to launch the project that will devise a set of dynamic tools for monitoring and directing urban change to improve the quality of life and space for generations to come. In summary the proposed urban indicators concept is based on well balanced development and inherent complexity of the five major sustainability pillars (e.g. natural, built, social, economic, and political). It is derived through participatory GIS indicators' framework applied at the city and local community level (e.g. city quarters or neighbourhoods).

Methodology

The project used various approaches to obtain information pertaining quality of life and space in the two cities. As starting point the NZZ research coordinator has developed a project chart trying to summarise methodology, anticipate all phases, identify critical steps and canvas public and GIS technology issues (Fig. 2). After intensive consultation and documentary analysis of information obtained from diverse government and city departments and agencies the NZZ team has developed the

necessary background data base about past and current planning, development and environmental concerns in both cities. Apart from the direct secondary data collection the NZZ researchers have shared project views and established relevant links with professionals from other disciplines. Through a series of introductory sessions and meetings the NZZ team has also managed to reach almost all categories of stakeholders including politicians, professionals, government officials, academics and researchers, businessmen, NGOs, local community board members and citizens.

In June 2008 and November 2008 a community survey was administered to 630 people in 21 local communities of Zadar and to 480 people in 16 local communities of Pula, with the aim to identify issues, values and opinions about present and future quality of life and space. A total of 1,110 people of different age, social and professional background responded, stating that such a survey is long overdue. The survey helped to define the issues examined in areas of the natural, built, economic, social and political environment. It also helped to set an agenda for wider public participation and involvement within the plan making and implementation process, and thus acted as a kind of new approach applicable to other Croatian cities. The survey was designed to cater for 1% of the total population of both cities, and to have the citizenry publicly expressing and assessing the importance of various aspects of quality of space, life and environment at both city and local level.

Figure 2. Highlights on the NZZ project methodology
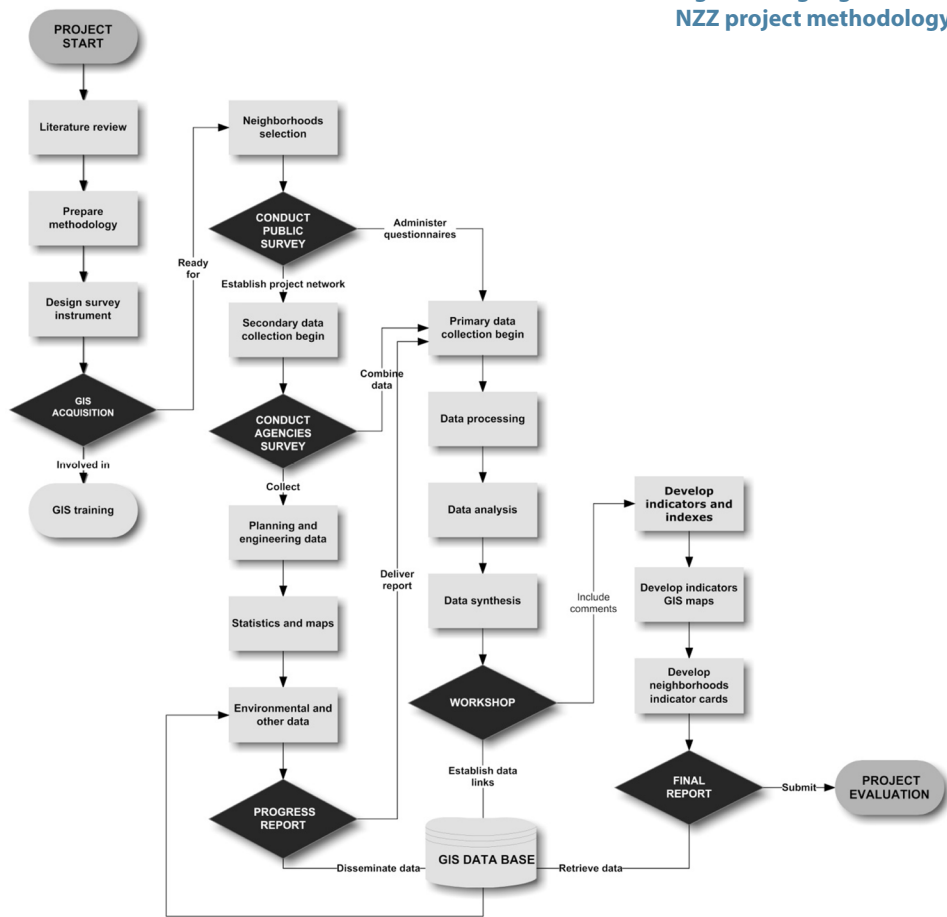
Source: Cavric (2011)

Citizens were involved directly through dialogue with NZZ experts and survey administrators who were trained to get the best possible answers at the grass root level. In this regard the survey confirmed advantages of the scientific approach where opinions of citizens were combined with specialist knowledge of NZZ team members in areas of urban planning, sociology, geography and GIS. Similar attempts could be found in the literature showing that a mixture of empirically measured trends and public opinions gives the best results in measuring and charting public perception regarding the integral quality of urban life and environment (Revvi and Dube1999, Stenberg 2001, McMahon 2002).

Furthermore, applied methodology showed to be right, due to the fact that the "top down" approach is still domineering Croatian planning practice. Politicians and planning professionals want to plan **"for citizens instead of planning together with them"**, imposing turn-key development solutions without serious public participation and consultation of all urban actors. For that reason, the intention was to create a dialogue between local communities and institutions in charge of providing citizens' services. The NZZ played a crucial role in bridging that gap. After saving all information in an interactive GIS database, the analytic process and formation of indicators sets within the framework of five environmental sub- systems (natural, built, economical, social and political) has materialised. As a result it was possible to come up with a variety of indicators generated at both city and community levels.

Findings and discussion

Quality assessment of the Natural Environment

The quality of the natural environment in Zadar and Pula is illustrated by using 13 indicators listed in Table 3 bellow. The level of assessment presented as the L - low, M - medium and the H - high shows that the majority of respondents complain about noise as one of the most prominent challenges. This is certainly due to the distribution of important traffic routes, higher concentration of people and noise producing activities (e.g. industry, port, tourism). However, the situation differs from neighbourhood to neighbourhood. Quality of air and sea water is very highly rated, but only inhabitants living closer to the seashore expressed concerns for how long good seawater quality will remain. There is also a long-standing issue of accessing the seashore in Pula where the shipping industry blocks the most attractive parts of the coast line. No one recognised a real opportunity of how to deal with this obstacle in future.

Table 3. Indicators of the natural environment

GENERAL ANALYSIS OF SUSTAINABLE URBAN DEVELOPMENT INDICATORS	PULA						ZADAR					
	Assessment of:						Assessment of:					
	Challenges			Opportunities			Challenges			Opportunities		
	L	M	H	L	M	H	L	M	H	L	M	H
NATURAL ENVIRONMENT												
1. Air quality		■			■		■					■
2. Drinking water quality			■		■		■				■	
3. Sea water quality			■		■		■				■	
4. Soil quality		■			■			■		■		
5. Noise impacts			■	■					■	■		
6. Open space ratio	■				■			■			■	
7. Landscape quality		■			■			■			■	
8. Human Impacts level			■		■			■			■	
9. Endangered natural species			■		■			■			■	
10. Vulnerability of prominent natural locations		■			■			■			■	
11. Exposure to natural hazards		■		■				■		■		
12. Frequency of natural hazards		■		■				■		■		
13. Existence of natural hazards early warning system			■		■				■		■	

Source: Cavric et al. (2009)

People in Zadar are in favour of good quality drinking water while in Pula they have put forward scores of complaints. Some respondents have criticised visible withdrawal of green areas and open spaces under the pressure of building activities. In addition, it has also been observed that landscape quality and biodiversity are under threat. Special attention is given to the unresolved issues of uncontrolled land fills and dumping sites, deteriorated industrial and socialist housing districts, empty military barracks, etc. Some were questioning urban infrastructure and services thresholds stating that they need to be always considered together with natural carrying capacities. High level of concern is related to natural and man-made hazards and their impacts at city and regional scale. Citizens have criticised the functioning of warning systems and the absence of disaster recovery and management plans at both city and local community level. The danger of earthquakes, fire, sea rise, tidal waves and draught were clearly highlighted as real challenges.

