STRATEGIES FOR THE POST-SPECULATIVE CITY

EUROPEAN URBAN SUMMER SCHOOL

AESOP

All the partners and participants in the European Urban Summer School and Young Planning Professionals Award are grateful to the Ministry of Infrastructure and the Environment of the Kingdom of the Netherlands for making the publication of this book possible.

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edited by

JUAN ARANA
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0 INTRODUCTION

1 THE POST SPECULATIVE CITY

Izabela Mironowicz (AESOP)
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THE EUROPEAN URBAN SUMMER SCHOOL (EUSS) AND THE YOUNG PLANNING PROFESSIONALS AWARD (YPPA)

0 INTRODUCTION

IN 2010, the Association of European Schools of Planning (AESOP) launched a new annual event: the European Urban Summer School (EUSS) for young planning professionals. AESOP wanted to bring together young professionals and experienced academics and practitioners across Europe to discuss spatial issues.

AESOP's aim was to facilitate a better trans-European understanding of planning issues, promote an exchange of ideas and foster a debate on the most important planning topics. These aims corresponded with AESOP objectives set out in the AESOP Charter.

AESOP offers its teaching resources at EUSSs. Members of AESOP – European universities teaching planning – host the event. The EUSS is not a commercial venture. It is meant as a platform of debate to be run on as low as possible fee for participants. Tutors do not get any fee for their work.

THE PAST

The first EUSS was held in September 2010 at the Wrocław University of Technology, Poland. The topic was Heritage and Sustainability. Izabela Mironowicz was head of school. The proceedings of EUSS 2010 have been published in "Urban Change. The Prospect of Transformation" edited by Izabela Mironowicz and Judth Ryser (ISBN 978-83-7493-570-8). The book is also available for downloading in pdf format from the AESOP website www.aesop-planning.eu and is ready for comments on the AESOP Digital Platform 'InPlanning'.

For the second EUSS, hosted by Lusófona University in Lisbon, Portugal in September 2011, AESOP invited four of its international planning partner organisations to be involved in the School: the European Council of Spatial Planners-Conseil Européen des Urbanistes (ECTP-CEU), the European Urban Research Association (EURA), the International Federation for Housing and Planning (IFHP) and the International Society of City and Regional Planners (ISOCARP). Diogo Mateus was head of school and the topic was: Quality of Space – Quality of Life.

This cooperation was intensified in the third EUSS organised by the University of Westminster, London in September 2012. The theme of the School was Times of Scarcity: Reclaiming the Possibility of Making. Deljana Iossifova was head of school, and was also responsible for editing the publication of the proceedings with the same title as the EUSS itself (ISBN 978-0-9927823-0-6).

At this 3rd EUSS, an initiative from the Netherlands government, which challenged young planners to find solutions to contemporary spatial planning problems, was integrated into the School: the Young Planning Professionals Award (YPPA). This is an annual, 3-year international competition (2012-2014) funded by the Directorate responsible for planning at the Dutch Ministry of Infrastructure and Environment (mI&M). Its aim is to stimulate thinking and

promote innovative ideas on how spatial planning in Europe can adapt its form and methodologies to take on the present-day challenges and transformations facing our human settlements. The underlying thinking is that it is largely the younger generation (< 35) of planning professionals who will have to come up with the answers, as it is they who will have the responsibility to plan and develop those settlements in the near future.

The winners get free participation at the EUSS and present their papers at a special YPPA session. The papers of winners and runners-up of YPPA form part of the EUSS publication which is also generously supported by the mI&M grant. The theme of the Award is related to the theme of the EUSS, so for 2012 it was 'Adapting cities to scarcity: new ideas for action. Trends, perspectives and challenges of spatial development in a phase of de-growth and decline in Europe'.

This is the publication of the fourth EUSS held in September 2013 at the Universidad CEU San Pablo Polytechnic School, in Boadilla, Madrid, Spain on the theme 'Strategies for Post-Speculative Cities". It includes the papers of the two winners of the 2013 YPPA – Clenn Kustermans and Veronika Kovacsova - on the topic 'Ensuring climate resilient cities: innovative ideas for effective measures in a low-level investment environment'.

The 4th EUSS / 2nd YPPA have once again confirmed that a few days of intensive interaction, hard work and fun can produce many useful new ideas from, and friendships amongst, young planning professionals. We thank them, the tutors and above all Teresa Franchini and Juan Arana Giralt, heads of school, without whose efforts the EUSS would not have been the success it was, and the Dutch Ministry for providing the funds to produce this book containing a lasting record of everyone's efforts.

Teresa Franchini and Juan Arana
EUSS Director and Coordinator

CONCEPT AND ISSUES OF THE EUSS2013

0 INTRODUCTION

AT a time of abrupt changes, when the old urban models are quickly becoming obsolete and inefficient, there is an opportunity to look into the future to envisage new strategies. We intend to work on the wounds inflicted on the city by speculative urbanism: there is a need to bring into question the existing model of urban growth, working from the present situation towards new visions to recycle our cities. This is the opportunity to put forward proposals to challenge uncontrolled urban growth; to review the situation of the new suburban territories, and to regenerate the consolidated fabric of the inner city.

Conversely to speculative planning, new strategies may consider how to enhance citizen participation in the making of the city. Would a bottom-up urbanism be possible that deals in a more responsible manner with people's needs? Instead of simplistic speculative solutions we need a multiple and diverse urbanism, capable of adapting to complex situations. New strategies may include reusing the city, rethinking the territory, generating activity, diversity, complexity and density.

The 4th European Urban Summer School (EUSS), hosted by the Polytechnic School at the CEU San Pablo University in September 2013, has been an invitation to develop new ways of thinking of, and tools to respond to emerging issues about the future of post speculative cities. It aims to bring together postgraduate students, emerging and experienced academics and young and established design and planning professionals from all over Europe (and further away) to develop a better understanding of some of the most pressing contemporary issues related to the built environment and to amplify and strengthen the links between planning, design-relevant research and professional practice.

WHY MADRID?

The burst of the housing bubble in Spain has triggered a deep crisis regarding the city as project. Latent problems have emerged, such as the lack of a territorial model, the unsustainability of urban projects, precariousness of resources and urban poverty. The economic crisis and the different administrative problems have left behind ghost cities and abandoned oversized urban projects. All these aspects are in the midst of a debate over flexibility in urban planning enhanced by the process of revision of the current Madrid Master Plan, carried out by the local administration.

Participants in the EUSS explored the possibilities of spatial planning to deal with present day challenges affecting European cities within the context of a deep economic crisis. Based on the case of the city of Madrid as an example of expansive urban growth, the course aimed to recognise the economic, cultural, social and environmental assets and shortcomings of the recent urban planning practices in Europe, and to identify new planning visions for contemporary cities.

For this purpose, participants explored their ideas approaching the city from three different perspectives:

Existing fabric: After decades of urban improvement, the central area still has some patches of urban deprivation in need of regeneration projects which aim to improve the existing conditions. We propose a reflection on the problems and possibilities of the consolidated city. What new strategies can be implemented? How to preserve complexity and social diversity while improving living conditions?

Urban voids: Within the compact city, empty or underused areas are requiring planning references and urban design proposals to allocate strategic urban demands. The next development of the city will take place within its limits, and the time of grand urban projects seems to be over. The idea is to locate potential sites of urban interest and work with them. Can we envisage new approaches for the urban design of our cities, which are sustainable, as well as exciting and responsible? Can we change the city from within?

Border areas: The construction boom in Madrid took shape in terms of a number of urban projects on the outskirts of the city. Often oversized and with deficient urban spaces, these projects remain in some cases uncompleted or largely uninhabited. In others they just leave enormous areas of vacant land raising a big question mark regarding the future of the city. We propose to work, reflect and develop strategies against the backdrop of these territories. Can we work with the reality of these failed urban fragments? How can we deal with this no-man´s land that lies amidst a waste of infrastructures, new housing developments and old neighbourhoods?

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Judith Ryser

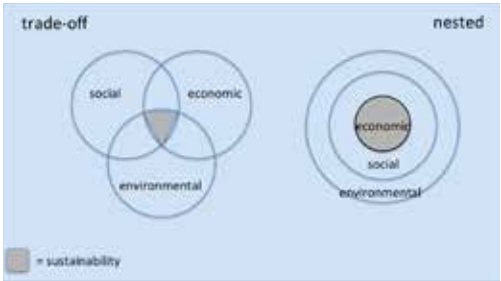
STRATEGIES FOR THE POST-SPECULATIVE CITY. REDRESSING THE BALANCE IN FAVOUR OF SUSTAINABLE DEVELOPMENT

INTRODUCTION

Every cloud has a silver lining. The ghost quarters[1] on the fringes of Spanish cities - ruins before their time due to frenetic property speculation - are shied by people. They want to live in urban environments where they have access to jobs and urban life, which is more crucial than ever during the economic crisis. Alternative 'shelter' is unsavoury though, as evidenced in the slums of the southern outskirts of Madrid, or in overcrowded garages and sheds around Heathrow airport and in the East End of London.

This raises the question of whether it is possible to revitalise the speculative quarters in the middle of nowhere into liveable environments and to harness unused spaces within the city by turning them into liveable places. They offer designers a great opportunity to rethink urban regeneration according to 'nested' sustainable principles encompassing the environment, the economy and social wellbeing.[2]

SUSTAINABLE DEVELOPMENT



1. Bio-regional concept: trade-off vs nested sustainability
Source: One Planet Communities (redrawn by author)

What is sustainable development? A contradiction in terms? Or a compatible compromise between the forces which shape urban change? And what role, if any, has the urban designer in this process? On whose behalf? Those who govern or those who are governed or,

controversially, the development industry? And who is evaluating the sustainability of such developments?

Definitions

The sustainability concept was introduced by the World Commission on Environment and Development (Brundtland Report) in 1987.[3] It adopted a dynamic approach to environment-related human uses, but added ethic and moral responsibilities to human interventions, constraining them by the rights of future generations.

However, sustainability is an ambiguous concept. It is interpreted widely by different interest groups. There are disagreements between economists and designers, for example, about the notion of development and growth. The former are seeing quantitative growth as a necessity of 'progress', the latter are claiming that development does not necessarily mean growth. For them, development can improve quality of life through alternative ways of producing, consuming and living in cities without quantitative growth and its unsustainable effects on their ecological footprint. Just as the Brundtland Report has extended its definition to include time, sustainability of the built environment needs to encompass the wider context of urban change, instead of confining it to project boundaries. Experience shows that sustainability does not lend itself to simple scaling and is shaped by multiple factors.

SUSTAINABILITY: POLICY AND TECHNOLOGY

Two aspects of urban sustainability are addressed here: policy and technology. The discussion of sustainable urban policy focuses on regeneration and the nature of its links with gentrification; the one on concrete projects resorts to means of assessing their degree of sustainability. Yet, sustainable urban policies and implementation technologies are interdependent. For designers and planners they are converging in the urban regeneration process and its repercussions on existing cities where their interventions take place.

CONTRADICTIONS

Cities contain inherent contradictions between sustainability principles and economic growth; man-made environments and nature; city competitiveness and inclusive citizenry; openness and gated communities. These contradictions are at the heart of urban policy debates and regeneration processes. Economic growth tends to dominate every development objective and, in times of recession, sustainability and social justice tend to lose importance. The distinction between trade-off and nested sustainability illustrates that.[4] In physical-spatial terms, this shift affects the balance between the man-made environment and nature; the city and the countryside; built up areas and open

2. Urban sprawl, picture taken at City exhibition
Tate Modern 2007

spaces within cities. During expansive periods, urban sprawl is invading the countryside, while austerity periods may favour a more sustainable and intense use of existing urban resources. Sustainable development approaches may have to apply to both types of environments, the wasteful green field invasions as well as derelict urban spaces.

REGENERATION AND GENTRIFICATION

Just as points of view differ about sustainability and development, they diverge regarding the understanding of regeneration and gentrification and the relationship between them.[5]

Interpretations of regeneration

In planning terms, urban regeneration has displaced urban renewal and is practised alongside rejuvenation and refurbishment. It indicates a softer approach in contrast to blanket "bulldozing" undertaken after the second world war in the UK and elsewhere, when arguably more urban fabric has been demolished than during the war.

There are many definitions of urban regeneration.[6] BURA, the British Urban Regeneration Association[7] defines it as: "Urban regeneration is a comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area." In his handbook on urban regeneration, Roberts uses a similar definition.. Alternatively, an investor, the Igloo Regeneration Fund sees it as "Urban regeneration is concerted social, economic and physical action to help people in neighbourhoods experiencing multiple deprivationto reverse decline and create sustainable communities…" "…[regeneration] requires public sector financial support which is only given to benefit deprived communities…" as opposed to "…property development [which] happens through market forces…". These definitions differs slightly form the official UK government definition: "Regeneration is the holistic process of reversing economic, social and physical decay in areas where it has reached a stage when market forces alone will not suffice".[8]

What all these definitions of urban regeneration have in common is some recognition that it has to encompass some component of public policy, as well as the interests of the development industry. Note that these definitions also include the economic, environmental and social dimensions of sustainability. Where they may diverge from reality is whether they recognise the need to improve conditions of existing communities.

3. Compact inner city, Dublin, consolidated with infill
photo: Judith Ryser

4b. Aviles Spain historic centre, private sector urban regeneration with public sector infrastructure
photo: Judith Ryser

4a. Bilbao Spain riverfront, public sector urban regeneration, vision and implementation
photo: Judith Ryser

Interpretations of gentrification

Similar, possibly contradictory elements are incorporated in the definition of gentrification. Ruth Glass coined the term 'gentrification' in 1964 to describe the influx of middle-class people who displaced lower class worker residents in urban neighbourhoods; her examples were working-class districts such a Islington in London.[9] These invasions and displacements disadvantage the local community, but they bring macro-economic benefits to these parts of the city and are thus welcome by local authorities and central government.

5a. London UK, before gentrification, indeterminate space colonised by transient activities
photo: Judith Ryser

5b. London East End Hoxton Square, when gentrification has taken hold
photo: Judith Ryser

Glass's concept has been examined further by many researchers and activists since then, also in the USA.[10] Loretta Lees and her colleagues define gentrification as "the transformation of a working-class or vacant area of the central city to a middle class residential and/or commercial use".[11] Paul Watt discusses the various reasons for displacement and resistance which accompany gentrification in connection with the 2012 Olympic games.[12] He sees it as a top down activity by the corporate sector with the support of the central and the local state, leading to increased land values, a better tax base, and less social pressures on local services, while destroying local communities and businesses according to those who are being pushed out due to an increasing rent gap and abandonment of the Keynesian welfare state. Others put the reasons to deindustrialisation and professionalisation,[13] and others still to continuous class struggle. For example, David Harvey argues that antagonistic class relations become interlinked with processes of urban spatial restructuring through the process of "accumulation by dispossession".[14] Similarly Neil Smith is relating gentrification to class struggle and the see-saw approach of capitalists to investment and disinvestment over time and space.[15]

What happens in both top-down and 'sideways' processes of gentrification is a transformation of low-value to high value neighbourhoods, more recently accelerated by the 'return to the city' movement. Not only does this deprive the lower income groups living there of their right to the city, but in cases when transient occupiers are initiating the process of gentrification, they too are eventually displaced through 'unintended economic eviction', without being able to reap any benefits from the 'value added' they have contributed to the area.

Urban regeneration under neo-liberalism

Urban regeneration claims to remedy 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, and after it, as well as in the long term. In a socially responsible political system the purpose of sustainable urban regeneration is to redress social and spatial injustice. This may no longer be the case in a neo-liberal environment, and it is questionable whether the purpose of partnerships between the public and the private sectors are willing and/or able to deliver sustainable, or more appropriately 'low (adverse) impact' development.

At the time when the planning system was firmly rooted in the public sector, it was controlled by elected representatives who were supposed to uphold the common good. This changed in 1980 in the UK when the Thatcher government passed the Local Government, Planning and Land Act. It created agencies[16] able to substitute for planning authorities and take over large scale urban regeneration projects with high political profiles.[17] The London Docklands Development Corporation was the first example of apparent abdication of public sector domination to the market.[18] In reality, this shift constituted a stronger but less accountable role of central government. Not only did it finance these non elected development corporations which are only loosely accountable to ministers rather than to parliament, but it endowed them with compulsory purchasing powers, including for land owned by local authorities which nevertheless remained responsible for providing local services, albeit without any say in the development process.

Such "quangos" are not subjected to appropriate scrutiny and 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. The outcome is that urban regeneration are totally dominated by economics, or profit.

Gentrification, unintended consequence of urban regeneration?

Although officially often targeting areas of deprivation,in reality urban regeneration policies tend not to ameliorate the life chances of the most disadvantaged. Regeneration is claimed to improve the quality of life of citizens overall, but its effects tend to be distributed very unevenly and there is little evidence of a trickling down effect, not least because regeneration provokes a shift of population.[19]

Studies by Marcuse[20], Paul Watt[21] and many others[22] demonstrate that local communities confronted with gentrification - be it top-down or sideways - are not homogeneous. Faced with an increasingly unsafe and precarious environment, they accept buy-outs and resettlements no matter under what conditions. These behavioural choices become a part of the planning process and once abandonment has reached critical mass take-overs become easier.

Gentrification emphasises contradictions in the urban fabric between social and spatial (in-) justice, open or gated spaces, man-made environment or nature, the city or its citizens. Its impacts are ambiguous and it is not clear whether it is inherently adverse, or whether its divisive effects can be attenuated.[23] Undoubtedly, gentrification makes a positive contribution to the urban fabric. Individuals release energy and investment and spend their time and money on improving derelict premises and often help improve the broader neighbourhood into which they move, even temporarily, as a further step in their housing 'career' or to set up a businesses.

6a. Replace: public sector supported neo-liberal gentrification, Olympic Games 2012 site, Westfield shopping centre as gateway to Olympic park
photo: Judith Ryser

6b. Neo liberal gentrification: Canary Wharf London, second financial centre
photo: Judith Ryser

7a. step by step gentrification inner city Madrid Lavapies, public planning, pump priming, for later private investment
photo: Judith Ryser

7b. Transient gentrification, occupation of derelict warehouses on fringe of Olympic site London by footholders who will be driven out by private sector developers
photo: Judith Ryser

Gentrification constitutes a social as well as a physical intervention in cities. Apparent in the shape of gated spaces and whole gated communities, it makes also less visible divisive and exclusive infractions into the 'commons'. The benefits of gentrification need to be balanced with its adverse effects on localities and existing communities.

Is the gentrification process path dependent?

It could be argued that gentrification can be both a contribution to, and an outcome of urban regeneration, thus path-dependency can work both ways. A path-dependent process of gentrification may begin with footloose artists, activists, homeless or marginal people colonising derelict buildings and abandoned sites. The process may start with temporary events, one-off festivals, exhibitions, jumble sales organised as part of transient urban life which enriches the city. Gradually, artists and social entrepreneurs who occupy these premises improve them and develop some informal local economy by harnessing their innovative creativity. When the place starts to show success, the erstwhile owners of the sites or the public authorities lay claim to them, evict the colonisers who have no title to land or premises, sell the sites on to private developers, often at very favourable terms, who may also recover the costs of decontamination from the public purse. This is the start of regeneration. After lengthy conflicts, the foot-holders are forced to move on without benefiting from the value added which they have generated on such sites by increasing their desirability and economic worth. In this case, the path dependency consists of gentrification, regeneration, resistance and displacement. A whole literature is honing these foot-holders[24] mostly though without addressing their moral or pecuniary claims.

The reverse process starts with the public sector or more likely its agents claiming land or premises and evicting those using it. In this case, urban regeneration precedes gentrification, and resistance and displacement precedes both. This raises the issue of what happens to the notion of the "commons", of land in public ownership, notwithstanding rights of way when they are contracted out, sold off, or privatised.

THE ROLE OF PLANNING IN IMPROVING THE SUSTAINABILITY OF DEVELOPMENT

The process of ultimate betterment of cities leaves a host of questions for planning, urban regeneration and urban design. It is important to clarify the role of planners and urban designers in this balancing act between private property and public realm, especially in the light of the changing role of the state under neoliberalism.[25] Moreover, the professionals of the built environment need to know how they are to incorporate the extra tasks emanating from the adverse effects of development on climate change which remains on the political agenda. Commonly agreed criteria, methods of measurement and evaluation become of the essence to obtain support from governance. They are discussed in the technical paper towards EUSS13, "Methods of Measuring and Assessing the Sustainability of Urban Developments". This still leaves planners to wonder how they will be able to make their development proposals

sustainable when the dynamic of urban change leaves so much outside their control.

Planning sustainability at the level of urban living

Sustainability is a very broad concept and goes way beyond the rescue of the planet. In its broadest sense it implies an equitably shared urban environment. Residents (citizens, voters), the working population, visitors, transient people, etc. all form part of urban life, but there are tensions within cities between the diverse needs and wants of those who use them, compounded by subjective perception. Is there a system of government which can relate equitably to all city users 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 sustainable urbanity by keeping the city open to all, and what role does physical urban regeneration play in all this?

The contradictions between the state, the development industry and the design profession may contribute to making the physical fabric transient without lasting identity. This may exacerbate uncertainty and alienation of urban dwellers, besides reducing their public realm, an important part of a sustainable environment.[26] The design professionals are implicated in this process, as they are increasingly working for the private sector and are prone to subjecting themselves to its value systems, often in contradiction with the meaning, if not the letter of public planning principles. Tools to assess and evaluate sustainable development may constitute a means to reach a modus vivendi for the cooperation between the diverse protagonists in producing a more sustainable urban environment. Yet, they cannot replace creative design.

8a. Housing still part occupied by social tenants on Carpenter Estate in East London
photo: Judith Ryser

8b. Carpenter Estate residents protesting against UCL take over of their estate in East London
photo: Judith Ryser

9b. Borough Market, London, gentrification when resistance is succumbing to its own success
photo: Judith Ryser

9b. Marseille, Belle de Mai, derelict site and buildings near main railway station taken over by artists who avoid gentrification through early protective contract with land owner
photo: Judith Ryser

1. e.g. Sesena, near Madrid, Spain: Source http://www.dailymail.co.uk/news/article-2102074/Spain-haunted-ghost-towns-built-boom-years-unemployment-tops-5million.html
2. See 'trade-off vs nested organization of sustainability. Fig 2 p 13 In: Poor Desai. 2010. One Planet Communities. Wiley
3. In 1987, the 'Brundtland Report' stated that 'humanity has the ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.
4. One Planet Communities.op.cit.
5. See for example the 10 ways how building industry protagonists define regeneration in published in 'Building' on 17 February 2006 (RegenerateLive).
6. http://www.building.co.uk/10-ways-to-define-regeneration/3062794.article
7. www.bura.org.uk
8. ODPM 2003, A156.
9. Ruth Glass. 1964. London: aspects of change. MacGibbon&Kee
10. Peter Marcuse. 1986. Abandonment, Gentrification and Displacement: the Linkages in New York City. In: N Smith & P Williams. 1986. Gentrification and the City. Unwin Hyman.
11. Lees, Loretta, Tom Slater, and Elvin K. Wyly.Gentrification. 2008. Routledge/Taylor & Francis Group.
12. Paul Watt. 2013. It's not for us. In: City: analysis of urban trends, culture, theory, policy, action. 17:1, 99-118, DOI.Routledge
13. e.g. Butler T &Hamnett Chris. 2009. Walking backwards to the future- waking up to class and gentrification in London. In: Urban Policy & Research 27 (3): 217-118.
14. David Harvey. 2008. The Right to the City. In: New Left Review 53: 32-40.
15. Neil Smith is considered one of the most influential scholars on 'gentrification which he attributes to the rent gap. Neil Smith. 1996. The New Urban Frontier: Gentrification and the Revanchist City. Routledge.
16. Known as 'quangos' quasi governmental organisations
17. 'Corporate quangos' were made possible in the 1980 Local Government, Planning and Land Act. They produce a report to Parliament once a year. The Enterprise Zones, newly established in Docklands, are more extreme forms of government outsourcing to, and subsidising the development industry.
18. For critiques of the effect of the LDDC on the local communities, see Sue Brownhill. 1992. Developing London's Docklands: another Great Disastere? Paul Chapman Publishing; Bob Colenutt. 1988. Local Democracy and Inner City Regeneration. Loal Economy 3 (2) pp 119-125; Bob Colenutt. 1998. Joined up Thinking Needs Joined up Practice, Urban Environment Today, 1/10/98.
19. For a more detailed discussion, see Judith Ryser & Teresa Franchini. 2011. Towards an Understanding of Quality of Urban Space. EUSS11
20. Peter Marcuse. 1985. Gentrification, Abandonment and Displacement, Connections, Causes and Policy Responses in New York City. In" Urban Law Annual; Journal of Urban and Contemporary Law, Volume 28 pp 195-240, http://digitalcommons.law.wustl.edu/cgi/viewcontent.cgi?article=1396&context=urbanlaw
21. It's Not For Us.pdf - Games Monitor
22. e.g. Peter Marshall on the evictions from the Carpenter Estate in East London. http://www.demotix.com/news/1347789/shame-newham-council-carpenters-estate-london#media-1347754
23. Peter Marcuse's view about that is "…the large question is not whether abandonment can be avoided, gentrification controlled, displacement eliminated, or even how these things can be done, but rather whether thereis the desire to do them. That is a question that can only be answered in the political arena." (p.175, op.cit)
24. e.g. Richard Florida, 2002, The Rise of the Creative Class, and how it is transforming work, leisure, community and everyday life, Basic Books
25. e.g. Mike Raco. 'State-led Privatisation and the Demise of the Democratic State: Welfare Reform and Localism in an Era of Regulatory Capitalism'. Paper given at the "City and Space" Seminar, UEL, 6 March 2913.
26. See for example, Anna Minton, 2012, Ground Control - Fear and happiness in the 21st century city, Penguin Books.

Derek Martin, IFHP [1]

HOUSING IN THE NETHER-LANDS

1. INTRODUCTION

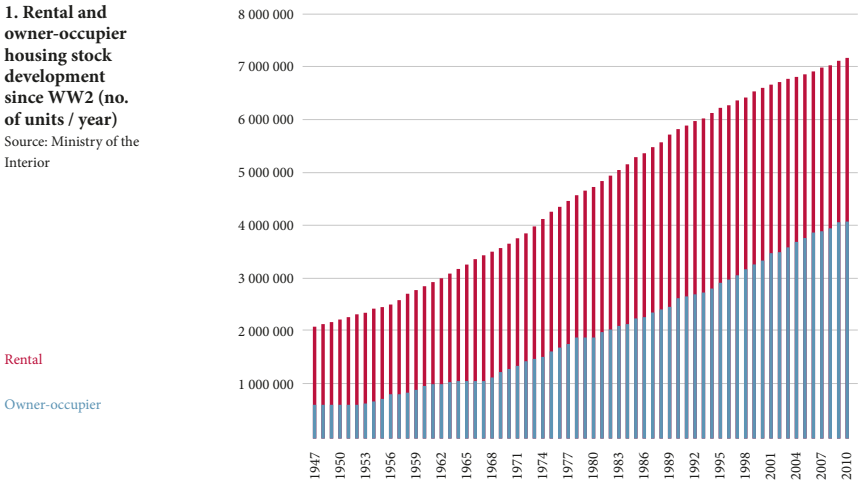
Housing policy in the Netherlands is an interesting example of how a traditionally (especially post World War Two) well-organised national structure of providing affordable and adequate housing has dealt with the transformations brought about by the neo-liberal wind of the past two decades. It has to be said at the outset that, because of this strong structure, speculation has almost totally been eliminated in the Dutch system. So this paper is not about housing in a post-speculative society but about how the Netherlands has continued to avoid speculation in housing even after the quite radical withdrawal of the public sector from this structure since the 90's. The totality of the housing system has withstood these quite profound changes and the recent financial crisis reasonably well, the social housing sector more than the owner-occupancy sector, which has felt the impact not only of the gross irresponsibility of the financial sector but also of the short-sightedness of the major political parties who put short-term electoral gain before sensible policies.

2. A BRIEF BACKGROUND

Why has the Netherlands been able to build up such a solid and resilient social housing system?
To begin with, it is a small, densely populated country with a rapid population growth: 9 million inhabitants in 1945; 16.7 million today. Such density and growth, together with the huge post-war housing shortage and the steady economic development of the 50's and 60's, were conducive to establishing a centralised system of housing policy and supply, subsidies and quite strict land use planning. A broad social sector of subsidised rental housing was established, covering 34% of the housing stock, largely run by quite powerful but very socially-conscious housing associations.

This strong social rental sector retained its importance throughout the period of rapid economic growth from the mid-70's onwards, when owner-occupation was encouraged by government and has been responsible for most of the growth of the housing stock since (Fig. 1).

1. Rental and owner-occupier housing stock development since WW2 (no. of units / year)
Source: Ministry of the Interior



The current (2010) situation is summed up in Fig 2.

2. Housing stock in the Netherlands 2010

Ownership	Amount	%
Social rental sector	2.359.000	34%
Private rental sector	517.000	7%
Rent total	2.876.000	41%
Owner-occupied sector	4.120.000	59%
Total housing stock	**6.996.000**	**100%**

3. THE RENTAL SECTOR

So the Netherlands has traditionally a strong social rental sector with considerable government intervention, which reached its excessive subsidy peak in the heyday of socialism in the late 70's / early 80's, but has been retained after demolishing those excesses and adapting to the many neo-liberal reforms since then.

There is still an extensive regulation and support of the rental sector by central government.

There is a scheme of Individual Rent Benefit in which the Dutch government supports 30% of the households in the social rental sector with direct income supports (€2 billion per year)

The maximum rent for all rental homes up to €650 is regulated, based on 'objective characteristics' (size, amenities, environment etc.). However, contrary to the owner-occupier market, where location is a major factor in determining price, this is not a major factor in determining the level of rent.

The national government also sets a maximum on the annual increase of rent for all rental homes up to €650 per month. If the annual income of the tenants is > €43,000, this maximum is 4% above inflation; if the annual income of the tenants is €33-43,000, this is 2% above inflation.

There is an independent rent tribunal for arbitration between the landlord (mostly housing associations) and tenant.

4. HOUSING ASSOCIATIONS

There is still a dominant position for housing associations in the social sector. It is still hard for private investors to enter the rental market on any large scale.

In 2010 there were 418 housing associations owning 2.4 million dwellings, about 80% of all rental dwellings in the Netherlands. The associations vary greatly in size, some are very local, some more regional, even national (Fig. 3.), but most own around 1000 – 10.000 units.

Since 1945, housing associations have played a central role in fighting the housing shortage, providing decent, affordable housing for the lower incomes and generally implementing a solid social housing policy in the Netherlands. With the increased standard of

living in the last 20 years, they have not only invested in maintaining affordable housing, but also in a better quality of the housing stock and quality of the living environment in the surrounding neighbourhoods.

Before 1995, housing associations were so dependent on government financing and so heavily monitored by government that they were in reality semi-public institutions

After 1995, with the neo-liberal wind, the housing associations became limited profit companies, but by law obliged to spend the benefits on housing. This privatisation and the abolition of the subsidy excesses of the socialist era end-70's/early 80's, were the main reason for the rapid reduction of direct government financing of social housing (Fig 4.)

There are nonetheless still several public financial back-up facilities for housing associations. Their investments are backed up by the Social Housing Guarantee Fund (WSW), which guarantees €85 billion in loans. Also the Dutch Municipal Bank provides them loans with below-market interest rates.

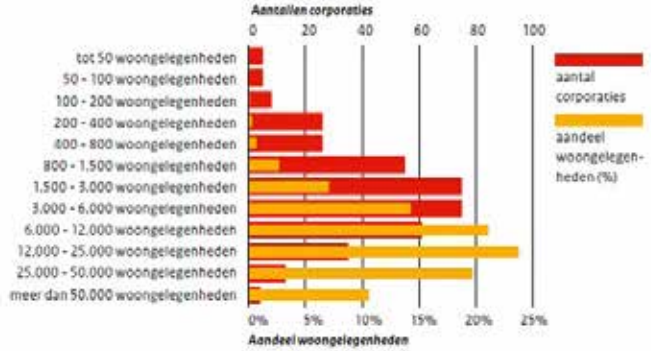
There is also the Central Housing Fund (CFV) which supervises the financial comings and goings of the associations.

5. OWNER-OCCUPANCY

Government intervention in stimulating owner occupancy from the mid-70's has been as far-reaching as in the rental sector. There is Mortgage Tax Deductability (MTD) for all home-owners. On average now 40% of all mortgage interest paid is tax deductible at the rate of income tax you pay (so the percentage increases with income.) The 'cost' for the Dutch state is €14 billion per year in 'lost' tax revenue. Usage of MTD has grown fast over the past 20 years especially with middle incomes as income tax rates are 42% - 52%, which represents a considerable tax reduction. This figure would be even higher were

grootteklasse	aantal corporaties	aantal woongelegenheden	aandeel woongelegenheden (%)
tot 50 woongelegenheden	5	169	0,01%
50 - 100 woongelegenheden	5	379	0,02%
100 - 200 woongelegenheden	8	1.213	0,05%
200 - 400 woongelegenheden	26	7.003	0,30%
400 - 800 woongelegenheden	26	15.870	0,68%
800 - 1.500 woongelegenheden	55	61.677	2,66%
1.500 - 3.000 woongelegenheden	75	162.659	7,01%
3.000 - 6.000 woongelegenheden	75	329.723	14,21%
6.000 - 12.000 woongelegenheden	61	488.632	21,06%
12.000 - 25.000 woongelegenheden	35	550.371	23,73%
25.000 - 50.000 woongelegenheden	13	456.783	19,69%
meer dan 50.000 woongelegenheden	4	245.299	10,57%
Totaal	**388**	**2.319.778**	**100%**

3. Number and size of housing associations
Source: Ministry of the Interior

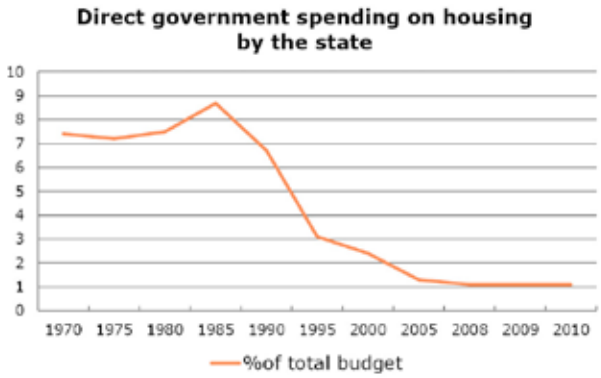


Grootteklasse = size category

Aantal woongelegenheden = number of units

Aantal corporaties = number of associations

Aandeel woongelegenheden = % total units

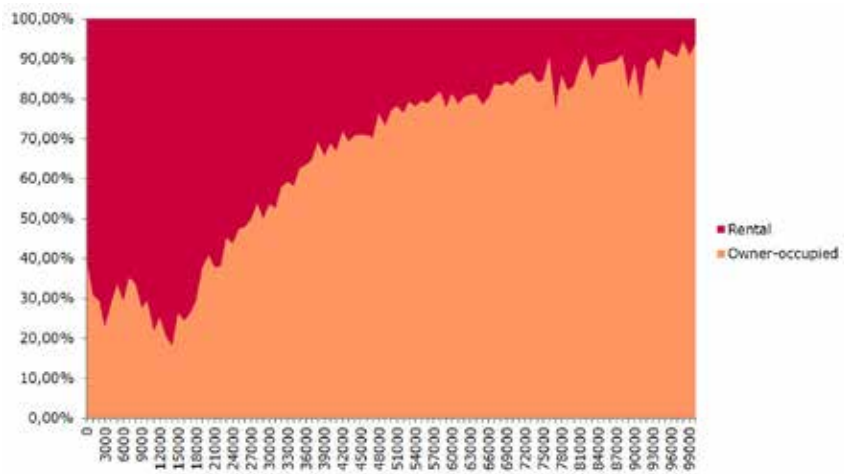


4. Direct government spending on housing by the State
Source: Ministry of the Interior

it not for the 'home tax' on the value of the home (€2.2 billion in revenue) and the 'transfer tax', for years at 6% of the house price of existing houses at purchase, which brought in a similar figure. This latter tax was a major obstacle to mobility, deterring people from moving to better homes when they could afford it, and has now at last been lowered to 2%.

As well as this generous 100% tax rebate on mortgage interest, there is also the national mortgage guarantee backed by the 'Homeownership Guarantee Fund' (WEW), home loans for first-time buyers and the possibility to buy (social) rental dwellings. The consequence is one of the highest rates of private debt in the whole of Europe: €644 billion in mortgages, which is slightly more than the total Dutch GDP! The financial risks for consumers, banks and government were considerable, but it is only now, some 5 years after the financial crisis hit, that political parties have woken up to the fact that the longer-term financial health of the country is more important than short-term electoral gain and they have started to take action.