In summary informants in both cities still share views vis-à-vis high quality of their natural environment, stating this as a good reason for continuous human habitation and urban attractiveness. However, at the same time they have expressed their judgement that spatial distribution of tourism and different types of medium and heavy industry are major contributors to harmful environmental impacts. They consider them as a real challenge to sustainable development and insist that authorities must consider opportunities and apply all possible means to restraining prolonged environment destruction. The majority of interviewees have agreed that the integration of their cities into Mediterranean bio-diversity and its cultural complex is essential for any future environmental planning and management. It means a full use of the cities comparative advantages such as natural landscape, wide countryside belt, fresh water resources, proximity to the sea, islands, mountains, natural parks, reserves, and much

more. According to the NZZ research team these advantages could only be fully exploited through application of methods and techniques which stimulate sustainable development, secure integrated natural resource control and protection from hazards.

Quality assessment of the Built Environment

The built environment assessment captures 10 interrelated indicators portrayed in Table 4. The phenomenon of space construction and intensity of residential and commercial development were the driving force in informing people's mind-sets. More than one third of informants in both cities claim that space is overdeveloped, while two thirds describe a moderate level of land cover change. A great majority in Zadar supports detached one to two story family houses. Conversely, residents of Pula convey a positive message towards multifamily housing in mid-rise buildings. Furthermore, there is evident support in favour of the MXD land use development, safeguard of traditional architecture but also encouragement of new architectural styles and building technologies. All these appraisals are strongly linked to mentality, ethnic composition, life styles, financial abilities, and space perceptions leading to a typical image of Mediterranean urban fabric in post-socialist transition. A good motion received from the survey is that there is enough room for contemporary adjustments which do not compromise traditional and socio-economic values.

Table 4. Indicators of the built environment

GENERAL ANALYSIS OF SUSTAINABLE URBAN DEVELOPMENT INDICATORS	PULA						ZADAR					
	Assessment of:						Assessment of:					
	Challenges			Opportunities			Challenges			Opportunities		
	L	M	H	L	M	H	L	M	H	L	M	H
BUILT ENVIRONMENT												
1. Built-up areas ratio			■		■			■				■
2. Acceptability of housing types		■			■			■			■	
3. Social services coverage		■			■				■		■	
4. Social services equipment demand			■		■			■			■	
5. Physical infrastructure coverage		■			■			■				■
6. Physical infrastructure services demand		■			■			■			■	
7. Level of heritage protection			■		■				■		■	
8. Prevalent building technologies and materials	■				■				■		■	
9. Implementation of sustainable development principles			■	■					■		■	
10. Mediterranean townscape and landscape compatibility			■		■				■		■	

Source: Cavric et al. (2009)

Huge criticism is articulated against "urban villas" which are in most cases owned and constructed by new-born tycoons and land moguls. These unique urban artefacts turn out to be a real battlefield involving numerous actors and interests at the expense of commoners and prudent professionals. They create animosity and destruction of the Dalmatian social niche and affect ecological impacts/costs at the most attractive city locations.

Research findings also signify respondents' dissatisfaction with urban services. Particular critique is made by young and old age groups indicating problems of quantity and diversity of entertaining, recreational, educational, health and care facilities. Their distribution, clustering, types, operational time and proximity do not meet demands at levels expected by concerned age cohorts. In terms of development priorities affected groups prefer urban services in the following order: **health, tourism, child care, culture, entertainment and leisure.**

A similar motion is spearheading towards urban infrastructure providers and equipment pointing out frequent black-outs and lack of capacities to maintain smooth running of utilities at reasonable costs. The highest degree of people's frustration is with solid waste management. Regarding infrastructure upgrades a vast majority of informants prioritise the development of: **sewage systems, parking, designated bicycle routes, pedestrian paths and street lights.**

Diverse opinions were obvious when the NZZ investigators asked questions about protection levels of cultural, architectural and historic heritage related to buildings, streets, squares, plazas and archaeological sites. It was interesting to learn that people were concerned about heritage conservation and renewal in their local communities rather then in the city at large and surrounding neighbourhoods.

This demonstrates citizens' awareness about the importance of heritage in urban branding and marketing which usually starts from the doorsteps.

Moreover the NZZ questionnaire has indicated the importance of sustainable development as guiding principle for any future urban planning and management. In this regard respondents have highlighted numerous negative practices which they hope will not affect the well-being of their cities and local communities or impact quality of life and space. They have critically assessed current practices which trigger urban sprawl, litoralisation (e.g. cementing of the shoreline), proliferation of weekend house settlements, leapfrog development, spontaneous urbanisation, illegal construction, polluting discharges, uncontrolled dumping of building rubble, and much more. In addition, some respondents have industriously highlighted several other issues, including cognitive image, skyline limits and incorporation of city townscapes into the wider regional landscapes and biodiversity contexts. Special attention is given to the fact that people wish to conduct their daily affairs in the built environment which allows closer social contacts; pedestrian orientation; rhythm and sensitivity to smells, sounds and flavours; and observation of dominant green and blue colours. Unfortunately, the global and local dynamics are not in favour of this type of sensitivity which has existed in this part of the world for centuries.

Quality assessment of the Economic Environment

The dialogue between citizens and the NZZ interviewers has validated the hypothesis that political changes in the early 1990s instigated simultaneous reaction in the economic sphere on macro and micro levels. For years suppressed and centrally controlled prospect for private initiative and economic transparency has finally surfaced, marking the start of a competitive game unprecedented in recent Croatian economic history.

Historically, small craft and ship industry provided the economic base of both cities. Since then, there has been a shift from the more traditional industries towards commercial business fuelled by improved technologies, as well as global and regional networks. Private initiative coupled with legislative amendments and less political intervention (especially in the medium and small enterprises) contributed to faster economic growth and diversification. However, in that process, similarly to other transitional countries, there emerged unavoidable structural, technological and some time illegal challenges. Political, nepotistic and even mafia type cliques enabled some individuals and groups to achieve favourable positions and monopoly within a geographically limited market (Cavric, 2011). Only recently, as a result of adoption of legal obligations in the process of complying with EU regulations some more positive shifts occurred (Bosch, 2002). Meanwhile the global crisis emerged, although for years it was believed that it would not be possible in Croatia.

Respondents confirmed that transition was painful, especially affecting former socialist industrial giants like Tito, Uljanik, Maraska and many more. Some of them went into liquidation through auction mechanisms with many employees starting to roam the streets and triggering potential social arrests. Since buildings and technical equipment of these companies occupies significant land areas, the above transformation caused spatial and ecological implications which are noted in the NZZ assessment. As a logical consequence, our field reporters aimed to find out about people's views on the current economic situation. Their task is recorded in Table 5.

Table5. Indicators of the economic environment

GENERAL ANALYSIS OF SUSTAINABLE URBAN DEVELOPMENT INDICATORS	PULA						ZADAR					
	Assessment of:						Assessment of:					
	Challenges			Opportunities			Challenges			Opportunities		
	L	M	H	L	M	H	L	M	H	L	M	H
ECONOMIC ENVIRONMENT												
1. Fraction of people working in local community firms		■				■	■				■	
2. Quality of life improvement by proximity to working place		■				■		■			■	
3. Number of firms in local community		■			■		■				■	
4. Influence of local firms on neighbourhood life	■				■		■				■	
5. Dominant economic activities		■			■			■			■	
6. Activities that foster fastest economic growth			■		■			■			■	
7. Average salary			■	■			■			■		
8. Income-expenditure ratio of average 4 member family		■			■				■		■	
9. Influence of mushrooming shopping centres			■		■				■			■
10. Current economic situation			■	■					■		■	

Source: Cavric et al. (2009)

In a situation with job irregularities many skilful individuals devised different survival strategies. One of them is to work from home or in small businesses nearby. This helps cutting the cost of transport and allows working family men to spend more quality time at home without compromising their professional life. Still today there is a small percentage of local inhabitants who support this model in which the work place needs to be close to home and to important urban services. Unfortunately, planners who were for years preaching this concept in theory never progressed with its practical applications in making provision for small and middle size compatible firms to locate within housing estates and residential neighbourhoods. Although some efforts are made, particularly with the IT oriented companies it is still quite unusual in the Croatian post-socialist city to recognise spatial and economic alliance between residents and entrepreneurs.