5. The segregated housing market: low incomes/rental; middle &higher incomes/ownership
Source: Ministry of the Interior



The middle incomes have gained the most from these measures, which has led to a clear distinction in the housing market between lower incomes (rental) and middle incomes (owner-occupancy) (Fig. 5). With the high levels of immigration in the 80's and 90's, this 'segregation' in many towns and cities also now has an ethnic dimension.

6. THE CRISIS AND BEYOND

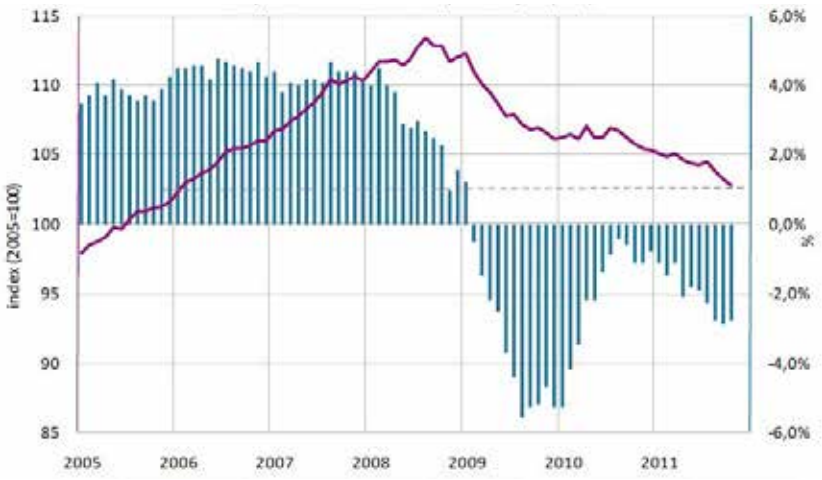
Having exerted an increasing influence for some 20 years before, the neo-liberal wind suddenly became a heavy gale in 2008 with the economic and financial crisis. This manifested itself in an almost total shut down of the owner occupiers' housing market. House prices are down on average by some 18% (Fig. 6), mobility is down by a third, with people not moving unless absolutely necessary. About 1.7 million people now own a house that is worth less than the mortgage debt on the house. This is after three decades of growth, rising prices and over generous mortgage lending. The combination of banks now sitting on their money and applying strict conditions for mortgage lending, and the many young people who cannot get jobs or jobs with reasonable terms which can convince the banks to lend, means there is also a structural problem for starters to buy their first house.

The crisis hit hard because the main political parties had refused, for short-term electoral gain, in the course of those 20 odd years to reduce the 100% mortgage interest tax rebate and the 6% transfer tax on mobility, despite a growing number of housing experts warning that these fiscal measures would create severe problems in the longer term.

The rental sector has been relatively unaffected, due to its extensive regulation.

The present government is now attempting to restore confidence in the housing market.

At last, the first small limitations in mortgage tax deductibility have been introduced. The transfer tax on mobility has now been permanently fixed at 2% instead of 6%. Stricter rules for mortgage financing have been introduced (e.g. no more 100% mortgages without a down payment) in order to make a start to lower the debt burden and reduce the financial risks for consumers, banks and government.



6. House price decline since the crisis: price indezx of existing houses
Source: Ministry of the Interior / Central Bureau for Statistics

= price change with respect to same month in nprevious year;

= price index (2005 =100)

It is too early to see what the impact of the present government's measures will be on the housing market, but the structural reforms will necessarily take about 10-20 years before having their full impact. How the market evolves will depend on when and to what extent the Netherlands returns to economic growth, but at least the crisis has forced the politicians to introduce the reforms that should have been taken many years ago. Now it is time for the banks to be induced to act in a more socially responsible way.

It is estimated that there will be a need for some 500.000 new households in the next 10 years, due to continuing population growth and a further splitting of households due to divorce, ageing and new social forms. A big challenge is where to build. The Netherlands is already having to deal with population decline in the south-east and north-east. In the longer term, this challenge will get greater. The prognosis is that the population of the Netherlands and the number of households will start to level out in the 2030's at about 17.4 million, some 0.7 million more than the present, and start to decline in the 2040's, unless there is once again a new wave of considerable immigration like in the 80's and 90s, which is at this moment politically unthinkable. If this stationary to declining population does occur, then there will also be a strong regional differentiation between areas of decline and continued demographic growth, with large areas of the south, east and north decreasing in population and the west continuing to increase.

7. CONCLUSIONS

It is interesting to note that housing has always been in the political front line. It has been impacted by excesses when the political wind has blown too hard to the left or to the right and hopefully will come out of the present crisis in a more depoliticised form, where sensible, pragmatic policies with a solid longer-term foresight take priority over political philosophies and short-term electoral gain. Nevertheless, the Netherlands has built up a strong system. It has been shaken and stirred by the present crisis, but its foundations, especially in the social sector for the lower incomes, have stood firm. In the recent transformation, the housing associations have retained their central position, but their adaptation has not been easy.

Property speculators have suffered from the present crisis, as indeed have many municipalities, but more from the collapse of the office market, than from new housing development.

The continued fiscal reforms of the owner-occupancy market, which have only just started,

the housing supply catch-up, and planning for de-growth are the main challenges ahead. However, we should also not lose sight of the necessity to deal with other aspects of the housing challenge, such as the improvement of eco-efficiency and the introduction of more flexible, open design.

1. This paper is based on a presentation to EUSS that was kindly given by my colleague then at the Ministry of the Interior, Rik de Boer. The opinions are mine and If there are any factual mistakes, they are mine as well.

Alberto Leboreiro Amaro

STATE OF THE ART OF STRATEGIC PHYSICAL PLANNING

INTRODUCTION

The urban reality of Europe is metropolitan, and good governance of Europe's metropolitan regions is crucial for the future wellbeing and prosperity of Europe.

The total population of the European Union is estimated at about 533 millions inhabitants, with 73% living in urban areas. The Urban Audit of Eurostat identifies 127 Larger Urban Zones with populations of over half a million. These are Europe's metropolitan regions and areas. A Metropolitan Region is defined by at least 50,000 inhabitants in its core city and 500,000 inhabitants in the entire region (BBR, 2005; DATAR, 2004).

From an economic point of view, deregulation policies are applied to the liberalised markets of metropolitan areas. In the global context, competition is emerging between all the cities and globalising cities require internal restructuring based on the information revolution. In the new information society there is a need to modify the spatial network which is concentrating people and activities in cities and financial centres, but dispersing activities in their peripheries.

The Metropolitan areas are the engine of European development, the centres of economic, political and cultural life. They are also the centres of political and economic management, expressed in a highly developed infrastructure of specialised services.

Acting as external challenge the globalised economy is characterised by the flow of people, goods, capital, services, ideas and information, as well as relationships between organisation and interaction. Metropolitan regions face serious structural transformations, economically, politically and territorially. (Blotevogel 2005a, OECD 2001, Sassen 1991). It is necessary to reconsider the process of evolution of both core cities and the periphery, the urban environment and rural space.

Metropolitan regions face internal challenges of urbanisation, such as population growth, land use conflicts, sprawl, and shortage of open space, traffic and environmental problems, in which economic competitiveness and liveability are two sides of the coin. Cultural globalisation produces a change in lifestyles of contemporary society which is becoming more individualistic and autonomous. Globalisation leads to standardisation but also to diverse urban demands.

New forms of activities appear with these changes, a growth of the tertiary sector, a shift towards a network economy. New habits emerge with changes in consumption based on leisure; for example families spend their entire weekends in malls at motorway crossroads. However, these changes affect people differently as demographic evolution is producing diversity between employees and increasing income disparities.

Transport infrastructure, new motorways, high-speed trains, air traffic and airports are increasing to accommodate global mobility. In inner cities and metropolitan areas an exponential increase in the use of the private car and intra-city mobility are putting new demands on the road network. Some cities are consuming more land to develop new suburbs, thereby producing a steady increase in the process of dispersion and delocalisation of activities, while other cities undergo population and employment decline.

Some cities like London or Paris have experienced urban riots in the past years. Many countries lack policies of social integration. Quite to the contrary, there exists segregation and discrimination due to existing parallel lives between immigrants and the rest of the population. The number of poor people is increasing while the "middle-class" is declining and the rich are getting even richer which has led to the gentrification of the core of many cities.

Climate change is another constraint which requires common efforts at an international level, strategies to avoid global warming, floods, natural hazards, etc. and cooperation to mitigate adverse effects such as CO2 emissions and adapt to climate change by reducing the consumption of finite resources.

For such measures to succeed participation of the whole society is needed. In Mediterranean countries the participation of politicians (leaders) is always greater than the participation of citizens. Conversely, in the Nordic countries the administrative strength of their governance mechanisms is proportionate to the scale and significance of the strategic issues which are being addressed. For example, a strategic plan to ensure a comprehensive and multi-sectoral approach to metropolitan issues is based not only on top-down but mainly bottom-up participation, which enables these countries to choose a model of governance which is based on local differentiated capacities.

The topic here is how to tackle different processes of change in metropolitan areas, but it is not possible to cover all aspects in a short paper. Those considered are globalisation, competiveness and inequalities, climate change, governance, sprawl, mobility, shrinking and smart cities and finally the necessity of a Strategic Physical Plan as a framework to develop the future of metropolitan areas.

GLOBALIZATION

In 1800 the urban population of the world was 2%, at the beginning of the last century it was 10%, currently it is more than 50%, and it is forecast to reach 70% by 2050. The urban population of Europe will reach 70% by 2020, higher in percentage terms than in Africa and Asia (UN-HABITAT, Frédéric Saliez).

At present, the largest cities are situated mainly in the northern hemisphere, but the

growth of emerging countries will change this in the future, driven by 'time–space compression'. This concept was first articulated in 1989 by geographer David Harvey in "The Condition of Postmodernity". It refers to any phenomenon that alters the qualities of a relationship between space and time. Due to the improvement of communication and information technologies, cities cities are becoming larger while its population is moving further away.

Surprisingly perhaps, while the pace of life accelerated owing to new technologies the concept of 'slow society' had emerged. Slowness in all its creative forms, supported by diverse movement of people around the world, encourages a sustainable (slow) development path, which is transforming the way to learn, work, and live, and thus arguably to end the era of creative destruction. In these perilous times, it is difficult to imagine when Joseph Schumpeter's ground-breaking effort to explain "creative destruction" has shifted to "destructive creation"; when the perception of time and space has altered towards what François Ascher describes as the autonomy of the person - where, when and how we wish - akin to the concept of duo fridge-microwaves.

Until now though, the globalisation effects have produces changes in the population with growth and produced concentration in alpha and emerging cities and decline of population and employment in shrinking cities, as Edward Glaeser highlights in 'The Triumph of the City'.

COMPETIVENESS AND INEQUALITIES

The increase of unemployment looks as something that is going to stay into some future due to changes in the production processes based on new technologies which increase production mainly in the tertiary sector, but keep demand at the same level. Financial crises and global capital movements are becoming increasingly recurrent, as are changes in training and costs of labour throughout the entire world.

Imbalances are growing throughout the world and differences are increasing (the 20 richest countries are 37 times richer than the 20 poorest countries). There are 1,200 million poor people meaning 20% of the world population, and this inequality is getting more and more concentrated. Curbing this adverse trend would require new governance with a more participative and deliberative democracy.

These changes have developed the notion that cities are only a business. In reality, their rapid development produces a lot of value added but only for very small groups. Cities may be increasingly more productive but they are also becoming poorer and raising social inequalities.

Metropolitan environments tend to be more successful in areas which already have relatively large stocks of resources. Vázquez Barquero (1999) divides them into economic 'hardware', 'software', and 'orgware'. For cities, hardware means the labour market, capital, land and infrastructures; software encompasses physical and social conditions, the business environment, knowledge structures and human capital; orgware, a new necessary urban attribute refers to the social tissue, inter-administrative coordination, public-private partnerships (PPP), planning, management and promotion of metropolitan areas.

Success of cities does not always guarantee successful social cohesion. Similarly, the improvement of the economy does not necessarily produce a better quality of life if profits and benefits are not shared by the population, but inequalities are increasing instead. EU Cohesion Policy funded programmes aim to achieve a balance between economic growth and employment together with territorial cohesion, but it is cities which

face this two-fold challenge the most which is currently plaguing the European Union. Territorial and economic inequality generates migration. Migratory movements due to systemic wars or desertification or simply seeking employment or training opportunities can entail environmental risks and overcrowding in recipient cities. Tourists increase urbanisation of coastal resorts or congestion of urban attractors, while economic migration from the countryside creates population concentrations, often in cities of developing countries.

Where the poorest populations and recent immigrants are concentrated, local authorities often do not have sufficient resources and thus their social services, the police, schools and public transport are inadequate. Such places which can be located in the core of cities as well as in their periphery tend to be weakly governed. The unequal territorial distribution of such urban services can be both the result and the cause of further migration.

CLIMATE CHANGE

Cities need to take into consideration climate change by means of adaptation, capacity building, financing mitigation and adaptation actions, reducing emissions from deforestation, environmental degradation and technology transfer.

Two examples are the Draft Master Plan for the Île de France which contains a chapter called "Space Challenges" stating that sustainability has to be taken into account in all development objectives; and the Mayor of London's climate change mitigation and energy strategy of 26 October 2011 which includes a chapter on "Delivering London's energy future", introducing a new concept of 'alimentary challenge'.

Extracts of the latter are:

– Energy and climate change: arrangement of programmes to ensure the city is greener and litter free; cut pollution; reduce rubbish and use waste material more wisely; make the city more energy efficient and unleash a new generation of jobs and enterprise in a low carbon economy.
– A vibrant low carbon economy: reduce London's carbon footprint, generate tens of thousands of jobs by fitting green roofs, installing insulation and renewable energy supply; green financing or developing electric vehicle infrastructure;
– Ultra Low Carbon Transport: Foster travel by bike, foot, public transport or zero pollution emitting vehicles.
– An energy efficient city: use energy to cut co2 emissions and tackle climate by making all new buildings energy efficient;
– Secure and clean local energy: there are exciting new ways for the city to generate energy locally by tapping into natural resources like wind, sun and tidal power or generating energy from waste materials.

GOVERNANCE

According to the principles for Metropolitan areas developed by the OECD, governance has to be basic so that all the citizen can identify with the strategic visions that are being proposed. **Aspects include:**

– Identity and consensus: this involves setting reference territories for its population, to create a sense of belonging and solidarity and the establishment of discussion forums on metropolitan areas.
– Accountable: there is a need for a clear division of tasks, responsibilities and power so that conception gets as close as possible to the citizens;
– Transparent: institutions and main stakeholders of the governance process should work in an open way and explain how decisions are made; this includes responsive

government actions, public hearings, and information processes on the current proceedings;
- Equitable and inclusive: policies and actions have to be coherent and easy to understand, and all the stakeholders and institutions have to be involved in these processes;
- Effective and Efficient: decisions in urban politics and Metropolitan governance have to be timely and should be well founded on clear objectives,;
- Follow the rules of law: in the absence of metropolitan government, all must adopt the metropolitan area as relevant territory to reorganise the administrative division;
- Participatory: regional stakeholders should become involved in the policy making process from the conception phase to the implementation (principle of equality);
- Sustainability: the central objective of governance activities should be an economic environmental and social sustainable development.

SPRAWL

Another aspect to consider is diffuse growth. The characteristics of this phenomenon are "unlimited" external growth which breaks through administrative boundaries, low-density developments; "leapfrog" development; high cost of infrastructure; segregation of land uses; social fragmentation; dispersion of functions and services; automobile dependency; peri-urban development which is undermining the central city; environmental impacts. Among the main effects are also loss of nature and farmland, lack of governance and planning at the metropolitan scale.

According to "Urban sprawl in Europe", sprawl is due to new lifestyles, a better environment in outlying areas, more urban services and infrastructure outside urban centres.

The following economic factors need to be taken into consideration, ranging from macro-economic drivers, such as economic growth, globalisation and European integration, to micro-economic drivers, such as rising living standards, land prices, availability of cheap agricultural land, and competition between municipalities.

From a sociological point of view, sprawl is due to population growth; increase in household formation; search for more space per person; greater choice of housing types. Sprawl is also accelerated due to inner city problems, such as poor air quality; noise; small apartments; unsafe environments; social problems; lack of green open space; and poor quality of schools. The development of transport infrastructure increases private car ownership, together with greater availability of roads, low cost fuel and poor public transport. The regulatory frameworks also influences urban sprawl, mainly due to weak land use planning, poor enforcement of existing plans and lack of horizontal and vertical coordination and collaboration.

The effects of sprawl are well known. They encompass mono-functionality of uses, low density, poor connection to the overall city and general lack of infrastructure and services. Such morphologically and functionally isolated systems are like archipelagos as Francesco Indovina has highlighted, which is exacerbated by accessibility based on the car, weak relationships with urban centres and inadequate public transport. The outer city is closed by night or partially even by day, due to use of space at certain times only because of its mono-functionality. Sprawl has also a negative impact on the environment and natural resources, and contributes to the destruction of unique landscapes, besides social uprooting of such places without history, which leads to loss of sense of belonging and weakens social values.

MOBILITY

Cities require suitable densities. New York or Barcelona have a high quality of life at densities of 400 persons/ha. Depending on the cities density is also a cultural factor. Higher densities can encourage the use public transport as shown in the study by André Sorensen. In Atlanta (USA) a density of 6,8 persons/ha. and 8,7 miles/person of roads leads to a high use (95%) of private cars, while in cities like Madrid with a density of 74 persons/ha and 1,7 miles/person of road, the use of the car is 30%. But density is not sufficient to curb car use which needs to be restricted and public transport promoted. In the periphery of the Madrid metropolitan areas, where there is less density, the use of private cars is increasing with distance.

There is a vicious circle of transport, whereby increasing numbers of cars in the city produce congestion and make public transport run slow. Given limited urban space, increased investment in parking lots and road space to maintain the same level of service is undermining public transport even more while increasing the use of private cars. However rising congestion makes the city centre less attractive and eventually economic activities and population are declining in the core city. More sustainable transport in cities requires a reduction of automobile dependency, which would also avoid urban sprawl. By reducing the number of motorised trips, increase public and alternative transport, it would be possible to rescue the quality of urban space and recover the value of proximity.