Some respondents are behaving very NIMBY (not in my backyard) and are not supportive towards businesses located in their local community. They argue that companies do not contribute enough to the local social, environmental and urban development projects that could improve citizens' well being and add extra value to physical space. They also feel that companies need to have closer ties with local community boards when dealing with people's living and working conditions in their neighbourhoods. However, others see location of businesses as a great opportunity for economic and spatial diversification. The assessment further reveals that there is a lot of sympathy for employment in tertiary and quarterly economic sectors, especially by younger and middle age groups. Young people also speak positively about mushrooming shopping centres which present a new urban decor in post-socialist city. Older demographic cohorts prefer jobs in primary and secondary activities which are not exposed to frequent technology modifications. In terms of the most admired economic choices people have underlined lucrative

trades such as urban and rural tourism, IT, entertainment, real estate industry, transport, restaurants and catering, production of wine and olives and sale of fuel.

Interviewees were not enthusiastic of disclosing information about the structure and source of their monthly and annual incomes. The vast majority of informants stated that falls within average Croatian salary bracket amounted to between 400-700 Euros monthly. Only a small fraction earns between 1300- 2000 Euros per month. When asked to enlist additional revenues from part time employment or "grey economy" sources they have adamantly refused to provide more details. It is very evocative that almost everyone complains about low wages which are not sufficient to sustain their living standard. However, some observable manifestations like possession of flashy cars, designer labelled clothing, gatherings in restaurants, beaches and other popular places during working or late hours convey a different message. The only conclusion that could be drawn is that there is still quite a number of people living above their means or being capable to generate extra returns. Probably the circumstances of liberal capitalism are encouraging for some while rather gloomy for others.

In summary, the economic situation in both cities is not rosy due to multiple external and local factors leading to prolonged recession, unemployment, debt crisis and introduction of austerity measures. An increased number of repossession cases speaks on the subject of the decline of property and the private car market. But still, compared to Pula the city of Zadar has advantages especially with regard to the area of Gaženica which is expected to develop into a regional MXD water front. If this happens in the foreseeable future Zadar will have a great opportunity to enrich its urban economic matrix. When speaking about Pula the only

way forward is to exonerate collapsing industries. Although this is not an easy task and a socially and politically very unpopular assignment, economic planners will have no other choice than to embark on taking this "hot potato" by their own hands.

Quality assessment of the Social Environment

The social pictures of Pula and Zadar are composed of colourful and miscellaneous cultural, religious, ethnic, linguistic and human manifestations. All these pieces are well crafted into the distinctive ethos of Istria and Dalmatia and subsequently melted into the prevailing urban mosaic of the post-socialist city. Without any doubt such moral fibre passed historic tests and is a good guarantor for time to come. Among the many indicators shown in Table 6 bellow, interviewees highlighted accumulated social synergy as one of the leading reasons to settle and reside in the local community.

Impacts and levels of neighbourliness have contributed to comfortable living in a physical setting with many domestic symbols such as favourite cafés, bars, meeting corners, grocery shops, food kiosks, pizzerias, mini-soccer playgrounds, parks and piazzas, neighbour's children noise, hanging laundry, and much more. This is the reason why some interviewees declared that closeness to family, friends, and neighbours of similar social background could be important when moving through cognitive avenues of their own locality. Unfortunately, some informants in Zadar expressed fear and phobia against certain individuals and groups which include drug addicts, homosexuals, refugees, urban poor, single mothers, invalids, and members of some ethnic groups (e.g. Serbs, Gypsies). The situation in Pula is apparently tolerant since social communication and culture of dialogue are very advanced. Nevertheless, local hostility where some people might have problems is annoying, particularly during the tourist season when

both cities are over spilled with guests from all over the world.

Interesting results are also revealed when inquiring levels of satisfaction with social contacts, gatherings and projects which affect spatial, environmental and social improvements. Most popular gathering places are cafes, rarely libraries and museums. In addition reports has been made about people's behaviour in a family and public places. More positive references on kindness, diligence, helpfulness, friendship and neighbourliness were recorded in Pula, while descriptors in Zadar were concentrated on characteristics such as influence, economic and political power, hard work, politeness and culture. Some respondents expressed bad opinions about inhabitants of other city quarters assigning negative characteristics like arrogance, laziness, criminal behaviour, etc.

Table 6. Indicators of the social environment

GENERAL ANALYSIS OF SUSTAINABLE URBAN DEVELOPMENT INDICATORS	PULA						ZADAR					
	Assessment of:						Assessment of:					
	Challenges			Opportunities			Challenges			Opportunities		
	L	M	H	L	M	H	L	M	H	L	M	H
SOCIAL ENVIRONMENT												
1. Social reasons for settling and residing in community		■			■		■				■	
2. Level of neighbourliness		■			■			■		■		
3. Level of social exclusion and inclusion		■			■				■	■		
4. Dominant group in development of social atmosphere	■				■			■			■	
5. Level of happiness and spatial location of social contacts		■			■			■			■	
6. Existence and level of negative behaviours		■			■			■		■		
7. Existence and level of positive behaviours		■			■			■			■	
8. Locational and spatial preferences for leisure time		■		■			■					■
9. Social preferences for leisure time		■			■			■			■	
10. Social organising		■				■			■	■		

Source: Cavric et al. (2009)

The importance of social context has been confirmed by indications on how the inhabitants like to utilise their free and leisure time. The vast majority of them spend their spare moments in open areas of the local community, sunbathing and swimming on the beach, walking by the sea promenade (e.g. riva), or simply enjoying a cup of espresso. During these endeavours in most cases they prefer closeness to friends or family members. The amount of time being at home or outside differs and depends on seasonal weather, but on average at least 6-8 months per year are suitable for going out. Simply speaking they appreciate rewards provided by mother nature and the specific Mediterranean way of life.

The most recent development which tailors the social arena is organising people around NGOs, clubs and citizen associations aiming to improve awareness about all important aspects of urban life. These forums become an excellent place for exchange of ideas and positive criticism through open debate. Public meetings, workshops, discussion groups, surveys, displays and exhibitions are the most common tools of bringing more people on board. With this type of involvement participants feel that their role as educated and loyal citizens is fulfilled.

Quality assessment of the Political Environment

The fact that they can freely express their opinions about their city and urban governance caught the attention of interviewed citizens. Seeing that Croatian society is highly politicised (e.g. one Croat 3 parties), interviewees gladly expressed opinions about the cities' political establishment and its impacts on urban development. The majority of them verified that regardless of the political affiliation the ambition of local government officials and their cronies was always to achieve their individual and group benefits first. Priority in protection of the public interest is clearly

substituted with aspiration of fulfilling personal gains, as well as the interests of ruling parties.

Interviewees criticised limited professional expertise of the present city administration (dominated by a single party) in the area of urban planning and development. This fact could be easily proven by a simple analysis of the professional qualifications of employees in the planning sector where there are no officers with formal qualifications in urban planning, urban governance and management. Most of the work and decision making is done in simplified and voluntary manner. This state of affairs caused numerous city projects to be unaccomplished or behind schedule. It is obvious that existing governing and management bodies and administrative clerks in both cities have difficulties, especially when requested to run public affairs in multifunctional and multitasking manner. The citizens object that the current establishment cannot perform competently without necessary modernisation and continuous education which would create ethical and state-of-the-art professionals able to make responsible decisions and to provide the highest quality control in serving the city and its citizens. It is important to acknowledge the presence of the major of the City of Pula during one of the workshops organised by the NZZ research team and their collaborators from the University of Juraj Dobrila, Department of Economics and Tourism. It was noticed that the Major and a couple of city officials were present throughout and even after the workshop trying to contribute to a lively academic and public dialogue. Unfortunately, city officials were ignorant about happenings during the workshop in Zadar. The results of indicators analysis of the political environment show a high level of discontent and distrust towards public institutions, government and management. Some political challenges and opportunities currently shaping the city's political landscape are summarized in Table 7.

Table 7. Indicators of Political Environment

GENERAL ANALYSIS OF SUSTAINABLE URBAN DEVELOPMENT INDICATORS	PULA						ZADAR					
	Assessment of:						Assessment of:					
	Challenges			Opportunities			Challenges			Opportunities		
	L	M	H	L	M	H	L	M	H	L	M	H
POLITICAL ENVIRONMENT												
1. Activity of local community boards		■				■		■			■	
2.Joint citizen and local boards driven projects			■			■			■		■	
3.Acceptance of citizens opinions in public participation		■				■			■	■		
4. Opportunities for public participation		■			■				■	■		
5.Negative practices in urban development process		■			■			■			■	
6. Negative practices by key stakeholders			■	■					■	■		
7. Key stakeholders interference in urban development		■			■				■	■		
8. Acceptance of EU standards by authorities in their work		■			■				■		■	
9. Level of attainment of city administration		■			■			■		■		
10. Level of efficiency of city administration			■		■				■	■		

Source: Cavric et al. (2009)

Alongside the critiques addressing the level of professionalism of the city administration there are pessimistic opinions on the system of decision making about quality of life. When asked to spell out at least five joint projects in the area of spatial and environmental planning which resulted from the united action of citizens and neighbourhood officials in recent times, most interviewees did not have any answer. They explained that in fact citizens do not even participate in united decision making with local government, or that for the past few years there were no such programmes, or that they possibly existed but interviewees were not aware of their presence. In any case, there exists unevenness in perception of spatial and environmental planning congruently with requirements of sustainable development. In reality there is an absolute absence of citizens' involvement in the scrutiny of planning projects. The possibility of participating in public discussions does not exist, and if it does the level of involvement is very low. Furthermore, the NZZ field survey team has examined citizens' views about the preparation and implementation of spatial plans, environmental impact assessments, and different social and physical infrastructure projects. Unfortunately, their answers confirmed expert knowledge about this very common disease, whereby the role of the public is extremely passive or sometimes curtailed by local politicians and their allies.

The NZZ research has also anticipated the need to answer questions with regards to negative phenomena such as corruption and bribery, nepotism and racketeering. Almost three-quarters of the citizens confirmed that such practices are very common in contraposition to the country's legal and social security systems. Interviewees conveyed that personal interests of local leaders are frequently above public interest. Because of that the question is in whose interest are decisions regarding spatial planning and urban development made; in other words, who loses and who gains

with these decisions. Interviewees think that in such processes state and local politicians, corrupted professionals, tycoons, and to some extent even individuals with criminal records are involved. They stress that major actors of change can be found amongst influential Croatian politicians and ministers who originate from both cities and their surroundings, some experts, domestic and foreign investors, and religious groups. About one-third of citizens considered that those actors have high influence, while the remainder believed that their influence could be marked as medium or low but still existing.

Citizens were especially concerned about the bad practice of public insight where quite often plans and projects are presented too late to the public, and this research agrees with this perspective. About a quarter of the citizens considered that local politicians and administration under the umbrella of the City Council still struggle in promoting the EU standards of good governance. Also, a vast majority of those interviewed think that efficiency, working habits, the speed and inefficiency of city administration could be described as unacceptable. According to those interviewed, the lengthy administrative procedures influence efficiency of investments. Good examples of this situation are planning (location) and building permits which can be obtained only if the applicant is ready to provide some financial incentive (i.e., money under the table) or favour.

GIS based indicators model

Complexity and an enormous amount of raw data have required a strong technological background, and well trained and motivated staff able to handle demanding tasks of data selection, collection, processing, presentation and dissemination. In addition to managing the research project, the NZZ team has many technical, financial, publishing,

conferencing, facilitating, moderating, field work and other duties. Immediately after familiarising themselves with the project goals and objectives young researchers have embarked on intensive GIS training. The NZZ project coordinator was blessed to lead a group of very talented young academics who managed to acquire working GIS knowledge in a few weeks. Additionally, the decision of the project coordinator to acquire the latest full ArcGIS 9.2 technology while the team members attended GIS training, was wise for saving time and money, and allowing everyone to embark on duties instantly. Considering financial and time limitations, lack of experience and the large number of young researchers involved, the expected work load of the NZZ team was gigantic. A huge collection of more than 100,000 digital records for both cities was prepared and inserted into the GIS data base during several months of intensive work. As the final result the proposed GIS data base indicator model was developed to cater for users at both city and local community level. The results at city level are presented in the form of digital and hard-copy maps which allow on-line queries, browsing and printing of 29 different indicators amps classified in five groups (e.g. natural, built, economic, social and political environment). An example of the general GIS Indicator's map is shown in Figure 3.

Figure 3. Example of selected indicators city map -Zadar
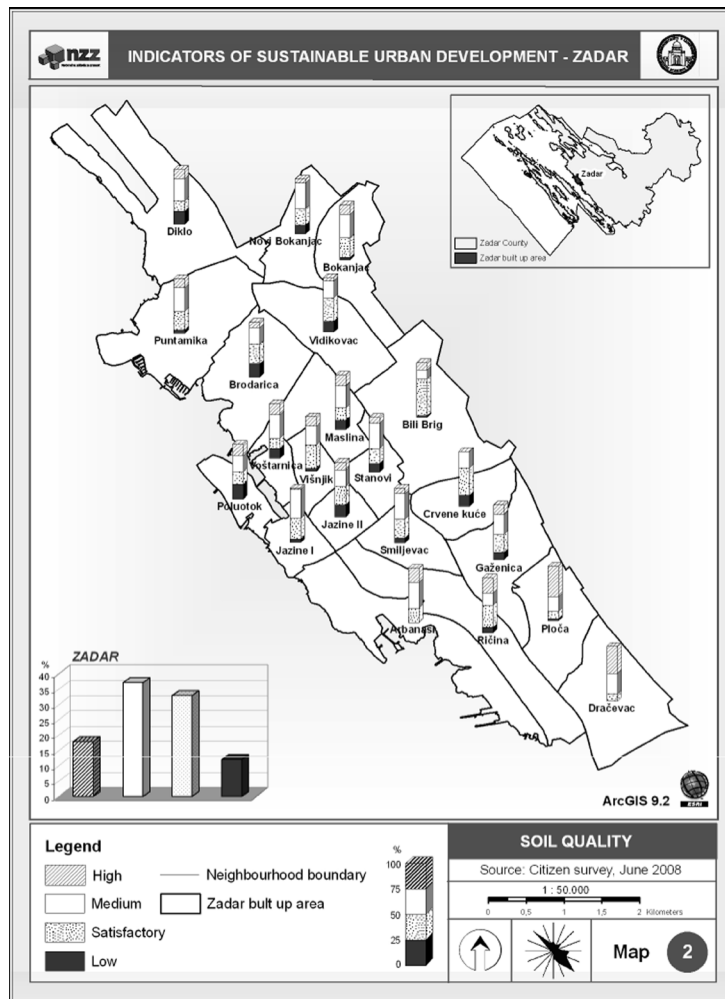
Source: NZZ Project GIS data base (Siljeg, Cavric, Toplek; 2009)

More detailed visualisation is given in Figure 4 in the form of a local community identity card (ID), which offers a comprehensive set of indicators, indexes and information in the five areas of sustainable development. The design of these cards is very diverse due to differences in human cognitive abilities and perception. Some citizens prefer maps and graphs, while others are more comfortable with alpha-numerical insights. Researchers have also made efforts in experimenting with additional audio-visuals (music, voice, sound, photo, video), thinking about people with disabilities. There was a suggestion to install a GIS kiosk in every neighbourhood akin to ATM machines where everyone can browse important tips on different aspects of city and local community life.