SHRINKING CITIES

In the centre of Europe and especially in eastern European countries, cities are losing population and the economy is in decline. Reasons range from the loss of attractiveness and quality of life to lack of economic diversity which leads to a decline of demand and investment. When local government tries to increase the infrastructure or develop new land this often results in a waste of money. Planners know how to plan for growth but not for urban decline. Shrinking is a vicious circle for cities. Their populations are aging and less likely to change behaviour or accept new technologies. Infrastructure becomes less efficient which results in declining capacities and resources. Longer term strategic planning combined with improving quality and diversify the local may make the city more attractive again (Olofsdotter B. et all. 2013).

Loss of population and economic strength dates from the 1970s in many European cities in connection with dynamic suburbanisation or severe economic structural changes. After the collapse of the socialist system in Eastern Europe in 1989 the phenomenon of shrinking cities became widespread, alongside persistent demographic structural changes, which became a challenge for urban planning and politics.

The root causes were:

- the emergence of newly industrialising economies
- new waves of economic restructuring associated with rapid technological changes and capital mobility;
- cities became less attractive and quality of life declined;
- local economies were not sufficiently diverse and their main activities were lost to more competitive areas;
- the attraction of global cities.

The effects were:

- city population loss and urban decline (13% of urban regions in the US and 54% of those in the EU have lost population in recent years);
- some cities found themselves in the unusual situation of abundance of land with no demand for new urban land;

– the land market became dysfunctional because of lack of demand.

The proposals:

– At the outset of such situations of decline municipal decision-makers often worsened conditions considerably by allocating more land for different building purposes, offering subsidies and relaxing environmental and social controls, due to fear of competition from neighbouring cities.
– This problem can only be overcome through cooperation between cities, qualitative regulation of land use at regional level and equalisation of financial burdens.
– Older cities can improve and become more self-sufficient by reducing their ambitions, and bringing their level of infrastructure and housing into line with their smaller populations.
– The most successful efforts of renewing old urban neighbourhoods tend to come from organic, bottom-up, community-based efforts to strengthen and build on neighbourhood assets.
– It would be better to let residents take control and build on community assets, engaging themselves in community-based organisations to spearhead revitalisation and build real quality of place. "The key is to engage the residents of the area, the business owners, the shopkeepers, the workers and the commuters"(Jane Jacobs 1967).

Different strategies applied by shrinking cities:

– Tearing down large vacant housing stock of low quality because cities are unable to do anything about them.
– Betting big on improved attractive environments to give people a good self-image, create a positive atmosphere and hope to generate increased interest from the outside. This approach tends to lead to a loss of a lot of public money.
– Adopting a lean city strategy which does not attempt to change the trend of declining population and economic base. It tries to adapt what remains positive to new conditions, on the basis that development does not have to assume continuous growth.
– Adopting a heterogeneous configuration strategy which aims to coordinate contradictory issues into a single vision with encompasses a variety of measures to meet the target image.
– Building up a new networks strategy to form new alliances between actors.
– Negotiating and cooperating to manage urban land as a common good. Often bottom-up initiatives in neighbourhoods result in more sustainable characteristics of the area while fostering social cohesion among citizens in the process.
– Diversifying the local economy to make cities less vulnerable to global economic crisis.

SMART CITIES

The concept of "smart cities" has appeared where "smart" has gained importance in urban planning as "smart growth". Instead of submitting to market dictated laissez faire planning resulting in urban sprawl or unsustainable densification, smart growth argues that greater efficiencies can be accomplished by coordinating transportation, land speculation, conservation, and economic development. Smart planning consists of synthesising hard infrastructure with the availability and quality of knowledge, communication and social infrastructure, the latter being critical for a city's competitiveness. It is also argued that smart cities based on information and communication technology can – or have the potential to – improve competitiveness in ways that strengthen community and improve quality of life for all. (Batty et al. 2012; Caragliu et al. 2011).

Batty et al. (2012:505) have identified six types of initiatives within the smart city movement:

- The development of new cities which are labelling themselves as smart. They are proliferating in rapidly growing countries. Masdar outside of Abu Dhabi being developed by GE is the world's first carbon neutral city.
- The development of older cities by regenerating themselves as smart in a much more bottom-up fashion. This includes many cities that are embedding new ICT as a matter of course.
- The development of science parks, tech cities, and technopoles focused on high technologies. Silicon Valley and Route 128 are classic examples.
- The development of urban services using contemporary ICT. In the form of a networked database, cloud computing and fixed and mobile networks
- The use of ICT to develop new urban intelligence functions that generate city structures and forms that improve efficiency, equity and the quality of life.
- The development of online and mobile forms of participation in which the citizenry is massively engaged in working towards improving the city

STRATEGIC PHYSICAL PLANNING

Planners need to develop a strategic physical plan, foster the development of a long term vision which is global, comprehensive, flexible and coordinated between public and private interests and between different levels of government. This vision has to project an image of the metropolitan region that is unique and attractive and that exploits the best relationship of competiveness, complementarity and cooperation with the neighbouring cities. A Strategic plan is outcome-oriented through actions on critical issues ranked and rated according to costs-benefits analysis. It is oriented towards demands and needs of citizens, investors and visitors, based in a consensus of decision-making with maximum participation of all economic and social stakeholders to extract maximum positive impacts from urban dynamics. The plan as a process, seeking results through a vision.

In their theory which Bernardo Sechi and Paola Vigano have applied to different projects, for example the "Competition for the elaboration of the draft concept of the Moscow city agglomeration" with the slogan "CIVIC MAGNIFICENCE" they use three concepts:

- meshing the metropolis using green and transport to equalise the urban condition
- continuous centrality, achieved through high densities, re-cycling the existing city, and mixed uses
- governance based on responsibility.

A strategic plan must consider external factors like changes in demographic structures, climate change, new liberal economy, technological cycle changes, emergence of global civil society, decentralisation vs. global supra-municipalities. It must also consider internal factors, such as cultural tradition in regional planning, political climate promoting a more participatory and deliberative democracy, informality, lack of social interest regarding aspects of land use planning, areas of high environmental and historical value, scarcity of natural resources and heritage, depressed territory, emerging areas, economically developed territory, economic commitment, economic and technical competencies, assigned means.

The city has historically been the area of citizenship, the territory of free men and women as equals. Metropolitan areas need to provide identity, where people are proud to live,

training and employment opportunities, access to housing, comprehensive social services, efficient mobility, easy information and exchange, a suitable environment and the possibility of appropriating the city as a set of freedoms.

Transport Oriented Development requires a suitable density and diversity (all services need to be close to homes), with a good design of the public space that can be used by all including the disabled, children and the elderly, working with distance as factor while having a lot of opportunities in proximity. This is best achieved by compact cities, with adequate density, diversity integrating all the different social groups, and diversity of facilities working with proximity as a factor of design. The ground floor of the building must be a window display making the street a space of exchange and interaction, a space for culture and socialising and a safe place with segregated traffic. Such a design strategy requires different kinds of connectivity to foster the quality of life for all citizens.

There must be continuity in planning principles, such as promoting metropolitan areas through a specialised and complementary city network, sprawl control, prioritising urban renewal over urban expansion, urban development along axes of public transport, preserving a dense public transport network, safeguarding and improving accessibility to green spaces.

Lastly there is a need for renewing existing planning instruments. What is required are flexible regulatory instruments instead of formal design; a strategic model giving directions for long term interventions to re-establish structural elements; cultural, social, economic and environmental sustainability; integrating of all parts of society; guaranteeing commitment of public investment; fostering public-private partnership; guaranteeing transparent governance and availability of public documents. The development of these objectives has to take into account all the requirements of stake holders and citizens, ascertained through a feedback process of reflection and proposal. These are the contemporary means to improve the quality of life in Metropolitan areas.

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MADRID A
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Eduardo Leira

MADRID'S URBAN PLANNING BACKGROUND. SOME ANTI-SPECULATIVE MEASURES. THE 1985 MASTER PLAN

INTRODUCTION: THE NEED OF BACKGROUND REFERENCES

The European Urban Summer School deal mainly with the consequences of the latest Madrid dealt planning decisions. Their consequences are what B. Ynzenga calls the "nightmare". The students took a trip around the no-man's land to see them. The EUSS course worked on what may be done with them. The situation will be difficult to mend. Those decisions were taken in the Madrid 1997 Plan. They were more than a "dream", more properly a delirium.

Those decisions emerged as a result of a previous evolution. Madrid, in respect to other major European metropolises is perhaps the youngest one. It has grown at the rate of developing countries, what Spain was, in fact, in the middle of the 20th century. It is therefore convenient to have at least some glimpses at the history of Madrid or, in a more colloquial sense, Madrid's Story.

Some flashes on Madrid's previous story

At present, Madrid is simultaneously a city with around 3 million inhabitants and a Region within the Spanish decentralised State of some less than 6 million people. At both levels, as the Central Municipality or at the Metropolitan/Regional level, Madrid is becoming a consolidated, established, metropolis, reaching a point of no more population growth. In fact, in 2013 it is losing population at both levels.

At the end of the Spanish Civil War in the 1940's, the city of Madrid had just about 1 million people. Franco's Regime pushed for Greater Madrid as the capital city. Industries were promoted, even public ones, and an immigrant flux from the countryside was in fact induced. In the 1950s a large number of the smaller

municipalities adjacent to the Madrid one were aggregated into the Central one, to become bigger. The size made a difference. At that time, the area of Madrid Municipality became quite large, with almost 7000 has. It was going to be important later on. We will come back to this.

Madrid attracted population very fast. It reached 1.5 million by 1950. It was the result of the late, but much accelerated Spanish process of industrialisation. Spain did in 15 years what France had done over more than 100 years.

The volume and speed of the transfer of population from the countryside to cities reached rates similar to the ones that surprise us now, years later, in China and India. With just 1 million in 1940, Madrid reached 1.5 million in 1950, then 2.2 million in 1960 and 3.1 million in 1970. The 3.3 million of 1975 constituted the zenith. Afterwards, what was becoming the Central City of a rising Metropolitan Area, started to lose population, as always occurs in such central cities.

An extraordinary need for new shelter: there was a housing shortage

There was no way of accommodating the new population captured so fast by Madrid. Suble mechanisms (with the right to use the kitchen or not), increasing urban density in the central areas, and shanty towns, in the first peripheries of a very concentrated city, were the spontaneous answers. Population stacked up in an insufficient "urban built fabric" was the result. Very fast, it was going to become an explosive situation.

The Regime's response in the 1950s: public housing

Franco's Regime reacts. A huge public housing programme is undertaken in the late 1950s and the 1960s. Thousands of new houses are built around the centre of Madrid, in the immediate peripheries, at times competing with and next to shanty towns.

The quality and size of the homes was low, as was, at the moment, the level of the country's industry. Conversely, the urban quality of the new neighbourhoods was, most of the time, much better. The best top professionals, not necessarily related to the Regime, but committed with people's needs, made the difference.

A different feature on housing offer emerges: ownership as a target

To convert proletarians into home owners is an odd target of Franco's Regime. The flats, in the majority collective typologies of public housing, start to be sold. What Margaret Thatcher did in the 1970s, selling public housing, started in Spain almost 20 years before.

Decades later, along that trend, Spain is the European country with the largest proportion of home ownership at the beginning of the 21th century, reaching almost 90% of the total amount of dwellings in the last years.

The 1960s: private real estate promotions

The private real estate industry saw the opportunities and breaks out, directing a huge investment to housing. Two targets influence that investment: new housing (it was necessary to increase the stock) and ownership. A rudimentary mortgage system and extraordinarily shorts periods of repayment of homes are the common features of the private development in the 1960s and the 1970s. At the time the effort to pay the homes is really extreme. People made that effort and, years later, once they had already paid the home where they live they were able to buy a new one or to invest in buying other dwellings. These are the conditions causing the real estate bubble of the last years, before the financial crisis.

The explosion of housing demand in Madrid, at the end of the 1960s, is not able to

find appropriate supply within the city. This creates the basis for building up a Metropolitan Area. Real estate developers look for small villages (not more than 5000 inhabitants at the time) close to Madrid, at 10 or even 20 km distance from the centre, which created the accepted "leap frog jump" way of growth.

The banks did not provide finance to buy an existing house and all conditions induced to buy are oriented towards buying a new house.

With thousands of new homes built, the Metropolitan Area was formed in a very short period of time, but had to rely on in precarious transportation bus system. In Spain in the 1970s, we were building yearly 14 new dwellings per 1000 inhabitants, what amounts to almost a Guinness record. However, ta the beginning of the 1980s, 90% of the households at constituted in Madrid had to "migrate" to the metropolitan periphery, being expulsed from the central city by the markets forces.

In less than 20 years the seven South West municipalities of the Madrid Metropolitan Area accumulated more than 1.2 million inhabitants.

An unusual operation of an anti-speculative city: 50.000 new houses built in the places "gained" by the shantytown citizens in Madrid city.

Linked to the political struggle for freedom, the Neighbours Associations play an important collective role of claiming. Residents in different shanty towns in the first peripheries, relatively close to the centre, demanded new housing. The new claim in the 1970s is that they ask for new homes "now and here". This means, in the same place where they were, in the same location as the previous shanty towns. They claimed a new right: the right to the place. This clearly is an anti-speculative claim. In fact, most of these claiming movements were initially defensive ones. Land owners, with the support of the Municipal Authorities, made plans to eliminate the different shanty towns. That meant expulsing residents from there, even if new housing could be built for them further away. They occupied, it was considered, a place "too good" for them, that they could not afford in a market economy. The answer of the residents was: we have the right to the place, we "made" it, we conquer the right to stay, but we want new housing and now. They won.

Even though the claiming processes had started before, the actual building of new public housing took place after Franco's death, with the first democratic government. 50,000 new homes were built. This is probably the largest anti-speculative action that has ever developed in a large European city.

The reason for that unusual public action has much to do with the special moment of the transition to democracy. It was an unrepeatable moment.

I directly participated in a couple of those processes (Orcasitas and Cornisa de Orcasitas) because a very interesting collaborative mechanism was built up. Technical teams were formed that worked together with Neighbours Associations, as a model example of "Advocacy Planning". In the Agreement signed in each case with the Public Works Ministry the technical team of the Association was accepted and the projects were developed with the direct participation of residents. This was a very interesting process in itself which could be the object of a separate discussion.

The basic chronology of Transition. Steps to the first Madrid Master Plan in Democracy.

Franco died in 1975. Two years later, in 1977, the first general elections took place within the framework of the world oil crisis. Local

elections to elect new mayors, took two more years. They were completed in 1979.

Madrid's new democratic administration was led by mayor Tierno, perhaps the best mayor that the city has ever had. He led a coalition of the Socialist and the Communist Parties. Brand new democracy transmitted enthusiasm. New people, new ideas, the need and willingness for change built up the ambience. The target was to improve everything in the city.

From the outset, the new administration did not pretend to change the former Madrid Master Plan which had been approved in 1963. Very soon, during 1980, the day to day problems and the need for new answers required a New Master Plan. It had to be new in many things, with alternative objectives and providing tools for new ways of managing urban problems. At the end of 1980 the decision was taken. I was nominated for directing the Plan.

A new public Company was created, the "Oficina Municipal del Plan". We were aside but not inside the Municipality Civil Servants organisation. Afterwards, many public-single purpose companies have been constituted in Madrid and elsewhere. At that time, in 1981, our Office was a landmark.

Some other background information: our Land Laws

Before entering in the description and discussion on the 1985 Madrid Master Plan, it is convenient to say a few words on the land law and the planning system in Spain.

The area of land to be urbanised has to be first fixed in the Master Plan, what we call the General Plan. This applies to the whole city, considering the complete territory of the Municipality at the same time.

All landlords have to know what they will be able to build on their land in the future. We call it legal guarantee. In Spain, this requirement reinforces the general condition of the land market as a dependent market, conditioned by what is possible to build and where. Here, more than in other countries (with a different legal framework), the land market is not at all an autonomous market as opposed to the raw materials market.

When cities were growing and growing very fast, as occurred during the accelerated industrialisation process above mentioned, the land chosen for new urbanisation was considered the basic content of a General Plan. Accordingly, the pattern - amount, location and distribution on the territory- of land for new urbanisation was called the "city model".

How much and where to grow was supposed to be the decisions of the basic General Plan. It was so up to the 1980s when there was no doubt that any city, large or medium sized, was going to grow indefinitely in Spain.

The amount of land "needed" was the result of applying target densities to the estimated demographic growth (natural and mainly immigrants). The density rates were progressively lower towards the periphery, starting from the intense and historically overcrowded central areas of our cities. The obsession to increase the "standards" of areas of public realm has been a constant in our history of urbanism since the first Land Law in 1956 during Franco's Regime. Those standards set the rate of green space, or other public realm spaces, per person or per new dwelling. They were increasing in the different new law reforms since the 1970s.

Tension was induced once the General Plan had fixed the dividing "line" between the area designated for development and land not available for urban growth. Land outside areas of urbanisation tried to be inside, Land "inside" the line could wait, in a most speculative way, as there was a guarantee that such land would become development land some day.

During some years, based on the 1975 Law, a difference was established between "programmed land" and not programmed land. The former was supposed to have priority for the next 4 years as well as further 4 years in the 8 year Programme that all the Plans had to introduce. That procedure was in force when we conceived the Madrid Plan. Later on, it was eliminated. Programming (and planning itself) was increasingly becoming out of fashion.

THE 1985 MADRID MASTER PLAN. SOME FEATURES

The 1985 Madrid Master Plan was a very innovative Plan, in its contents as well as in the way it was produced.

A full general diagnosis was undertaken. A very detailed analysis of every part of the built up city and of vacant land completed the analytical basis for decisions. For the first time, the Plan was focused on the built consolidated urban fabric, designed to complete it, to link up existing fractures and to remodel degraded areas. It was a Plan for urban transformation ahead of its time. Urban growth was considered in a secondary role, more in the sense of completing the existing city.

It as a participatory Plan, in which, for the first time publicity campaigns were used to mobilise and enable citizens participation. Teams of first class architects outside Madrid were called in to produce quickly projected solutions for 50 enclaves within the whole city to be remodelled. We called it the "50 ideas to Recuperate Madrid".

The 1985 Plan deserved the merit of the National Urbanism Award with which it was awarded. It was however a polemic Plan, acclaimed as well as criticised.

The treatment of urban growth: an anti-speculative approach.

Albeit with less prominence than in other plans, a certain amount of urban growth was proposed. For the first time in the recent history of Spanish cities, Madrid was not growing any more at the beginning of the 1980s. On the contrary, it was losing population.

The reason for the decreasing population was normal, not the product of a crisis. It occurred in all central cities of Metropolitan Areas around the World. The market was expulsing new households to the Metropolitan Area and beyond it. As above mentioned, 90% of central city households were going out. Just a small percentage was able to make a voluntary decision and look for individual houses in the best part (the NW) of the Metropolitan Area. The majority was forced out by house prices generated by the buoyant housing market.