Figure 4. Example of local community (neighbourhood) urban indicators ID card (Pula)
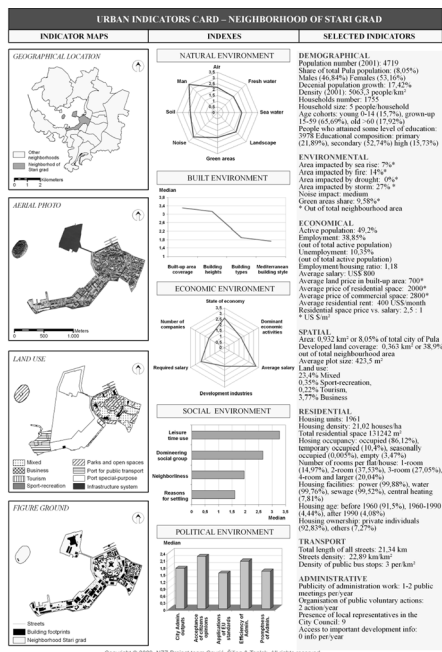
Source: NZZ Project GIS data base (Siljeg, Cavric, Toplek; 2009)

Concluding remarks and recommendations

The results of the NZZ project are in many ways challenging because they are breaking new ground in a relatively new area of research in the Republic of Croatia. This is the first interdisciplinary and comprehensive effort in the country trying to encompass complex issues of urban sustainability in the specific conditions of the post-socialist and coastal city. The research teams have applied a variety of methods manoeuvring within limited human, budgetary and technology frameworks. However, integration neighbourhood aspirations at city level and sensitising the dialogue between the community and experts presents an innovative approach to urban indicators studies. This implies that the indicators toolbox may be useful for urban development control and monitoring on a regular annual basis. Without any doubt it could help urban administrators and governors to make wise decisions about priorities for action in a participatory atmosphere where all stakeholders should have their say.

The study opened a question about development of a standardised urban indicators set. A preliminary indicators check-list has been tested only in six neighbourhoods. It is expected to apply an improved model for other cities along the coast and the interior of Istria, Primorje and Dalmatia.

Concerning the basic content of SUDI indicators cluster the aim was to: (1) make output results available to urban managers, professionals, and ordinary citizens, (2) develop indicators that can be comparable and applicable to other Croatian cities; (3) present all results in easily understandable graphical, textual and tabulated form; (4) have accessible indicators that can speak for all interested parties (public, government officials, scientist and individuals; (5) design a reasonable number of indicators which can be reviewed and comparable on an annual basis; (6) secure that different spheres of urban life could be measured and

compared via different types of indicators; and lastly (7) cluster indicators within main urban problems groups and priorities in order to find the best solutions in tackling problems and critical situations.

These are actually key elements of using a system suggested by NZZ project. This type of system, in comparison to existing ones, does not put a limit on data and information availability; it serves as a source from which an urban type of information can be obtained, as well as the possibility of incorporating data sets from all interested parties: citizens, experts, councils, non-governmental organisations, societies, investors, etc. It is also compatible with the National Spatial Data Infrastructure – NSDI initiatives. The NSDI supports GIS applications where there is no spatial data redundancy and where the reduction of spatial data cost is evitable. In practice this signifies great savings and more efficient operability of urban systems. However, in order to implement a suggested SUDI model in practice it is advisable to improve professional and administrative capacities in both case study cities.

From the NZZ research it is apparent that indicators are tools of change, learning and propaganda as their existence, absence and prominence affect the behaviour of all actors in post-socialist cities. In that context proposed indicators may serve as effective tools for monitoring urban development progress congruently to the formulated objectives. At the same time, they could help taking corrective measures along the road and under circumstances when a city evolves in an undesirable direction. Simultaneously, they indicate how far the fulfilment of proclaimed objectives is in respect to the present stage of urban development in both cities, as well as what the deviations from the planned course are. Should there be any initiatives for preventive actions the indicators of sustainable urban development may contribute to the improvement of policies and

strategies, plans, programmes and projects. They may greatly improve implementation efficiency and the decision-making apparatus resolving important complex issues of the city's social, economic, constructed and natural systems.

The proposed indicators model and its sub-sets are the foundation for more objective decision making, which unfortunately still does not exist in Croatia as it is reduced to a technocratic "top-down" approach where citizens lack stronger influence. The model suggests a systematic and sustainable mechanism of regular collection, analysis and monitoring of indicators about urban trends, with the intention to correct negative phenomena and processes, and to conduct further city development exclusively on sustainable foundations. It also offers an initial cluster of individual indicators grouped into domains (categories) which can change, adapt and advance over time. Based on that it is always possible to enhance aiming at the creation of: (1) healthy, safe and nonexclusive local communities; (2) dynamic and perspective local economies with special emphasis on a revival of coastal "blue and green economies"; (3) sustainable natural and built environment; (4) culturally enriched and spirited local communities; (5) democratic and engaged communities.

Literature

Bosch, P. (2002) The European Environment Agency focuses on EU-policy in its approach to sustainable development indicators. Statistical Journal of the United Nations ECE 19, IOS Press, 5-18

Cavric, B. (2011): Integrating Tourism into Sustainable Urban Development: Indicators from a Croatian Coastal Community, in Sirgy, et. Al. (Eds.)

(2011) Community Quality of Life Indicators – Case Studies V, 1st Edition, Springer, Netherland, 219-265

Cavric, B. et al (2009) Izgradnja sustava indikatora održivog urbanog razvoja za izabrane primorske gradove Hrvatske – Zavrsno Izvješće (Developing the System of Indicators for Sustainable Urban Development in selected coastal cities of Croatia),

Flood, J. (1997) Urban and Housing Indicators, Urban Studies, Vol. 34, No. 10, 1635-1665

Gahin, R., Paterson, C. (2001) Community indicators: Past, Present and Future, National Civic Review, vol.90, no.4, 347-361

Ghosh, S. Vale, R., Vale, B. (2006) Indications from Sustainability Indicators, Journal of Urban Design, Vol.11. No. 2, 263-275

Hoernig, H., Seasons, M. (2004) Monitoring of Indicators in Local and Regional Planning Practice: Concepts and Issues, Planning, Practice and Research, Vol. 19, No. 1, 81-99

OECD (1997) Better Understanding Our Cities: The Role of Urban Indicators. Organization for Economic Cooperation and Development. Paris

Innes, J., Booher, D. (2000) Indicators for Sustainable Communities: A Strategy Building on Complexity Theory and Distributed Intelligence, Planning Theory and Practice, Vol. 1, No. 2, 173-186

Laurini, R. (2001) Information Systems for Urban Planning – A hypermedia co-operative approach.

Taylor & Francis. New York.

McDonald, W.G., Patterson, G.M., (2007) Bridging the divide in urban sustainability: from human exemptionalism to the new ecological paradigm, Urban Ecosystems, 10: 169-192

McMahon, S.K. (2002) The development of quality of life indicators – a case study from the City of Bristol, UK. Ecological Indicators 2, 177-185.

Niemeijer, D., Groot R.S. (2008) Framing environmental indicators: moving from causal chains to causal networks, Environment, Development and Sustainability, 10, 89-106

Niemeijer, D., Groot R.S. (2008a) Framing environmental indicators: moving from causal chains to causal networks, Ecological Indicators, 8, 14-25

OECD (1997) Better Understanding Our Cities: The Role of Urban Indicators. Organization for Economic Cooperation and Development. Paris

Revvi, A., Dube, M. (1999) Indicators for urban environmental services in Lucknow – process and methods, Environment & Urbanization, Vol. 11, No.3, 227-245

Sawicki, D. (2002) Improving Community Indicator Systems: Injecting More Social Science into the Folk Movement, Planning Theory and Practice, Vol. 3, No.1, 13-32

Šiljeg, A. Cavric, B., Toplek, S. (2009) NZZ Project GIS data base.

Spreng, D., Wils, A. (1996) Indicators of Sustainability: Indicators in various Scientific Disciplines, Paper written in support of the Multidimensional approaches to Sustainability: The Framing Project proposed to the Alliance for Global Sustainability.

Stenberg, J. (2001) Bridging gaps – sustainable development and local democracy processes, Gothenburg.

Stuart, D. (1972) Urban Indicators: Their role in planning, Planning Advisory Service – PAS, No. 281, 1-21

Westfall, M.S., De Villa, V.A. eds. (2001) Urban Indicators for managing Cities, Asian Development Bank, Manila, Philippines.

Wong, C. (1995) Developing quantitative indicators for urban and regional policy analysis, in R. Hambleton and H. Thomas (eds) Urban Policy Evaluation: Challenge and Change, Paul Chapman Publishingh, London, pp. 111-122.

Wong, C. (2002) Developing Indicators to Inform Local Economic Development in England, Urban Studies, Vol. 39, No. 10, 1833-1863.

World Bank (2003) World Development Indicators. Washington DC: World Bank

For their practical work, the summer school students were allocated wo sites, in need of urban transformation in the context of declining local authority funding. The purpose of the design projects was to generate creative solutions to revitalise a commuter suburb of Lisbon (Arroya-Odivelas) and a coastal village (Sintra – Praia das Macas) with summer tourism. The background to these projects was the acknowledgement that the public sector was no longer in a position to fund urban regeneration. The students were expected to produce alternative planning approaches with new stakeholders and funding opportunities.

Analysis of traditional high street and proposals for transformation within contemporary constraints.

One background study towards the summer school design tasks consisted of an analysis of the decline of traditional high streets. It was expected to assist students in rethinking the declining public realm in their study areas which amounts to a generic planning problem in many parts of the world, and in particular in Europe.

Traditionally, it was the task of the public sector to invest in infrastructure renewal, including traffic management, traffic calming, parking, pedestrianisation, street furniture, street lighting, and signage. The public realm was usually owned by the public sector which was responsible for its maintenance, improvement and provision of safe communal facilities, such as play areas or sitting out spaces. When trying to combat the decline of high streets, the public sector offered shop keepings incentives to keep their businesses there. More recently, public authorities also got involved in marketing their urban assets to attract and retain users and investors. However, since the latest economic crisis public funds were shrinking and no longer available for any activities other than basic services. In areas with low income populations whose spending powers were shrinking even

EUSS11 Student projects summaries
Projects: Arroja-Odivelas and Sintra – Praia das Maçãs
by Judith Ryser

For their practical work, the summer school students were allocated wo sites, in need of urban transformation in the context of declining local authority funding. The purpose of the design projects was to generate creative solutions to revitalise a commuter suburb of Lisbon (Arroya-Odivelas) and a coastal village (Sintra – Praia das Macas) with summer tourism. The background to these projects was the acknowledgement that the public sector was no longer in a position to fund urban regeneration. The students were expected to produce alternative planning approaches with new stakeholders and funding opportunities.

Analysis of traditional high street and proposals for transformation within contemporary constraints.

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more after the crisis as they faced higher taxes, while finding it difficult to dispose of their assets, the public realm was declining even more rapidly which, in turn, led to a downward spiral of devaluing neighbourhoods.

Commercial urbanism was proposed as an alternative to traditional publicly funded and managed urbanism. The characteristics of commercial urbanism were seen as fostering a new style economy, mobilising new artisans, younger self-employed and social entrepreneurs who were expected to revitalise traditional products and create new jobs. Another aspect of commercial urbanism was to increase the night economy. Provided it was able to reconcile conflicting land uses, such as residential and night life, this would create new ways of adding value to urban neighbourhoods and properties. Commercial urbanism consisted of sharing commercial risks and public responsibilities with traditional public authorities who would usually own the land earmarked for such innovative urban transformations. This required precise targets for risk sharing whereby municipalities would supply land or property, and reconcile noise regulations with increased night activities in compatible locations to attract new users, such as students, teenagers, old people, and others who would contribute to the local economy.

Sintra: a spatial strategy for the coastal village of Praia das Macas, Portugal
Students: Khadija Benis, Vanessa Beuchot, Florence Defert, Joana Goncalves, Amanda Rafacho, Nibal Saleh, Jost Wilker.

Spatial analysis

Building on the background information presented by the EUSS team and the local planners, the student team undertook three preparatory

tasks: understanding the historic background, undertaking a spatial analysis of the village and its metropolitan context, and clarifying their understanding of quality of space and quality of life suitable for this location. In the short time available they undertook a rapid desk study, followed by a site visit which gave them new insights into the local issues as a basis for their projects.

They decided to focus on quality of space and quality of life as their guiding principles for their design proposals. They used traditional planning tools, land use plans and SWOT, besides their personal observations to agree on objectives for their proposal. They elaborated a concept which was expressed in micro-scale maps, together with a metropolitan spatial context map. In parallel, they came to some understanding of quality of life and quality of space they considered relevant for this specific site, its users, its current and potential uses to conceive spatial transformations to improve physical, economic and social opportunities for the village.

Praia das Macas had evolved from a fishing hamlet to a summer tourist destination of people from cities and especially Lisbon. Its sandy beaches attracted holiday makers and surfers in large numbers over a limited period of time. Such increasing influx of tourists over the summer season created unsustainable demands on the locality and its services. Some second homes were built on the periphery, but people living permanently in the village remained a fraction of the summer population. Despite these changes, the village preserved a family friendly environment and a cosy atmosphere in a still attractive natural environment with leisure facilities along the beaches and in the village centre.

The SWOT analysis confirmed these strengths, but also uncovered weaknesses, mainly traffic congestion and excessive amount of parked

cars, poor sidewalks and some run down sites with derelict buildings. If these problems were not addressed, the team imagined that beaches with better environmental conditions and greater tourist attractions would compete for the summer tourists of Praia das Macas who are contributing considerably to the local economy. Development opportunities were identified as the outstanding site, its sea views, its natural environment and cultural heritage, and its recreational potential for swimming, walking, surfing and resting.

Design proposals

The key changes the students proposed were to enhance the existing heritage sites, to reconnect the town centre with its rich environment by opening sea views and improving physical connections, but most importantly to find solutions for the conflicting traffic situation, flows as well as parking. They proposed to regenerate the village centre by redesigning the square, improving its uses by calming traffic and reorganising parking to improve road safety, and by creating a more active footfall in the surrounding buildings to turn the square into a destination.

Their micro-scale changes focused on a complete redesign of the square with new pavement, street furniture, trees and better view onto the sea, as well as the reshaping of the uncomfortable links between the village centre and the beach which had lots of steps, no through views and no activities on the way. This meant taking most of the parking out of the square to new locations, albeit easily reachable on foot. By elevating part of the square they managed to create a safer space with sea views. They adopted a similar approach to the link between the square and the beach. The main challenge was to open up views along the path to guide visitors to the seafront where they proposed new leisure activities

and a promenade. They worked with the sections they had surveyed during their site visit and photographs showing the obstacles and opportunities. They were expecting that these changes would improve life of the permanent residents s well as prolonging the tourist season as it would be less dependent on bathing alone. Already, the surfers were using the beach over a longer period, thus providing more attractions to them, including a possibility to store their equipment should contribute to prolonging the tourist season and levelling out the unsustainable fluctuation of the demand on local public services and pressures on the natural environment.

Arroja: a revitalisation plan, Lisbon metropolitan area, Lisbon Students: Pervin Senol, Kristina, Gjini, Priscila Barros, Marianne Monte, Pawel Jaworski, Pedro Afonso Fernandes, Natalia Pawlik, Themistoklis Oikonomou

Spatial analysis

Using the documentation produced by the EUSS 11 team and contributed by the local authority the student team compiled relevant data for their projects about characteristics of the local population, level of education, local and commuting workplaces, together with the typology of the building stock in this peripheral suburb of Lisbon. In the light of a multicultural and increasingly footloose society their concern was to understand the diversity of the population of this neighbourhood to identity their needs and the potential contributions they could make to improve their local environment. Their objective was to transform Arroja from a space into a place, inspired by Jane Jacob's criteria of liveable places which include mixed use of residential, commercial and public amenities, small blocks leaving open connections, a diverse building stock

and a relatively dense urban fabric. They also compiled a map showing the local characteristics and attractions, without knowing though who among the local residents were using them, at what time of the day and how long for.