The previous conceptual approach to planning directed forecast demographic growth to areas of new land already designated to be urbanised. There was no need therefore to allocate further land to new urbanisation. The only new land required was to complete the already consolidated built area and for the purpose of substituting degraded housing.

Subsequently, we introduced a voluntary measure, as a metropolitan strategy: to try to retain in Madrid at least 25% of the new households generated in the city. We were criticised by being against growth. In reality, trying to reduce the continuing population decrease our proposal implied a growth target.

We put a new question on the table which made the difference. The question was, growth for whom? It was perhaps the first time that such a question was put. It was not something that planning used to deal with.

Once the question was raised, we had to figure out the measure to achieve the social and urban target of retaining population in Madrid. It was necessary to introduce regulations which

required to build the majority of the new dwellings as social housing, with fixed price, on the new land declared available for growth.

With that target on the table, we called the land owners of the new potential land that could be assigned to urban growth. We explained the target, we calculated with them the feasibility (costs and income) of the conditions we proposed, we negotiated and, finally, we signed agreements with almost 100% of land owners. Subsequently, the Plan was agreed with them. That was another of its unusual features.

Once established the amount of land area that would be able to be urbanised, we "closed" the potential further growth with the same instrument that Abercrombie used in London, for its post second world war Plan: the Green Belt. This is, a series of void spaces, assigned exclusively to parks, agricultural or forest uses.

To enforce fixed price housing in the metropolitan central city was of course an anti-speculative measure. After its approval, when the Plan was passed in 1985, the Court declared it illegal. Although the plan had been previously accepted by them, the land owners celebrated that they could now do much bigger business.

The situation in the first years of the Plan's enforcement: 1985-1989. The first Real Estate boom

After the Plan's approval economic conditions improved much and fast. In 1986, Spain joined the European Union. The general framework ameliorates a lot. With interest rates decreasing, the first explosion of "financial" housing demand took place.

The Plan's focus on the built city as a whole had eliminated the blockade on a series of areas in a relatively central position. They offered the opportunities of infill operations within the city where profitability was even larger than in the periphery. Offices in rehabilitated old buildings along the Madrid historical Axis reached prices higher than the brand new skyscraper built on that same Axis, further away from the traditional centre.

Meanwhile, during the first four years of the implementation of the Plan, (which were also the first 4 years of the Plan's Programme) not a single hectare of land "programmed" for growth was developed. Forces opposing the Plan and pressure for larger assignation of land for new growth requested a new plan, imputing to the 1985 Plan the responsibility of fast price increases for not having designated enough land for new growth, according the traditional approach of continuously growing cities.

There was no land shortage and the price increase was due to the overwhelming demand supported by available finance. The Plan had made available the actual plots of land, within the consolidated city, which allowed infill operations that could be developed in a shorter period of time, responding to the exploding demand increase. They didn't need long planning and new urbanisation processes. It was in fact very functional. Even though, the 1985 Plan was criticised for the shortage of land for new house building.

Pressure by opposing forces and their insistence on land shortage (and related price increases) managed to generate a perception in the public opinion that a new plan was needed. As soon as a change of the political profile in the Municipality occurred in 1987, new planning is envisaged. It responds to the obsession to generate a vehicle to enlarge development land when it would be possible in reality to increase urban development within Madrid.

THE 1997 PLAN: THE PLAN FOR THE REAL STATE BUBBLE

It took some years to start but in the early 1990s the new Plan for Madrid was being drawn up.

It was approved in 1997, just 12 years after the previous Plan of 1985.

Beyond elements which are similar to those in the 1985 Plan, the New Plan was considered to "correct" its deficiencies, namely to increase land declared available for new urban growth. The above mentioned first Real Estate boom of the late 1980s had transmitted an "illusion" of continuing growth. Even the relative crisis of the early 1990s (with house prices dropping) was not taken into account. From today's' perspective, it was just a step back towards speculative momentum.

For a Plan that aims to enlarge the growth possibilities, it is perhaps coherent to minimise the limits to such possibilities. As we had said at the outset, the territory of Madrid Municipality is quite large. In the 1990s it still comprised a lot of vacant land which was basically "protected" as such by the previous 1985 Plan. The New Plan declares the whole territory as available for urbanisation, included most parts of the Green Belt. The authors of the Plan explain that they did so, in case development would take place.

Far from reducing prices, these overwhelming development possibilities generated speculative tensions, especially in the context of a "bubble" that transmits a sense of continuous price increase... with annual increases of 18%.

To declare the Green Belt as land that could be developed was not done correctly, in legal terms. It is not just a matter of declaring it as such. The Spanish Supreme Court has ruled twice against that declaration, and it is in legal litigation still today.

Two different types of optimism

In a very simplistic way, the two opposing views on growth and the radically different approach to urban growth in the two Plans tended to qualify the 1985 Plan as pessimistic and the 1997 Plan as optimistic.

I would say that both approaches have been very optimistic. However, they responded to two different types of optimism.

The last Plan responded to the optimism of considering urban growth continuous and unlimited. This is the "delirium", as we have called it at the beginning.

Conversely, the 85's Plan made the hypothesis that the productive model of the Spanish economy could not depend that much anymore on the real estate - construction agglomerate.

Both optimisms were wrong. Reality overcame them both.

SOME CONCLUSIONS ON THE GOOD PLANNING PRACTICE TO CONTROL THE LAND AREA ASSIGNED TO NEW GROWTH AS AN ANTI-SPECULATIVE CRITERION

Since 1985, Madrid's urban growth has occupied less than the new 3500 hectares declared for that purpose in the 1985 Plan. It means an approximate average rate of 100 has of 'new' city per year, which it is a high rate for a consolidated metropolitan central city. That average was achieved by adding the above mentioned years at the beginning of the period, with no new urbanisation, and the years when the "bubble" was inexhaustibly growing.

House prices followed in fact another path. They responded to the continuously growing financially induced demand, only interrupted during the early 1990s. Exploding prices are a consequence of higher supply, and not the opposite. The same occurs with new occupied-urbanised land. In this peculiar market, the crazy race of simultaneously increasing the three variables - housing demand and supply and building land - is only interrupted when the bubble bursts.

Planning for increased land available for new growth does not achieved reduction of

house prices at all. Quite the opposite, the overwhelming declaration of available land for urbanisation simply contributes to increase speculative tensions.

This is why we think that the measures introduced in the 1985 Plan were genuine anti-speculative measures.

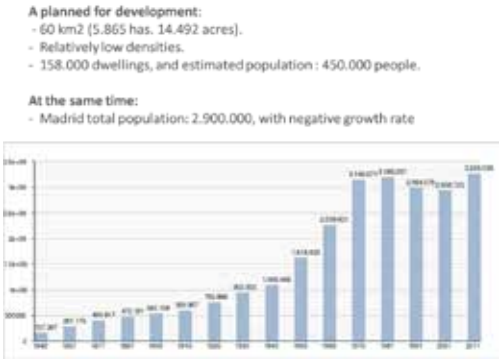
Bernardo Ynzenga

FROM DREAM TO NIGHTMARE: MADRID EASTERN STRATEGY, MENDING OR PUSHING THROUGH?

THE present paper[1] deals with the rise, fall and possible futures of the Madrid Eastern Strategy, arguably the largest urban operation undertaken in Spain in the last decades; probably the largest in Europe.

YEARS AGO: DREAMING

The Eastern Strategy is the name given to a development proposal extending over close to 60 km2. (5.865 Has. 14.492 acres) on the south-eastern fringe of Madrid. It was part of the 1997 General Master Plan of Madrid (*Plan General de Ordenación Urbana de Madrid -PGOUM*). It was designated for 158,000 dwellings and an expected population of about 450,000 people. The Plan also included other, smaller but not minor operations elsewhere which were supposed to attract their share of future population and push additional potential growth significantly. However and in dire contrast, when those decisions were made the total population of Madrid was less than three million people, and declining[2]. These numbers depict a panorama of unbounded development optimism, remote from demographic and urban realities.



Somebody made those decisions. They may have thought things would change for the better

(for the infinitely better) or dreamt that such a supply of planned areas would bring to Madrid most, or all the growth which was going to other regions or Metropolitan Area cities at that time. Those decisions were surprising. If one had to simplify, one would say they had emanated from an academic question and an array of wishful thoughts.

The seemingly innocuous academic question was: what could the capacity of this large Eastern Area be? How many dwellings, offices, activities, infrastructure, etc. could fit in there if fully developed?

Wishful thinking assumed that, given the anticipated (not to say desired) dynamic of the real estate market, there would be enough financial and economic muscle to promote and urbanise it all; and enough effective demand to buy all of the resulting plots. I say 'plots' because, as we will see, selling urbanised land was then the only business prospects expected by promoters.

Additionally, in a burst of optimism, the City and the area's landowners agreed on an extremely fast timetable whereby urbanisation had to be completed in eight years. To make things even rosier, they oversimplified and subdivided the area into only a handful of very large sub areas, each to be urbanised separately, fully and as free standing development.

Territorial growth context

The planned Eastern development strategy occupied an extremely large area: large in its own terms and relatively even larger when compared with the extension of Madrid's consolidated area.

Until the mid 20th century, the central part of Madrid was a compact and dense city, with two rather distinct parts: the Historical City and its 19th century Enlargement – or *ensanche*.

Madrid was chosen as Capital of the Reign in 1561, and for three hundred years, up to mid 19th century, that Historical City was all there was. Everything happened inside its confines.[3] Crowded within its relatively small surface (450 hectares), its population reached a quarter of a million people, at a density of some 125-130 dwelling per hectare. In 1860, the city approved a growth plan -The Enlargement or Plan Castro - that added some 1500 new hectares on a regular grid pattern. When The Enlargement was fully occupied, in mid 20th century, it contained an additional half a million people at an average density of 80-85 dwellings per hectare. After 400 years from Madrid's founding, the Historical City (now the Central District) plus the Enlargement (today's Core Area) jointly contained 2000 hectares, over 750,000 people and more than a significant amount of commerce, office space and all kinds of different activities, including governmental and institutional ones. This should be kept in mind as a reference.

Madrid was not confined to that Core Area. It had grown, grew and kept growing beyond it to reach a total population of 3,000,000.[4] Neighbouring municipalities grew and formed an extensive inter-related Metropolitan Area of 5,300,000 people.[5]

Economic and financial context

By the end of the 20th century, after a sustained period of real and expected economic growth, world financial capabilities had reached unheard levels. An ocean of potential investment money was looking for places, and a legion of local authorities, land owners, real estate developers and others were eagerly labouring to attract as much of it as possible. Easy and plentiful financing boosted demand beyond any reasonable limits. As a result, or as one of the most significant ones, the size and scale of urban land-development operations increased to record levels, boosted even more by the explicit or implicit support of cheerful

– if not greedy- local authorities. In the 1950s and 1960s a development of a few hundred dwellings was 20th century, the size of development areas had reached what seemed utopian to the early Moderns.

Urban management context

In Spain, two factors contributed to making large scale, and even larger private land development initiatives relatively 'easy'. They were the way in which land is dealt with and urbanised before final construction may begin; and the practice of '*buying the future*', accepted by many eager buyers, ready to acquire property on the only basis of drafted plans.

At the risk of over simplification, the process for land development in Spain went and goes as follows:

- Urban plans identify possible future growth areas and set some basic conditions for their development.
- The landowners of a given area get together and create a Compensation Board, '*Junta de Compensación*', tantamount to a shareholders private corporation.
- The Board designs and submits a detailed zoning and layout for the area for approval.
- Once approved, they subdivide the area into plots-to-be, inscribe them in the Land Registry, and begin to sell future plots to third parties before any work or construction of any kind have taken place.
- With either the revenue of those sales or with their own or financed resources, the landowners represented on these Boards have to complete all the urban works: streets, infrastructures, connections, etc.
- When they are completed, construction permits may be issued and building construction may commence.

The above described dynamic, boosted by banking institutions, by plentiful and aggressive financial practices and by overoptimistic future expectations, sped up the rhythm and scale of development initiatives, focusing on few sectors. Because of public works being costly, a more than significant level of investment had to be disbursed well before real final construction got underway. Obviously, in the meanwhile, the benefits to be obtained by the sale of land transformed-into-plots were the landholder's main concern, leaving the risk and tasks of construction and development to others.[7] Excel tables showing expected land sales results were more relevant, by far, than the characteristics of detailed urban planning, which were seen not as an end but as a mean to assist sales and to reduce costs.

An additional urban development management practice has to be taken into account: the '*Convenios Urbanísticos*', or pre-planning agreements between local public authorities and private landowners. Those agreements are contracts whereby the public sector allows a given urban growth in a given area in exchange of receiving jointly accepted given amounts of future plots and other surplus land, works or services, above the minimum legal requirements. Normally, both parties negotiate their '*Convenio*', before any serious planning or urban design has taken place. It is a 'what do I get, what do I give' kind of dialogue. Once the '*Convenio*' is signed, design and other initiatives are transferred almost fully to the private sector, within the constraints or conditions jointly set up.[8] This proceeding implies two risks:

- Public responsibility for the design and quality of the urban environment gets passed on (or abandoned) to private interested parties.
- Whatever accepted growth there is gets thinly spread and densities pushed down because more and more owners want and claim to be part of these deals: too much toast for little butter.

The Eastern Development Strategy proposal

The Eastern Strategy was the largest urban expansion area designated in the 1997 Madrid Master Plan. It aimed to extend the city over practically all the then undeveloped outskirts east of Madrid. It involved an enormous area and thus claimed to accommodate an inordinate amount of contents (land, population and dwellings):

- It occupies an area larger than the entire Core Area –the Central District plus Enlargements.
- At the current persons per dwelling rate, it could contain almost one seventh (14%) of the municipality's total population; more than one time and a half of Madrid's growth over the past 20 years.[9]
- Even if the crisis did not lead to lesser population and housing forecasts and even if all future growth would only occur in the Eastern Development, it would take at least another 20 years to occupy it fully (current Madrid City data[10] imply an increase of only 9,000 dwellings per annum[11]).

The stated capacity (158,000 dwellings) is misleading. It seems high, but density is low. The average density is about 30 dwellings per hectare[12], half or one third of that in Madrid's consolidated areas.

Areas

The General Development Plan divided the East into nine areas or sectors, generically called *PAU's, Programas de Actuación Urbanística*. Two PAU's were intended for industrial and economic activities and seven for predominantly residential use. The residential areas were very large: most were close to 500 hectares; in *Berrocales* they amounted to more than 800 ha, and to an exceedingly high 1900 ha in *Valdecarros*. According to the City, Valdecarros would be "*the biggest development project realised so far in the city of Madrid with an area and estimated population similar to that of a city the size of Albacete*". Again, a comparison suffices to see the huge scale of these areas: Valdecarros is several times bigger than the Central District and exceeds that of all Madrid's Enlargement, whose development took 100 years.

Detailed planning

According to the Master Plan, the detailed planning and design of the Eastern Strategy area should result from assembling and juxtaposing a series of independent Partial Plans, linked up by a first level network of high capacity highways, as well as a longitudinal large avenue. The latter would be implemented incrementally (according to expectations) as each area developed, fragment by fragment, until all segments were fully urbanised (in the meantime it would remain an interrupted or incomplete avenue).

The urban landscape designed for this assembly of parts, and for most of each separate part, tends to be conspicuously homogeneous:

- For whatever reasons –which we don't know but can well imagine- urban design leans almost exclusively toward an urban fabric based on a grossly over-dimensioned hierarchical grid system of streets, boulevards and avenues, defining standard sized city blocks.
- Architectural typologies are dominantly, and almost solely, based on collective buildings, aligned with the sidewalks, on the borders of the blocks, surrounding central common courtyards; all of it was complemented by some areas for row houses and occasionally a few blocks with somewhat different designs.[13] It is interesting to note that the Municipal Housing Society (Empresa Municipal de la Vivienda, EMV, part of the City government) has been the

first one not to follow this imposed model, allowing significant design changes for the blocks it developed.
- Green areas and open spaces spin off towards the outer edges, far and away from the centre of gravity of the living quarters. Large gaps isolate and separate each area from the adjacent ones (and from the municipality boundaries).
- Space is reserved for public facilities and local open spaces supposedly to ease design, but in reality pre-empting any other kind of construction within whole (or half) blocks, creating gaps that interrupt the (doubtful but pursued) the continuity of the theoretical street façade.
- The oversized dimensions of the partial plans is one of the reasons for this homogeneity. The fact that they were designed by a very small number of authors chosen by the various Compensation Boards at their convenience (five teams, nine partial plans[14]) may be another.

YEARS LATER: A NIGHTMARE

As these sectors led to unique independent actions, each Board faced very large investments and had to obtain heavy financing. According to the 1997 Master Plan, urbanisation infrastructure had to be completed for all the residential sectors in eight years. However, fifteen years later realisation was way behind the schedule. By 2012 most of the area had not yet been completed, and on some plots work had not yet started, or barely[15]. The financial situation was critical.

Compensation Boards - one for each area - have resorted to varying degrees of financing, including bank loans and anticipated sales of future plots-to-be.

Some of the buyers, often housing cooperatives in the making, began marketing or selling ownership rights for future dwellings-to-be in turn. A few thousand families had bought them.

Development and urbanisation are almost at a standstill. In a number of sectors, it has not gone beyond earth movements, or even less, but transforming the terrains' natural conditions.

The large amounts of oversized fixed capital weigh heavily on final land plus housing costs; costs which, if passed on to prices, will have a negative impact on demand levels (and therefore on revenue flows). Little has changed, and not for the better.

On the positive side, almost all the highway infrastructures providing access to uninitiated or delayed sectors have been completed.

However, there has been an important recent change. A ruling of the Supreme Court has declared null and void the Eastern Strategy PAU's provisions (and others) of the 1997 Madrid Master Plan. The municipality has responded with an urgent review of the Plan, including, basically and among other things: smaller development units (but probably with the same number of development shareholders per development unit[16]); and, larger development periods (up to 30 years).

For the PAUs this is a break, but nobody believes that good times will return soon if at all.

THE PRESENT: A NEW STRATEGY?

The dreams of yesterday collide with actual economic, demographic and urban growth conditions. It is not possible to carry on as if nothing had happened. Changes are required, and there are two sides to them.

Those who would like things to be as they were would only accept changes that would survive the effects of the crisis. They want to maintain the present design, keep and attempt to increase densities or other contents, attempt and reduce obligations, subdivide large areas into smaller ones for easier development and,

above all, bide for time. These changes will neither improve urban quality nor overcome the built-in urban shortcomings discussed above.

On the opposite side, there are those who would like to see the crisis as an opportunity. They would opt for profound conceptual and design changes, sensible use of the investments already made, restoring and achieving urban quality, healing the scars left in areas that will remain unoccupied for long…

The question, or the alternative, is: unjustified hope or positive action? The answer seems clear: waiting will not bring the desired results, not in the relevant future. A new kind of approach seems to be called for. Its key words are: shrinkage, density, concentration, recycling, preservation, attentiveness, adjustment… This approach was developed in a Master Degree Workshop held in 2012[17] and the following sections are based on it.

Observations

Several kinds of observations arose from the dynamic of the workshop, and as a response to the then current state of affairs.

From an urban planning and design point of view:

- The area offers an exceptional opportunity to mobilise and realise the best of contemporary up-to-date thinking and architecture, a positive contribution to the local urban environment and to the town as a whole.
- Average planned densities are too low: they lead to dubious urban quality, poor sustainability and high costs of urbanisation and maintenance.
- The prevalence of the block-grid and its formalistic rigour fosters uncritical and easy use of past models and hampers freedom and project quality. It seems to have been adopted more for reasons of convenience (ease of subdivision into plots and marketing) than for a concern for urban quality.
- The extreme and ubiquitous presence of a hypertrophied rhetoric street system dominates the urban scene, with oversized sections, profusion of roundabouts and axial boulevards, formalistic exedras conceived as convex outward borders to reinforce the autonomy of each section.
- The offish, distant, introverted and self-assertive character of the design adopted for the various areas, together with the treatment of their eastern limits, leads to a notorious anti-urban image.
- The inadequate proportion between buildings and road areas, and the absence of non-residential activities onto the street generate an empty urban scene' difficult to use (and expensive to maintain).
- The location and size of (many) local facilities and open spaces are emptying any other uses in what are now exclusively residential blocks, and distort the continuity of the urban tissue and the intended arguable 'street' image.
- On many occasions, the way in which the layout and grouping modes of city blocks have been planned contradict their intended character as part of a continuous grid. They parade, linearly, along the main avenues, as nostalgic reminders of the big old 'city beautiful'.

From an urban and development management point of view:

- Under the present conditions of uncertainty and change, the joint once-and-for-all detailed planning and management of such vast areas, whose occupation may take decades, is a burden in terms of frozen investment and deadlines.

A comment on the future:

- Urban space, form and environmental

quality, key for individual and collective well-being, are public goods that institutions should promote and reinforce.
– Under the terms of the *Convenios Urbanisticos*, or whatever adjustments to them may be agreed upon, the City would become the main or one of the main land and property rights owners, and it would also have full responsibility for maintenance and repair of all urban infrastructures and services. In any case, the City should take a more direct leadership role for the design, ensure the pursuit of excellence, and monitoring actively the development process and its results.

Criteria

Based on these observations, the workshop adopted several basic criteria.

Concerning the content:
– Reduce by about half the aggregate dwelling capacity of the host areas to about 80,000.[18]
– Raise average density to about 50 dwellings per hectare, so as to increase sustainability by more intense use of already realised infrastructure and of urbanised land plots.[19]
– Improve urban quality by facilitating the establishment of local commerce and activities, mixed-use buildings, and multipurpose public buildings.
– Reorganise and redesign the system of open spaces to produce a more coherent system of routes and sites, better integrated into the everyday habitat.
– Improve appearance and non- vehicular use of the street system.
– Resolve the boundary conditions and avoid the permanent appearance of a "*sorry, construction works ahead*" landscape.
– Maintain in reserve, all the land for which occupation is neither necessary nor intended, and restore its environmental quality by taking into account its present state and the changes caused by interrupted land movements and by other works.

Regarding management:
– Preserve the rights of those who have already acquired home ownership or other rights in the same place or sector if its development is going ahead, or in its proximity if that sector is not being developed.
– Given the fall of land prices and real estate expectations, analyse the advisability of negotiating the public acquisition of land in sectors, parts of sectors or even urbanised land not expected to be developed in the relevant future, (Bad Bank?).

An alternate schematic strategy

The observations and proposed criteria led to an alternative strategy that calls for more density and less content, which means that the amount of total committed land should be reduced. If densities are doubled, land take divided by half, and if, moreover, expected population declines, land requirement lessens in identical proportion. With such higher, but reasonable, densities the total capacity of the area would soon reach an extravagant three quarter million people… or more.

Taking all this into account and with more realistic growth expectations and forecasts, the strategy proposed a cut down of the number of dwellings, from 158,000 to 78,000, and an increase of average densities, from 28 to 45 dwellings per hectare[20] which meant freeing 3850 hectares.

In terms of urban design, the alternative strategy should include the following aims:
– Acknowledge the presence of already developed land and the condition where earthworks have begun; and in particular the existence of nodes and links on the highway system.
– Concentrate development on areas close

Alternative	sup. in m2	dwellings	dwell/ha	sup. m2 equiv	viv	dwell/ha
New Eastern Centrality	5.730.000	12.000	21	2.865.000	12.000	42
Dehesa	0	0	0	0	0	0
Cañaveral	5.373.000	14.200	26	5.373.000	21.300	40
Cerros	4.620.000	14.300	31	0	0	0
Ahijones	5.684.500	16.800	30	710.563	4.000	56
Berrocales	8.270.000	22.000	27	827.000	4.000	48
Vallecas Enlargement	7.360.000	28.000	38	7.360.000	36.400	49
Atalayuela	0	0	0	0	0	0
Valdecarros	19.135.300	51.000	27	500.000	3.000	60
Total	56.172.800	**158.300**	28	17.635.563	**80.700**	45
Population (2,7 pers/dwell)		**427.410**			**210.600**	

to existing highways and nodes, on or by already urbanised land and on sites where works have already advanced to some significant level.
- Cancel development on untouched sites, allowing only whatever may be needed to seal or complete present or semi-finished developments.
- Improve continuity and connectivity among the new eastern areas and between them and the city's urban continuum.
- Set a large land reserve aside, and give differential treatment to land where natural conditions have been altered by earthworks.
- Design for and achieve a more differentiated urban environment; denser nodes with higher amounts of activities; concentration along the main local road links; higher quality of contemporary residential areas; more a sensible and better scaled system of urban services, facilities and public open spaces.
- Plan for smaller development units and incremental development.

Towards a new Master Plan

In the last municipal election campaign, the City governing party (PP) promised to update and review the Master Plan. Soon it set up a Master Plan Office. Numerous studies, preliminary drafts and wide-open consultations have already taken place.

On the Eastern Strategies areas, and conscious of the controversy and tension between the '*keep things as they are*' and the '*let us change them*' approaches, the Office proceeded cautiously and carefully. However, after the recent Supreme Court rulings, pressure for quick reaction increased the immediate response towards the '*keep things*' camp[21].

The result was a somewhat contradictory pair of decisions:
- On the one hand and as already said, a partial and urgent Plan Revision was set in motion to maintain, strengthen, facilitate and prolong the 1997 decisions and has been approved,.
- On the other hand, the new Master Plan process continues theoretically as if nothing had happened… uninterrupted, but 'freezing' any additional decision on the Eastern Strategy… following the '*don't let one hand know what the other does*' advice.

What the new Master Plan can achieve is as yet unknown because the partial and urgent Plan Revision, already approved despite its claims to the contrary, will make any future change of its contents extremely difficult, costly, and practically impossible. But… the Plan Revision will, no doubt, face new court challenges… and uncertain results. Let us hope that for those who have embarked on it, and for the good of the city, theirs is not a Medusa raft.

This is not a happy story. It is a story of unjustified dreams and predictable nightmares. What happens after awakening will take time to find out. In the meantime, let us wait… actively.

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1. The paper is based on a conference given at the 2013 San Pablo University, CEU's 2013 Summer Course Strategies for the Post-speculative City. See also: Ynzenga Acha, Bernardo. 'Mega barrios: la oportunidad perdida' in Carmen Priego Fernández del Campo (ed.): 'Sociedad y espacio urbano de Madrid en el siglo XX' Museo de Historia. Madrid. 2010.
2. In recent years Madrid's total population has increased somewhat, to 3.324.000, with a feeble forecasted rate of growth of about 20.000 to 15.000 per year.
3. A fiscal fence surrounded the city. Built by Felipe IV in 1625, it stood unchanged up to 1868.
4. More in the 70's and 80's, less 20 years later
5. Madrid Metropolitan Area around 2000: 29 municipalities; 1.935,97 Km2.; 5.285.242 resident population
6. Occasionally, building permits may be issued before all public works are finished.
7. Some shareholders may choose to continue with the development business.
8. The Public Sector retains supervision and approval.
9. Population 1991=2.984.576; population 2011=3.256.038. From 1991 to 2011: an increase of 280.462 people.
10. Building and Housing Census, 2001. "Main family dwellings by districts and sections, by type of housing. Government Finance and Administration Department. Department of Statistics. Institute of Statistics of the Community of Madrid Registration Office. Estimated population at 1 January of each year (2010-2020). Base Population 2009 "
11. Using annual mean values: annual increase of 24,879 people and average family size, 2.76 leads to an increase of 9.014 homes per year.
12. City of Madrid Planning and Housing Government Area. GIS Department. Monitoring of management in new urban developments. April 30, 2012.
13. Blocks around the central core of the Cañaveral
14. Just one team, Valentín Merino Architects SLP, designed almost half of the entire area (nearly 2,900 of the 5,800 hectares corresponding to the partial plans of La Dehesa, Vallecas Enlargment, Atalayuela and Valdecarros). In addition, another team, CA14 Architecture and Urbanism & Zealand Limited, designed 40% of the remainder area (the 1,140 hectares of New Centrality and Ahijones).
15. The PAU of Vallecas Enlargement is fully urbanized and partially built. The two industrial areas and the residential area El Cañaveral are fully urbanized but building activity has not yet begun. In Berrocales some urbanization has begun and in Ahijones just earth movements. In Los Cerros and in the quite large Valdecarros, no works have started.
16. Initially, all the landowners in a given area participated proportionally in all revenues. If the area is subdivided, its land owners will be a subset, leaving out the rest. But as all had commenced together, the rest would claim to be in; and so the resulting subdivision will have to be in smaller lots, fragments of a block, with negative effect on final urban scene (blocks as sum of different projects instead as platform for unified ones).
17. Master in Collective Housing. Departamento de Proyectos Arquitectónicos. Escuela Técnica Superior de Arquitectura de Madrid, ETSAM. (http://www.mchmaster.com/)
18. This figure includes the dwellings already built in the Vallecas Enlargement.
19. In the Vallecas Enlargement, increase density of occupation by inserts in, or ordinance changes for, unoccupied lots or urbanized blocks.
20. Achieving higher average densities would be difficult, in so far as part of the areas are already developed or under final housing developments.
21. Fear of lawsuits and significant compensations was, no doubt, one of the reasons for the City's decision.

Juan Arana

WASTE LANDS

THE UNINTENDED CITY

Through the production process of the contemporary city, the left over spaces become, in opposition to the spaces of the formal city, a key aspect to understand our urban space. In its various forms urban waste space is inscribed in the cities as defining a fuzzy inner border. Its shape or lack of it equals to the negative of the city. It often marks the middle ground between urbanisation and the countryside, between infrastructures or between uses. As such, it is an intermediate space, a space that mediates between different spatial situations or a transition in time. In continuous transformation, its form and character are by definition imprecise. It shares qualities with the urban and the rural realms together with a very definite character on its own.

In the absence of a defined function, residual spaces are occupied by residues, playful, ephemeral or marginal uses.

Its universal use is that of the informal gathering of waste, as if fulfilling a spatial necessity of the urban context to expel out of its limits waste materials and activities unsuited for the formal city. In this way, they follow the logic of the excremental defined by Slavoj Zyzeck for the Untouchables "Not only dealing with impure excrement, their own formal status within society is excremental" (Zyzek 2002). Gilles Clément designates as Third Landscape the space left over by man to be colonised by nature (Clément 2003) He makes a political comparison when he relates the Third Landscape to the Third State paraphrasing Abbé Siéyès' famous question: *What is the Third State? Everything. What has it been until now? Nothing. What does it ask? To become something*. What is implied in this statement is that certain spaces of the city have been treated as a mere background. They have been taken for granted and either

ignored, perceived as a problem, or seen as potential space for urban development.

Urban waste space differs drastically from standard public space. The public space of the city is the main image from where the different intervening powers project certain civic values. It entails a promise of secure friendly urban leisure and gentrification.(Delgado and Malet 2007) The residual space on the other hand represents conflict and diversity versus uniformity and consensus. Such potential has raised interest towards this unintended city from various aspects that could be identified as form, nature, uses and memory.

The fascination for the form of vacant in-between spaces lays on its lack of defined limits or precise shape. Its blurred limits are not restricted to public or private borders and they cannot be properly mapped out. It also lacks a uniform scale, ranging from small vacant plots or buildings to the territorial scale of the periphery.

Unattended urban spaces are also object of study due to their biodiversity richness[1] and as the expression of a different relationship between city and nature. In this sense there is a current trend to substitute picturesque ideas of urban nature such as 19th century urban parks for a hybrid landscape.

Theorists such as Solá-Morales connect the expectant and the undefined with a sense of freedom from the oppression of the contemporary city or from urban planning (Solá-Morales 2002. Those are also qualities that allow for unexpected, spontaneous use or guerrilla urban activism.

As a by-product of urban transformations, unused waste spaces present themselves as contemporary ruins. As such they hold the memory of city evolution through banal vestiges and traces of other uses and times and question the notion of place (Marot 2010)

WASTE LAND DEFINITIONS

Urban left over spaces are a reference for the avant-garde from the 1960s and have been the subject of urban theories from different perspectives. By different names as Terrain vague, third landscape, *drosscape* or *zonzo*, it has become a contemporary topic of research.

Terrain Vague

Ignasi de Solà- Morales built around the term terrain vague a theory of individual experience of the contemporary city and a proposal for architectural intervention. For Sola- Morales the term vague implies on the one hand void, vacant, lack of compromise. On the other hand it conveys an uncertain, imprecise or blurred character. It is also linked to wave, movement and instability. He characterises the terrain vague as external and strange places: external due to their nature as edge, outside of the production structures. They are the waste that remains outside the urban dynamic. They are strange because they reflect the individual's relationship with the city in the contemporary sensibility. Strangers in our city, the inhabitants of the metropolis feel the spaces not dominated by architecture as a reflection of their own insecurity, their vague wandering through boundless spaces (...) they constitute both a physical expression of fear and insecurity but also an expectation of the other, the alternative, the utopian, the future. Sola-Morales establishes an opposition between the Enlightenment tradition of modern architecture and urbanism, aimed at the production of a comfortable and efficient city, and the fascination of film and contemporary photography for expectant and imprecise spaces. He questions the problematic role of architecture before such spaces of indeterminacy. The 19th century answered the problem of how to incorporate nature to the city in the

form of the urban park. In the same way the question now arises of how the contemporary city should answer this new utopia. The author suggests the architecture of the terrain vague will emerge from the attentive listening to flows, energies, rhythms that the passage of time and the loss of limits have established (...) The split individual of the contemporary city would look for forces instead of forms, (...) the haptic rather than the optical, the rhizomatic rather than the figurative. (Solá-Morales 2002)

Zonzo

Through the experience of wandering and aimlessly walking, Francisco Careri discovers empty space as the protagonist of urban landscape. He describes the archipelago of interconnected voids as a parallel city that he denominates Zonzo (from the Italian expression andare a zonzo: to wander aimlessly) (Careri 2002) He belongs to the architects team Stalker who describe themselves as a collective that deals with research and action on the landscape with particular attention to the areas on the edges of the city and forgotten urban spaces, abandoned areas or regions in transformation. Those territories constitute the negative of the city, the interstitial and the marginal (...) the spaces of confrontation and contamination between the organic and the inorganic, between nature and artifice.[2]

Descampado

The artist Lara Almárcegui, in her works around the empty lots (descampados) emphasises the open, unfinished, free status of such spaces in the city. Her work provokes a reflection on the city and the relationship with the individual. Some of her works, as the guide to the empty lots of the city strive to give visibility to this parallel city that remains unfinished and undesigned and therefore full of possibilities.

Vague Parks

Krystallia Kamvasinou suggests that involuntary qualities if the terrain vague can be inscribed within the urban design of certain public spaces. These vague parks include the principles of void, indetermination and uncontrolled occupation. Kamvasinou studies a number of interventions on various public spaces: The design of New York High Line by landscape architects James Corner/Field Operations together with architects Diller Scofidio + Renfro and planting designer Piet Oudolf, the reforestation of the riverbanks in Bordeaux by landscape architect Michel Desvigne, the proposal for Fresh Kills Parkland in Staten Island, New York, by James Corner/ Field Operations and Peter Latz´s work in the design of Duisburg-Nord between 1990 and 2001 (Kamvasinou 2010) These examples are urban space interventions that incorporate spontaneous natural landscape, respect local ecosystems, undefined uses or continuity of pre-existent elements.

MADRID: ARCHAEOLOGY OF THE PERIPHERY

Every moment in the development of the city produces its own residual spaces. The demographic growth of Madrid in the 1960s due to the migration from rural areas to the city produced a characteristic peripheral landscape formed by expectant unurbanised areas between the countryside and the city, illegal settlements and new housing developments. The small towns and neighbourhoods around the city suffered a sudden growth, mixing rural village architecture with free standing collective housing. The city border was an element in continuous change, where livestock and agriculture had still a presence next to the road infrastructure and the construction activity. The empty land (los descampados) became the landscape

of childhood memories for a whole generation. This urban landscape was reflected in movies, photography and painting.

Currently, the city of Madrid has suffered an intense growth of very different nature. The new waste space is the result of the vigorous forms of recent urban developments and abundant road infrastructure and also the deserted spaces produced by the crisis of the productive model.