They noted that the suburb built sometimes in the seventies after the flower revolution was conceived according to modernist principles, with plenty of communal open spaces with a building stock dating from the same period. In effect it was a new town extension with amenities which had declined as the residents were commuting to Lisbon to work and the neighbourhood was not used much during daytime. Quite some empty sites were still awaiting missing cultural and community establishments which were never built. A lot of the open spaces were neglected, cars parked everywhere, many shops in the arcade closed, and many ground floor spaces planned for workplaces never used. Based on this analysis and their site visit they decided to concentrate on the public realm and its improvement as a means to make this neighbourhood more liveable. They identified potential vacant spaces for which they were proposing new uses and designs, including connections between them to create greater cohesion between the various parts of the neighbourhood inhabited by different communities. This included rethinking the use of the empty ground floors to create employment opportunities and thus retain some of the population in the neighbourhood during daytime. Their key design problem was how to conceive such a network of public spaces and how to realise it. Their design strategy was to select specific places where they would introduce urban acupuncture projects which they designed to accommodate diverse and complementary uses to heal the 'neighbourhood body'. That included the connections between the places, a park, a cultural or community centre, revitalising existing neglected squares, an oecumenical pole and a green way meandering along the historic landmarks.

Design proposals

They produced a masterplan locating seven planning interventions, six place transformations, as well as links between them and connections beyond this rather enclosed neighbourhood. For each intervention they identified the existing problem of the space; who should participate in, and benefit from the change; overall planning objectives which would contribute to the regeneration of the neighbourhood as a whole; and the planning tools and urban design instruments to achieve these transitions.

They produced sketches showing the situation before and after, including in sections as the morphology of the neighbourhood was very complex. The connection project consisted mainly of redesigning streets, parking arrangements, and creating safe places to walk and play with new greenery to improve the comfort of using outdoor spaces. The idea was that people would use their neighbourhood more and on foot. They identified a neglected open space with views over the valley which they proposed to transform into a local park with shaded sitting out areas, cafes and spaces for communal cultural activities and leisure. One idea to enliven what was in fact a dormitory suburb was to create a space for events, such as ethnic or food markets, music performance, etc. where inhabitants could express their cultural identities and which would attract visitors from the surroundings. They selected a bare space in front of the declining shopping mall which should benefit from these new activities as well. The cultural centre was to be located near the social security office where inhabitants had a purpose to go anyway. Transforming a backyard space into a green area connecting the shopping mall with the medium density housing blocks was expected to add value to the area and generate a new multifunctional centrality by transforming the shopping mall into a covered street between several open spaces. They noted the absence of

any religious establishment and decided to set up an oecumenical node where a church had been planned by was never realised. The site around this building would be a node on the internal walkway and contain spaces for spontaneous activities.

In the longer term, they would mobilise the local inhabitants to take a new interest in the existing and rather run down heritage objects which they would restore and include on the internal walkway. The students also set up a longer term strategy for spatial transformations which would require more substantial investment, such as a public transport connection between the neighbourhood and Lisbon, the relocation of the power plant which occupies a central space in the neighbourhood, and the transformation of the empty ground floor areas into productive and creative spaces.

Name
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Netherlands Environmental Assessment Agency

Senior researcher at the Netherlands Environmental Assessment Agency, The Hague. Her research interest involves spatial planning, landscape development and policy evaluation, urban landscape design, and planning support systems. In 2005, she has been appointed associate professor at the Department of Horticulture and Landscape Architecture in Novi Sad, Serbia, where she teaches landscape planning. Since 2009, she has been working as a tutor for the subject Paper Writing at the Amsterdam Academy of Architecture, at the third year of master studies in Architecture, Urban Design and Landscape Architecture. Alexandra Tisma obtained her PhD and master's degree at the Faculty of Architecture in Delft, Netherlands, and her bachelor's degree at the Faculty of Agriculture in Novi Sad, former Yugoslavia. She is a member of the Netherlands Association for Landscape Architecture and Le-NOTRE network.

Name
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Artur is Dean for cooperation and regional development of Aveiro University , is graduated on Civil Enginery (Coimbra , PT, 1978), have a Master on Regional and Urban Planning (Cardiff , UK 1983) and PhD on Regional and Urban Planning (Cardiff, UK, 1987).

He is Professor at the Social , Political and Territorial Sciences of Aveiro University . His field of work is Planning Policies and Theory , Strategic Territorial Planning, Inovation Policies and Sustainable Development Policies.

Between 2003 and 2005 was Vice-President of Regional Coordination and Development Commission of Centro Region (CCDR-C). Was State Secretary of Environment and Territorial Planning of Portugal (May to June 2004) and Consultant of Presidency of the Portuguese Republic on Science and Environment between 2009 and 2011.

Name
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Is Associate Professor in the Department of Architecture and Planning at the Faculty of Engineering and Technology, University of Botswana.

He gained his Ph.D., M.Sc. and B.Sc. degrees in geography and spatial planning from the University of Belgrade.

He has been involved in professional practice, research, management, government service and academia since 1980. Before joining the University of Botswana in 1997, he served on the Board of directors in Yugoslav Institute of Town Planning and Housing (YUGINUS), as an assistant professor at University of Belgrade (Faculty of Geography and Faculty of Architecture), as director of GISDATA Belgrade, and as a senior urban planner in the Department of Town and Regional Planning, Ministry of Lands, Housing and Environment of the Republic of Botswana. During period 1997-2005 he was a visiting research fellow at the Institute of Architecture and Urban Planning of Serbia (IAUS).

As geographer and chartered town planner with the Royal Town Planning Institute (RTPI), he devoted his professional, research and teaching interest around issues of spatial planning and design, environmental land use planning, development and management, applied geography, institutional and organizational aspects of GIS, focusing on selected countries of Southern Africa and Western Balkans.

Name
David Prosperi (USA)

Florida Atlantic University.
International Society of City and Regional Planning (ISOCARP)

David is Professor at the Department of Urban & Regional Planning, has been with FAU since 1989. He holds a Ph.D. in Economic Geography from Indiana University and a master's degree from Temple University in Geography. His main interests include growth management, economic development, and computer applications.

Name
Derek Martin (NL)

International Federation for Housing and Planning
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Derek Martin has been the CEO of the International Federation for Housing and Planning (IFHP) since the end of 2007. He has a Masters in Urban and Regional Planning from the University of Amsterdam. As policy officer at the former National Physical Planning Agency in The Hague (NL), he worked in the Benelux Structure Plan, and on European planning collaboration within the framework of the Council of Europe. In 1987-88 he worked at DG Environment at the European Commission where he helped set up the CORINE Land Cover programme. After working on the cross border and European dimension of the Dutch 4th National Planning Report, he spent another 3 years (1990-93) at the European Commission working on the development of the spatial dimension of EU regional economic policy. Worked on the further elaboration of European spatial planning policy, which produced new European instruments (ESPON, INTERREG) and policy documents (ESDP). For almost 10 years, he was Head of International Spatial Policy, and then of Sustainable Spatial Development at the Dutch Ministry of Housing, Spatial Planning and the Environment.

Name
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Diogo is Urban Planner (PhD., Master Degree and 5 years degree on Urbanism)

He is Head of Urban Planning Department on Universidade Lusófona, Lisboa Portugal since 2006. Researcher at TERCUD – Centro de Estudos Território, Cultura e Desenvolvimento (FCT ID 462);

He is President of APROURB – Portuguese Association for Professional Urbanists ; Manager at GEOIDEIA – Territorial Planning Studies.

His research fields are urban quality and quality of life, urban rehabilitation and the teaching of planning. As researcher stand out the participation on LUDA – Improving quality of life on Large Urban Distressed Areas (EU FP5) and on TECHNOLANGUE (INTERREG B MEDOC/MEDA) on the Indicators field.

His activity on APROURB stands out in the awareness on the need of regulamentation for professional access supported on academic qualification on urban planning/design.

(Head of EUSS 2011).

Name
Dirk Engelke (D)

Karlsruhe Institute of Technology (KIT)

Dirk is Dipl.-Ing in Civil Engineering (1996) and Applied Cultural Studies (1996), have a PhD in Spatial Planning (2002).

Coming from civil engineering and applied cultural sciences Dirk is currently managing director of a planning office called 'pakora.net – Network for Towns and Regions'. Beside his office work Dirk teaches at the Karlsruhe Institute of Technology (KIT).

His main tasks are consulting and research in national and international projects on urban planning, regional development and land use management. Recent tasks are e.g. a research project on land use management for communities for the German Federal Ministry of Education and Research, leader of a European working group with several cities within the URBACT programme on mediation on settlement structures for the Region of Stuttgart and their bordering regional authorities or the state of Luxemburg.

Name
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Fernando have a B.A. in Architecture (Lisbon University , Portugal), a M.A, of Science in Urban & Regional Planning (University of New York, USA) and a PhD in Human Geography (University of Durham, UK).

His field of research are Urban Geography, Natural and built space; Activities, forms, materials and schemes of social and professional organizations.

He works on popular constructions   and "appropriate   architecture "; traditional responses and integration of old and new forms and materials ; Urbanism and heritage , conservation of natural and built heritage and sustainability of urban development.

Name
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He is member of directory of the (International Federation of Housing, Urban planning and management - FIHUOT).

Recognized as specialist on "Territorial Planning and Management" and on "Transports and communication infrastructures" of Portuguese Engineers Order.

Name
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She is Qualified in architecture from Worclaw University of Technology obtained post-graduate diploma in urban design and spatial planning. Her PhD thesis discussing spatial patterns of business services was awarded the prize of the Minister of Urban and Regional Development of the Republic of Poland.

Her research interests focus on urban development and urban transformations. She is deeply involved in international cooperation in teaching planning. She run big international planning workshops as a Head Coordinator. Her activities within AESOP focus on core curricula and education-practice relationships. She contributed UN-Habitat ' Global Report on Human Settlements 2009..

Name
João Teixeira

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João teixeira is Civil Engineer specialized on Urban Planning and Management . Since 1982 is invited professor in several universities .He Is Specialist of UN -Habitat on expert groups. Was president of Public Enterprise for Lisbon Urbanization (EPUL), National coordinator on PLIS Program , Director of Urban and Regional Planning of Lisbon and Tagus Valey Regional Coordination and Development Commission . João has a Special Recognition by the Jury and Council of the 19 th Urban and Regional Planners Exebition Award at International Urban Planning Exebition.

Name
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Judith is Architect and urbanist (Diploma of Architecture and Urbanism, EPF-L 1964). She was in charge of research on response to effective demand and studied for
an innovative MSc on social sciences (Systems analysis, operations research, urban sociology, economic geography, environmental theory and design, ergonomics) at UCL Bartlett where she also worked on time-space relation research.

Joined the Greater London Council research and development unit and worked on Greater London Development Plan (GLDP).

Participate in the Forum of the first UN Habitat conference in Vancouver (1976) and won a post at the Economic Commission for Europe of United Nations (UNECE) responsible for East-West urban and regional research cooperation and in charge of the fifth Urban and Regional Research Conference in Paris in 1980 (1976-1980).

In 2006, she was rapporteur for the 10 UNECE conference in Bratislava.

Judith was rapporteur at the UN Forum of Professional Researchers at UN Habitat II in Istanbul (1996).

She worked with the Swedish Building Research Council and K-Konsult in Stockholm she founded the project-based International Researchers Cooperation (IRC), a network of urban and regional researchers working across the then East-West Europe . She is cooperating in London and Madrid with the Fundacion Metropoli on books, articles and innovative urban development.

She wrote numerous articles and book reviews for professional and peer reviewed journals in several languages. As past vice president, member of the editorial board, jury of the Gerd Albrecht Award and current head of the UK national delegation made many active contributions to Isocarp (International Society of City and Regional Planners) and edited a number of publications. Member of the Chartered Institute of Journalists in the UK and member of the International Committee, Judith has spent part of her professional life as a journalist.

Name
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Júlia holds a PhD on Regional and Territorial Planning (IST. Lisbon 1997) and is Professor at Universidade do Minho , Portugal , and former Director of Civil Engineering graduate studies at Minho University and actually is Director of Municipal Engineering Master Course.

She has been developing pedagogical experiences about knowledge by project, peer evaluation and team work on urban planning and management field .

Name
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Ph.D. in City and Regional Planning (2011), Master of City and Regional Planning (2007) and Bachelor of Arts in Sociology (2002) by Ohio University, USA.

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Name
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Mário Moutinho is actually Rector of Universidade Lusófona de Humanidades e Tecnologias.

Founder of Urbanismo degree (1991) on Universidade Lusófona de Humanidadese Tecnologias, have been head of Department since 1991 till 1997 and 2001 till 2006.

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Name
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Nils is an urban planner who graduated from the University of Applied Sciences Larenstein and the University of Amsterdam. During his professional career he worked both for the private and public sector and has experience in consultancy, urban planning, sustainable design and planning and redevelopment of urban areas.

He is involved in international training of young professionals as a tutor at international urban workshops. He is an author of several publications. Currently he works as a lecturer Urban Planning at Real-estate Management at the University of Applied Sciences Rotterdam.

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Name
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Paulo works at the University of Aveiro, Portugal, as professor (Department of Social , Political and Territorial Sciences) and researcher (research unit of Governance and Public Policies).

He teaches at the university for almost two decades and at the same time his research work has been published on urban policies . He has consultancy and expertise experience for almost three decades on spatial planning at the local , metropolitan and national level . He has also been involved in the Planning and Complexity AESOP's thematic group . He is member of the direction of APPLA (Portuguese association of planners)

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Town and Regional Planner is Senior researcher in Town and Regional Planning. Pietro has a degree in Environmental Engineering , specialization in town and territorial planning (Università degli Studi di Roma – LA SAPIENZA– Rome (Italy), 1999) and a PhD in Regional Policies and Local Planning (Università degli Studi di Roma – UNIROMATRE – Rome (Italy).

He has been working has **project designer and partnership coordinator** on topics connecting the use of 3d geographical data to the elaboration of town planning models for "smart cities".

He is founder of U-Space Romania, design of project proposals for the Romanian Social Fund.

Sennior project manager and international expert in town planning to draft an operational proposal and design development scenarios for Municipality of Sitges (Barcelona, Spain).

Pietro has an experience in international research projects on integrated urban planning, urban regeneration, community development, in Romania.

Name
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PhD on Environmental Sciences (UNL, Portugal) Master on Environmental Planning and Territorial Management (UNL, Portugal) and graduated in Law, (Catholic University, Portugal).

Coordinates post-graduate and specialization courses on Environment and Territorial Planning. Is Professor at Universidade Lusófona, on Urbanism course.

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Consultant at enterprises and municipalities on the domain of Urbanism, Environment and territorial planning, his field of research.

Name
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Stefan is a town planner and urban designer graduated from University of Applied Sciences Koblenz and University of Applied Sciences Stuttgart.

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Name
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As a researcher she collaborates with the Spanish National Council of Scientific Research. She is author of several books and articles on urban and regional issues and as a professional she has participated in the drafting of numerous regional , municipal and special plans.

Between 2002 and 2005 she held one of the Vice -Presidencies of the International Society of City and Regional Planners (ISOCARP). At present she is member of ISOCARP Scientific Committee.

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He has 20 years of experience with UN, EU and NGOs in Sub-Saharan Africa, Southeast Asia, China and Brazil, and in Southern and Eastern Europe.

He works on Food and Agriculture Organization of the United Nations (1990/1996). Director of Geography Department of Lusófona University, Lisbon, science 2000.

His field of work /research is Geography of Development (territorial identity socio -economic change and local /global interface); Local and Regional Development Planning (participatory methods and integration of socio - environmental, demographic and cultural spheres of development); International Assistance, Policy Advice and Co-operation for Development .

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