Manolo Laguillo has photographed for years the periphery of Madrid and Barcelona. As he puts it "the periphery has the interest of a symptom. It is as taking the pulse of a city. The different components a city needs for its metabolism to enter and exit through it. The energy, the goods, the people..." Speaking of his work he quotes Nabokov: The future is but the obsolete in reverse. His photographs of Madrid and Barcelona´s periphery in the 1990s show a superimposition of layers, the rural, the infrastructures, the obsolete industry and the new city in the background. (...) Above all, ruins. Old ruins but also new ones: ruins that have had no time to become older, instant-ruins that suppress any resource to archaeology (Laguillo 2013)

Madrid: urban residual spaces in the post-speculative city

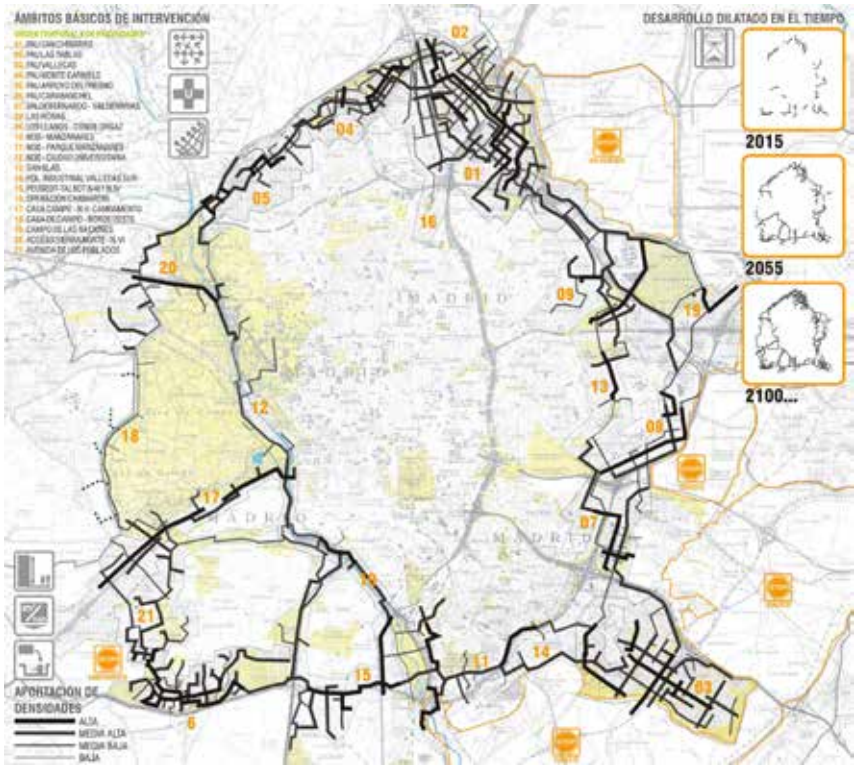
The urban territory of Madrid presents a number of cases where planning has been unable to give a solution to conflicts generated by economic growth. Inside the municipal limits, vast areas of land such as the East Developments are now paralysed at an intermediate state of urbanisation. Planning envisages an unprecedented growth in those areas, but the burst of the economy makes such development very unlikely. Meanwhile the landscape, partially modified, becomes a ruin before its development.

In 2004 the Madrid Municipal Housing Company (EMVS) launched a restricted competition for young architects for a Bioclimatic Boulevard in the new neighbourhood of Ensanche de Vallecas. The project was developed within the framework of the European Union Life programme. The competition brief presented the project as a harmless and politically correct urban design, but it had ideological connotations. It was sited on one of the very controversial new developments (PAUs) that had been criticised not only for poor quality design but more importantly for the model of urban growth. The new developments were a means to put rapidly on the market large amounts of available land. They were driven by a continuous growth of house prices and a highly speculative housing market.

One of the invited teams, Equipo Bloque Arquitectos (Rogelio Ruiz, Álvaro Moreno, Luis Perea and the author) submitted the proposal Urban Suture as a response to the new Madrid developments that were becoming a landmark of blatant unsustainability. The proposal was presented in the form of manifesto and included a strong critique ofnew urban developments in contemporary Madrid, designated as "urban desert". The memory of the project points out the necessity to protect the land and paralyse upcoming developments (significantly the East Developments).Instead of strictly limiting the project to the designated boulevard in the recent development, the team took the urban scale as necessary starting point. The team proposed to locate the wounds inflicted on the city by speculative planning and implement through citizen participation policies that would supplement new neighbourhood necessities, emphasise diversity and search for a continuity of urban space. The Urban Suture strategy inserts itself in the existing city through its public spaces, infrastructures and in between spaces of the city. The diagrammatic urban plan for "intervention areas" shows a continuous alien occupation of Madrid from

its periphery, with different degrees of intensity depending on the severity of the wounds, higher in those territories of the new developments (Empresa Municipal de la Vivienda y Suelo, Área de Gobierno de Urbanismo, Vivienda e Infraestructura2005). In this approach, the fragmented periphery and the residual public spaces generated by the recent urban growth, become significantly the privileged areas from which to heal the city.

1. Urban Suture, Intervention areas
Source: EquipoBloqueArquitectos 2004



In a text published by Madrid Council in 2002, one the mentioned objectives of the 1997 Master Plan is the control of housing prices through the overabundance of available land (Gerencia Municipal de Urbanismo 2002). In spite of the amount of new housing built during that period, the prices were never accessible to large sectors of the Madrid population. The massive construction rates and the optimism displayed by the administration, together with the complicity of technicians came altogether to an abrupt end with the economic crisis and the burst of the real state bubble in 2008. Paradoxically, thesituation came to fulfil the objectives of the Master Plan by causing the sharp fall of prices due to overabundance.

It seems that the left-over spaces become more and more the battle ground for a different informal urbanism that confronts the deficiencies of standard planning with political activist proposals. Currently, a number of teams formed by young architects, planners and others, work in Madrid on projects related to participation and public space from a guerrilla approach. The Basurama collective is one of them with projects such as 6,000 km,[3] a critical reflexion on the metabolism of the city and the left over urban spaces. Other projects like Autobarrios San Cristobal create events and ephemeral interventions on residual urban spaces.[4] The project Increasis by the team Todopor la Praxis intends to work with the ruins of uncontrolled growth system. It includes a recollection of spaces and experiences and maps voids and residual spaces left behind in the process of transformation of the city to postulate them as opportunities for occupation and transformation through active citizen participation.[5]

Los Ahijones. Strolling through the Waste Land

A stroll around the vast territories of the proposed New East Developments of Madrid reveals an unexpected landscape of the city.

Preparing the EUSS 2013 workshop we took the chance to walk aimlessly (a zonzo) through the area of Los Ahijones. This development expects 15,400 dwellings to be built, a small part of the total 125,000 dwellings foreseen for

all the new developments (excluding Ensanche de Vallecas). The Master Plan conceived this territory as the larger scale continuation of the PAU, as Sanchinarro or Ensanche de Vallecas. In a text by the Council Planning Department in 2001 the nature of this land is described as residual, environmentally deteriorated and holding scarcely any agricultural use. The East Development Strategy was bound to confront the housing demand of the Madrid population.6 It may now seem only too easy to qualify such statements as short sighted. 12 years after those words, the land is currently clearly residual and has been environmentally very much deteriorated by the paralysed developmentinfrastructure works. It would be very complex to make assumptions on the future of the developments as they are planned, as the administrative processes continue and new building permits are issued every year.

Other areas of the East Developments as Valdecarros are still untouched, but in Los Ahijones the development infrastructure works are at a state of 5% progress according to the municipal web page,[6] although they are hardly noticeable at first sight. A series of geometrical embankments are visible from the aerial view that resemble a buried ancient city at pedestrian level. There are hardly any trees on sight, but low vegetation covers the land, changing colours in the depressions of the landscape, where the water gathers. The up to two meters high carduusacquire a surreal presence in this context. A deep hole in the ground, signalled through fallen security plastic fences, marks an archaeological exploration spot. Such sight brings to memory Lara Almarzegui´s early work dig (1998) in which she excavated a two meter deep hole in an empty plot of Amsterdam until the construction company came to level the grounds; an action that evokes the search through forgotten layers of the urban realm.

The city seems very remote from here. The skyline is fragmented and surrounds the walker from a long distance. The urban presence is perceived through the power lines, the train and the distant on-going infrastructure works. On the other side of the railway the area of Los Berrocales presents a 25% state of development infrastructure works. The vegetation layer has been removed, leaving behind a flat moon-like landscape.

Towards the east, Los Ahijonesends with the illegal settlement of La Cañada Real Galiana. Over the last 25 years, this protected livestock trail has become a 15km long lineal city housing 8,628 inhabitants[7]. It becomes a paradox that such a focus of urban activity waiting for regularisation or dismantlement should be located next to deserted land, such as Los Ahijones, expected to become an improbable city.

2,3,4. Stroll through Los Ahijones
Photo: Juan Arana 2013

A commitment with uncertainty

The above mentioned urban theorists postulate the unused, left over space, as a utopian territory to be understood and grasped through intervention, action, study, leisure or leaving it

untouched. Solá-Morales starts by pointing out the aesthetic values of such landscape, to turn it into a revulsive for contemporary architecture and urbanism. More technical approaches (Hough 1989) deal with the landscaping and natural characteristics within the wider context of questioning the relationships of city and nature. Meanwhile it becomes the ground for political spatial activism in the city and the scenario for spontaneous events and citizen participation.

What we are confronted with in Madrid are large expectant territories that are in the transition process between a future city that never will be and their being reclaimed by nature. They are what Languillo would call instant ruins or the ruins of the future. But their unfinished nature could also mean open possibilities. After the years of the real estate boom, the city finds again its limits. In the aftermath of the crisis, for the first time after 25 years there is no pressure to build a new city. We can take the chance and leave it to nature, the regeneration of such spaces providing some room for indefinition and uncertainty for future generations.

1. Clément, op. Cit.
2. http://www.osservatorionomade.net
3. http://www.6000km.org/
4. http://basurama.org/
5. http://increasis.org/
6. http://www.madrid.es/
7. El Pais 12 mar. 2012.

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Covadonga Lorenzo Cueva

MADRID URBAN PANORAMA: BIG PROJECTS FOR AN EXPANSIVE ERA

ECONOMIC BOOM AND BUST

Caused by the economic expansion that put Spain among the European leading countries, Madrid could overcome its historic deficiencies, and was able to renew its potentiality during the last decade until the economic crash by turning itself into an economic and cultural capital of international stature. While urban development has been appropriating peripheral territories, defining a new structural organisation, the city took advantage of economic buoyancy to improve its infrastructure. Flagship projects were the treatment of the M-30 highway to recover the banks of the Manzanares River as civil space, and new urban services, such as the Terminal 4 of Barajas airport. Besides, big companies built new headquarters, economic fortresses in the form of autonomous cities on the urban fringe, or spectacular skyscrapers along the Castellana axis in the centre of Madrid.

The current economic crisis in Spain is an opportunity to analyse all those projects and try to understand the present situation to rethink new ways of improving the urban panorama of Madrid.

In 2007, the structure of the city broke up to be reconfigured through multiple interventions. The growth of the Spanish economy surpassed that of Germany fourfold according an article published in the Financial Times. A study of rating agencies placed Madrid among the five first economic countries of the world according to a criterion that considers political, social and demographic factors, including development potential. The nine Spanish companies placed among the world's 500 largest have their headquarters in Madrid, putting it into the sixth position in one of the rankings of global cities. Madrid, already among the most important communities in terms of population or income level had advanced by several positions according to the indicators which had measured its

economic prosperity during the last quarter of the century. All these results showed that economic growth of the Community of Madrid was superior to the national average and that Madrid had a greater capacity to generate jobs within the private sector. The total job growth was higher than in the rest of the country although the increase of public work was clearly lower. At that time, caused by the growth of the economy, Spain was among the leading European countries.

All this lay at the base of Madrid's building buoyancy which stopped when the real state bubble suddenly burst. After the longer term, after decades of urban crisis revitalisation appeared before the current crisis. It could be interesting to analyse why this unexpected renaissance appeared or what conditions (geographic, economic or cultural) or urban planning policies made that revitalisation possible and how could be made to last. A closer analysis of some key issues of contemporary urban development in Madrid could shed some light.

THE THREE MAJOR PHASES OF MADRID'S EXPANSION

The modern transformations in the Madrid metropolis was a process which did not occur gradually but rather in stages. This process could be summed up in three major stages: first, the creation of the metropolitan area which meant extending the urban area beyond the limits of the traditional, compact and continuous city. This took place in the 1960s and 1970s. Secondly, the idea of Madrid as a polycentric city-region to overcome the simple relationship of dependence on the metropolitan centre occurred in the 1980s. Finally, the post-metropolitan era began in the 1990s when Madrid adopted a fractal spatial organisation built around large axes of supra regional development.

The first phase, spanning from the 1960s to the 1970s is characterised by a central area in which the radial concentric urban structure depends on the metro system and the M30 inner motorway ring and, on the outskirts, on the arterial roads and the railway system. In the central city, institutions and commercial services and tertiary activities were grouped together. They were surrounded by a peripheral urban residential area distributed into socially divided parts following a very simple pattern: higher income levels were concentrated in the north and west and lower income levels in the south and east.

Outside the borders of the city of Madrid satellite metropolitan centres and dormitory towns appeared, were growing fast and totally dependent on the structure of the old arterial roads connecting rural towns. These new suburban areas were almost entirely lacking basic infrastructure and were totally dependent on central Madrid for employment and services. So there was no balance in this kind of growth. Fragmented development led to a north-south division in terms of environmental quality and centre-periphery contradiction. These were determined by the inefficiency of the transportation system that created an imbalance in the distribution of employment and services which constrained the quality of life of the metropolitan population.

This context constitutes the basis of the reform of the urban planning system developed in the 1980. There was an emphasis on fixing the shortcomings of urban quality through a series of spatial policies. They included territorial rebalancing and redistributing major services (in particular universities); promoting decentralisation of services, and creating a metropolitan transportation infrastructure. The latter was an enormous undertaking. It started with the creation of the Consorcio

Regional de Transportes, in 1986 and continued with the construction of Metrosur subway line in 2003, one of the largest projects of civil engineering carried out in Europe. During that period, educational and cultural facilities were implemented on the southern edge of the inner city, where the greatest concentration of museums of Spain is located at present.

During the 1980s and 1990s, the most significant change in territorial organisation was the shift to a polycentric structure based on a set of key infrastructure investment, the completion of the large orbital metropolitan highways M40 and M45, the start of the outer ring road M50; increasing the capacity of arterial roads and railway modernisation. These infrastructure projects surpassed the mere function of consolidating outer settlements; they became true vectors of territorial colonisation. Owing to good accessibility conditions, all these metropolitan centres were strengthened and attracted more highly qualified economic activities (businesses and services). Another substantial transformation occurred during this period, the ex nova creation of nuclei in metropolitan access points. They consisted of high and middle income houses, followed by services (universities and hospitals) and later by leisure and commercial activities (shopping malls).

In this way the territory was colonised with interstitial nodes, far away from traditional urban centres but central points according to their accessibility. Examples are the creation of cluster grouping business and commercial activities along La Coruña highway; the development of industrial activities in the south along the campuses of Carlos III University and the Rey Juan Carlos University; a technological cluster developed in the south-east of Madrid, the del Henares corridor, and the techno-scientific innovation area in the north in the Tres Cantos neighbourhood and in the vicinity of the Universidad Autónoma.

IMBALANCES

However, the new injections of activities created new territorial imbalances. The rapid increase of developments on green field sites led to the decline of traditional downtown areas. Moreover, the increase of land occupation was higher than demographic growth and metropolitan GPD. Although this also occurred in European countries, what was especially dramatic in Madrid was that the area taken over by development had doubled since the mid 1970s. As a result rural areas started to disappear and, except for the Natural Park and specifically protected spaces, residual land earmarked for further development multiplied on the outskirts of developed areas.

Due to the high rate of migration from the city centre to these areas marginalised areas appeared in the urban centre, such as Lavapies or Valdeacederas. These older metropolitan centres started a process of commercial decline and social deterioration. Only later when these central areas were considered strategic by investors and public authorities did new projects appear as part of the planned revitalisation of Madrid's city centre, which included the extension of La Castellana to the north and the renovation of the Paseo del Prado in the South, as a kind of reinvention of the urban spinal axis, together with the M30 the inner ting road surrounding the central city.

Reconnecting the city centre with the outer city: Madrid M30

Madrid M30, or the Road 30 project, was focused on the inner ring road of the city which was in need of refurbishment to add more capacity. A total of 99 kilometres in length were constructed, of which fifty six kilometres were tunnelled. Construction started in September 2004 and took almost five years to complete. Major sections of roads were

rerouted under the city to improve accesses and circulation. Some of the world's largest Earth Pressured Balanced Tunnel Boring Machines were in operation at that time. It was crazy. The mayor of the city placed sensors on the tunnels to signal when the vibration of the earth surpassed the maximum permitted level and put immediate reaction into motion. The project also involved the clean up and regeneration of open spaces along the Manzanares River which runs north south on the west of the inner city. In that location the motorway was rerouted into tunnels. This freed a lot of land for level reconnection between the inner city and Madrid expansion and public facilities, recreational spaces, parks, etc. were created above the tunnels. For these large new areas, the municipality of Madrid held a two stage design competition in July and November 2005. The first stage was used to qualify local teams interested in the competition from which two were selected to join six other preselected firms in an international ideas competition.

The winners were a Madrid based group led by Ginés Garrido and Paco Burgos which included the architecture office of Fernando Porras Isla and Lacasta, Rubio Álvarez Sala, as well as the Dutch firm Westt 8 on matters of urban design and landscape. Their proposal included a sequence of spaces offering different opportunities for both large and small interventions, a sequence of bridges linking the two sides of the river and integration into adjacent neighbourhoods, public parks with a strong presence of vegetation that related to the existing urban fabric on either side of the river. All this provided a foreground from which to perceive the city as well as a new relationship with the Campo del Moro.

There were other proposals by Juan Navarro Baldeveg, for the area of Arganzuela park, or the Camino de las Flores by Herzog & de Meuron, suggesting a connection between and with the Royal Palace. Despite local controversialities, there are some worthy aspects of this mega project. The traffic circulation and accesses were improved, it created opportunities for the development of more public spaces, the ambient air quality improved (there was a significant reduction of emissions), on the surface there are gardens, parks and landscapes instead of a highway which severed the urban fabric. From a socio-cultural point of view, open spaces and community facilities appeared in a forgotten part of the city, neighbourhoods which were isolated because of the highway are now connected, and the riverfront of the ancient city was recovered, as well as some of the historic bridges.

The M30 project is similar to most projects which try to fix problems association with infrastructural interventions. However, it should not be seen simply as a road project but more as an excuse for the urban renewal and revitalisation of a neglected part of the city of Madrid. The basis of the design rests on vegetation, the pine trees placed all along the right bank of the river, guiding visitors through squares, parks, resting areas or playgrounds. This linear pine grove was created with different types of Mediterranean pine trees reminding the ancient wood that used to be there before. The left bank of the river was redesigned as an artificial topography that included some traces of ancient orchards, such as la Huerta de la Partida. Different kinds of materials were used for the pavements indicating different uses or areas in a sequence of spaces all along the river. The bridges include the refurbishment of historic bridges such as Puente del Rey or Puente de Toledo, the regeneration on the river lock and the construction of new bridges like the one designed by Dominique Perrault.

New skyscraper cluster on main Madrid axis

In another part of the city, on ancient plot of land which had belonged to the Ciudad Deportiva of Real Madrid Football Team four skyscrapers were erected, mainly for offices. They constituted an extension of landmarks along the main axis, the Castellana, which traverses the centre of Madrid north south. Along this axis, there are earlier skyscrapers, the Colon Towers by Lamela, the Kio Towers by Phillip Johnson and John Burgee in Plaza de Castilla; and surrounding them the hospital complex La Paz to the north and apartment blocks by Secundino Zuazo at the opposite side of the Castellana. The latest skyscrapers are positioned in a symmetrical arrangement parallel to the Castellana axis in two different alignments. Two of them are designed by American architects, Pei Cobb and Partners & Reid Fenwick for the Espacio Tower, and Cesar Pelli, Ortiz & Leon for the Mutual Madrileña Tower, based on canonical typologies. The other two towers are designed by European Architects, Norman Foster for the Repsol Tower, now called Caja Madrid Tower, and Rubio Álvarez Sala for the Sacyr- Vallerhemoso Tower, offering alternatives to conventional typologies.

The Caja Madrid Tower by Norman Foster was a design for Repsol YPF (the major Spanish oil company). Construction had started at 2004 but in the middle of the construction process, Repsol decided to change the location of its headquarters and to sell the building to Caja Madrid, a savings bank, for 800 million euros. It contains thirty floors of offices over fifty five levels, and is 250 meters high (the highest building in Spain, the fourth highest in Europe). It could be understood as an arc with connections and services. The nucleus is structural and placed in a way to leave an empty space free of supports in the centre and keep the façade completely open oriented to the city and the Sierra de Madrid. Three floor plan types are spread over the different levels of the Sacyr Vallerhemoso Tower; a double skin disappears on the lower floors to illuminate the inside courtyards. The geometry is based on tangent circles that appear from an equilateral triangle, aiming for the thinnest tower to solve the client's space requirement.

The Cristal Tower by Pelli is 249 meters high and has 46 floors for offices, five for mechanical engineering and a double skin to improve sustainability of the building. Eighteen supports located on the perimeter and a central core of concrete are leaving spaces for offices surrounding this area. The Espacio Tower is 227 meter high and is based on the idea of reproducing an organism which grows while it is going up. The tower looks like a sculpture. Ut contains 54 floors of offices, resting areas, technical floors and sports facilities surrounded by a double glazed curtain wall that provides natural light, good room temperature and humidity inside, without any noise.

Urban fragmentation enhanced by new headquarter of large companies

In the 1990s, the conventional dual city (centre-periphery) became a fragmentary tapestry of low spatial micro-segregation. That was the time of the construction of the new headquarters of big companies, such as City of Santander (a major Spanish bank or City of Telefónica (Spain prime telecom company), following the idea of creating autonomous company towns on the urban fringe according to the American model. The city of Santander is a simple closed unit near the new residential growth of Boadilla and the area of commercial activities in northern Alcorcón. All of them are considered isolated units inserted into an urban structure of great diversity and complexity, as these new units are mono-functional, typologically monotonous and homogeneous.

Kevin Roche's proposal for the City of Santander was based on the idea neoclassical architecture with all the axis of the whole building complex oriented towards the central dome of the main building. Although the main species of trees came from the north of the country, hundreds of ancient oaks and cypresses were planted in an artificial platform to mix the Mediterranean landscape with the northern one. Santander City is located in the extension of Boadilla del Monte, close to the new highway which connects it with Madrid city centre. The ancient area called Prado del Espino forms part of this new city, It houses all the central services of the institution in an artificial platform above the ground. Below it, are parking areas and public transport access to the city, above it there are three floors of offices surrounded by gardens, laid out in a geometrical grid with sculptures placed all around it. The main building lies in the middle of the complex. It is covered by a huge dome over the main hall as a metaphor of a sacred space that contains the art collection of the institution in the basement of the building.

Although proposal by Rafael de la Hoz for the City of Telefónica (Spain main telecom company) was not the first price of the competition for the new headquarters, it was the most convenient for the requirements of the company. Four prisms made of glass located at the four corners of the site create a fragmented but Cartesian space inspired by Mies van der Rohe. Located in Alcobendas, close to the M40 highway, the site plan consists of a huge square in the middle surrounded by the building complex.

OUTLOOK

The current economic crisis in Spain provides a possibility to analyse all these projects and to rethink the idea of 'fractality' which seems to underpin the current design fashion for the contemporary city. The problem is that this idea leads to a fast consumption of non-renewable resources, land and energy. The question is: how is it possible to increase the complexity of the city without increasing wasted resources?

POST-
SPECULA
STRATEG

ATIVE

IES

Carlos Lahoz

MADRID THINK TANK

CRISIS

It is crucial to begin this article by making a reference to an undeniable reality: We are in a time of CRISIS. Having this word on mind, if we think about the nature of the term crisis itself, it is curious to see that while the Greek word (κρίσις) from which crisis is derived stands for a situation dominated by change, other cultures, older than the occidental ones, have come to deepen its meaning and implications. This is the case of China, where the ideogram for crisis is composed of two characters, one means danger and the other opportunity.

This philosophy, this way of approaching reality, is what has driven the creation of the MADRID THINK TANK. Depending on how we face dangers or take advantage of new opportunities will be our future.

However, we lack the tools to predict the future. Therefore, our only option is to propose bold solutions capable of addressing and providing answers to the different challenges and work for society to understand and endorse them.

"The best way to predict the future is to invent it"

Alan Kay, at a 1971 meeting of PARC.

CONTEXT

Before the central argument, it is essential to make a brief reference to the current context and the role that cities play in it, because the 21th century is raising enormous challenges for humanity and cities are the critical space where to address them.

This crisis is not only about the economy; neither is it a temporary phenomenon. What is happening is a structural change that affects the natural framework which supports human life, our organisation as a society and the way we live.

The most tangible evidence of this situation is that in 2011 mankind reached 7 billion

human beings, a figure which speaks very clearly of our success as a species, but it is important not to forget that only 900 million people, that is an eighth of the total population, have a decent standard of living.

Moreover, the effects of climate change are threatening the survival of our species and the ones living with us. The human impact on the environment has made entire areas of the planet extremely vulnerable.

Energy consumption, a key resource for the activity of all life forms, has doubled in the past 30 years and yet it is expected to continue rising at a faster rate in the following decades. The acceleration of this consumption is not only a concern in quantitative terms, but also in qualitative ones, since less than 10% of this consumption comes from renewable sources. In this sense, if we consider the addition by sectors, it can easily be seen that more than 60% of this energy consumption is directly related to our forms of settlement; therefore cities are largely the cause of this situation.

Cities have also become the major centres of goods and resources consumption, displaying ecological footprints that reach global dimensions. The very proof is that, although they only occupy 2% of the earth's surface, urban environments are directly responsible for 70% of the total emissions of greenhouse gases.

However, despite this unstable context, cities reach their maximum importance and validity. The planet is now totally urbanised. The present situation is radically different form all the previous ones. Up to the Modern Age, less than 3% of the world population lived in communities of more than 5,000 people, however today, half of the human population lives in urban areas and, according to some predictions, this figure will rise up to 60% in 15 years. Now, at least in terms of quantity, we, humanity, have become an urban species.

But cities have not only grown in population, what is even more important, they have also increased in numbers and have changed their shape, size and organisation. In 1950, only New York had more than 10 million people. By the year 2000, the number of these large cities had been enlarged substantially. By the year 2025 more than 60 cities with a population over 10 million are expected.

In parallel to these dynamics, globalisation and technological change are also making noticeable effects. Our time and space coordinates and the way in which we relate with others, have changed forever. The ability to connect people and distant places has been multiplied exponentially. In this way, our planet has become smaller.

Enormous and often contradictory social changes are also occurring. In some respects, the new global society, whose nature is essentially urban, has become more homogenous, selfish and ignorant, while in others, it is much more diverse, rational, informed, compassionate and aware of reality than ever before.

Therefore cities, that is, the places where most of the population concentrates, where the new cultures are found, where the main consumption of resources and products takes place, and finally where it is possible to most notably appreciate the effects of these consumptions, have become the critical areas in tackling the enormous challenges that the 21st century holds for humanity. For this reason, the role cities are to play, have an increasing importance.

CHANGE

New times require new procedures

As a result of this context it is evident that humans are forced into change. We ought to change and we are to do it by thinking differently. We must be aware of the dangers but also of all opportunities.

In the near future, which can already be perceived in our time and also as a result of the dominant role of urban environments, competition will not occur among states, but between cities and territories. As first consequence two categories of cities will emerge:

On the one hand there will be cities that have a very clear and well defined project. These projects, conceived upon the very deep knowledge of global and local realities, will be capable of uniting all citizens around the common task of improving their quality of life. These cities will contribute to prosperity and well being on the planet. On the other hand, there will be cities that are lacking such a future project; these cities will inexorably see their positioning decline.

However, if action is only based on traditional urban procedures it will be impossible to respond to this new context. We need to rethink entirely the way we make and live in cities to achieve these goals. Moreover, we need to change them.

The immensity of this task should not overwhelm us. In addition to 8,000 years of experience in the construction of cities, we can already count on many of the tools and ideas that will illuminate this change.

New Information and Communication Technologies are at the basis of all transformation processes that are taking place in our time. We must use them as a vector of change. But technologies are not enough. The importance of current and future challenges will also require innovative thinking in social terms.

Due to all these fact the main concept of this paper – participation - emerges.

Participation

The citizens of the 21st century are aware of their power. They have access to unlimited information, know the technological tools and use them to their benefit. They participate in public opinion and self-organise to demand their rights and freedoms. This allows us to state that in recent years a new culture of participation has been forged, a culture of participation that until now, did not exist. However, this new culture of participation has few echoes in the urban processes.

Although 21st century citizen have moved from "being part" to "taking part", they are nevertheless systematically relegated to a secondary and testimonial role in what is possibly the most important collective process of their lives: the configuration of the space in which they spend their existence, the construction of their city.

The traditional urban procedures, characterised by their functional segmentation and monopolised by a few stakeholders, offer little or no channel for the citizens to participate. This way of acting belongs to the past. If we want to ensure a fair system of coexistence, it is critical to reverse this situation. The new society is already demanding for new ways of doing and managing in every area and every aspect: the city is one of them. The responsibility of the authorities and the professionals must be to ensure that major decisions affecting collectivities, such as urban ones should be underpinned by broad citizen consensus.

Furthermore, in recent years citizens have been able to organise themselves autonomously through distributed, selfless and open collaboration, to perform tasks of enormous complexity and thereby expanding the horizon of human knowledge. Citizens have talent.

We must use this shared creativity as the basis for providing solutions to the challenges we are facing. With it, and with the contribution of new technologies, which offer a great channel of communication to achieve real and effective participation, cities could become the attractive and efficient place desired by their citizens.

Technologies and participation are therefore the keys to guide us in the right direction and toward the achievement of the desired goals.

In short, the city is the focus of the problems, but it is also a wonderful creation that thanks to promoting interaction among people, manages to produce the knowledge needed to meet and confront the new challenges. Cities think, create and innovate, and maintain technologies once invented. Cities are the natural space of the Knowledge Society.

"The city is not only part of the problem, it is also the solution."

Jaime Lerner

MADRID THINK TANK

Architects can and should take an active role on this process of reflection and change, which will make cities the best possible places while they remain spaces shared and desired by their citizens. For this reason, the COAM (Official Association of Architects of Madrid) has decided to promote and lead the creation of MADRID THINK TANK, so that with the participation of all, we will help to build our collective urban project. Participation therefore is the key to the MADRID THINK TANK.

The fundamental mission of THINK TANK MADRID is "to contribute to the construction of the collective urban project of Madrid, improving the position of the city and its territory and making them better integrated places in a globalised world while offering the highest quality of life for its inhabitants".

In opposition to the traditional structure of the "Think Tanks" models of the 19th and 20th century, where the thinking elites gathered to produce knowledge that was subsequently transferred to the rest of society, MADRID THINK TANK revolutionises this structure by making the citizens the true protagonists. For that purpose, MADRID THINK TANK provides a unique concept of working at the metropolitan scale of Madrid, whose essential functions are fourfold.

1. *To Participate*
   MADRID THINK TANK is a platform from which it is possible to participate, a place that concentrates Madrid society´s view on what and how they want MADRID to be. But participation in the MADRID THINK TANK is not only about opinion; citizens can also contribute by proposing and acting.

2. *To Act*
   Secondly, for that reason, MADRID THINK TANK is defined by the verb to act. MADRID THINK TANK will promote the adoption of coherent policies, the making of proposals and the implementation of specific urban actions. Therefore, the MADRID THINK TANK is also a tool for the city and its territory to continuously reinvent itself.

3. *To Train*
   Thirdly, MADRID THINK TANK intends to train. Citizens are the ones which with their reflections and interactions generate the applicable knowledge needed to build the city, but for this knowledge to be truly useful it is necessary to be based upon solid foundations. For this reason another MADRID THINK TANK mission is to inform and educate those involved in the participation process.

4. *To Communicate*
   Finally, fourthly, MADRID THINK TANK searches to communicate. Therefore, communication also emerges as a key factor. Communication is carried out in two ways. Its purpose is to expose the latent knowledge that resides in society, and also to promote communication and interaction between those involved in participation. Consequently, the MADRID THINK TANK has among its objectives to be a space for dialogue and debate.

Encounter

The MADRID THINK TANK seeks to achieve its objectives by the sharing, the cross-pollination, the open dissemination of ideas and the participation of all, turning the city into a common task. For these reasons, MADRID THINK TANK is also a meeting place for institutions, professionals, companies and citizens, enabling them to interact, and share ideas and initiatives. Thus, thanks to the ultimate participation of all, MADRID THINK TANK will help to build a collective urban project of which they have ownership.

MADRID THINK TANK has been initiated by the Official Association of Architects of Madrid (COAM), and the Fundación Arquitectura-COAM, as well as with the support of other institutions such as the Regional Government of Madrid, the City Council and the Federation of Madrid´s Municipalities, as well a vast number of civic, professional and educational organisations.

Besides the impetus of the civil society, private initiatives, providing human and financial resources, also help consolidate MADRID THINK TANK as an innovative model to build the city all citizens want.

Participatory process

At this point the question is how are all these processes of citizen participation carried out? Regarding citizen participation and action, MADRID THINK TANK has proposed two different platforms.

The first, IDEAS X MADRID, calls for extensive citizen participation. This forum encompasses many ages and formats, which can vary from individual initiatives to specifically targeted ones.

The second, MADRID THINK TANK CHAIR, acts in parallel to IDEAS X MADRID. It promotes that the process of generating ideas and deepening knowledge about various topics takes place within university settings.

These platforms work according to a specific operative mode that makes an intensive use of new technologies since the participation process of MADRID THINK TANK is primarily managed via the Internet. The tool that manages all operational aspects is called iPARTICIPA.

The iPARTICIPA is an open innovation platform that covers the whole chain of ideas generation and the dynamics of user participation. The iPARTICIPA is a social network focused on the future of Madrid, in which people that will contribute with their ideas to building a collective urban project may interact with each other, express their thoughts and make evaluations and comments on others.

How can anyone participate?

MADRID THINK TANK dynamics is structured around the launching of challenges and the proposal of solutions to them, but it is also possible to participate by voting and reviewing both challenges and solutions.

There are a variety of problems and opportunities in the city which are still latent, due to the fact that they have not been properly identified yet or because they are still unresolved. In this context, the challenges emerge. They are the starting point of the various participation processes that lead to ideas competitions, to providing of innovative solutions, to forum discussions, round tables, etc. The challenges are, therefore, questions. The citizen who proposes a challenge poses question for other citizens to answer.

The solutions, however, are concrete ideas aimed at responding to what is been proposed for the different challenges. Therefore, whoever proposes a solution answers a challenge.

In addition to proposing both challenges and solutions, participants can also vote and

review other´s comments. The vote adds value to both the challenges and the solutions. When voting on a challenge, participants highlight its importance and contribute to triggering the process of debate and participation around it. Voting on a solution contributes to choosing the most appropriate response to any specific challenge. Opinion generates debates and discussion that help know better the specifics of the different challenges and solutions by adding nuances that improve their perception.

Temporal development of the participation process

The participatory process starts with a selection. Initially, citizens present their challenges to the organisation of MADRID THINK TANK, whereupon a jury of experts analyses and reviews all submissions, giving priority to those that hold great interest. Once the challenge is accepted it is then publicly launched through all the physical and virtual channels of MADRID THINK TANK. The challenge is exposed but not yet active.

With their votes, citizens decide which are e the most relevant challenges, and by doing that, they assist fund raising that allows the activation of the challenges. Once sponsorship is been raised the challenge is automatically activated. This sponsorship contributes to funding the challenge as well as means to finding solutions, such as conferences, exhibitions or competitions. Thereafter, begins the proposal of different solutions to a challenge on the citizen participation platforms.

How are the best solutions chosen? The process of choosing the best solution occurs in two stages. Firstly, citizens with their votes prioritise the solutions considered most relevant to Madrid. After that a jury specialised in the different matters meets to select and reward the best initiatives among those to which the citizen had attributed the highest ratings.

A particular case is that of a solution that can trigger new competitions in which the degree of detail or technical requirement is larger. In these cases, the Office of Competitions of the Association of Architects of Madrid, OCAM is responsible for managing the process.

Besides participation and action, training and communicating are among the other essential functions of the MADRID THINK TANK. For this purpose the MADRID THINK TANK has developed four platforms that work in parallel with the participation platforms.

They are all linked to the MADRID THINK TANK WEB and all its associated networks, in which different contents are redistributed.

MTT EDITIONS is another collaborative platform for publishing interactive contents on architecture, the city or any related topic.

TRANSFORMING MADRID is a third platform dedicated to research, dissemination and discussion of the spatial transformations of contemporary Madrid. With TRANSFORMING MADRID, MADRID THINK TANK aims to build a narrative about Madrid, a story about a city that needs to be better known and understood by all.

The final communication platform is MADRID TALKS. it consists of lectures, talks and debates organised by THINK TANK MADRID to reflect on the city of Madrid, to extend the knowledge to the public participation process and to publicise the activity of MADRID THINK TANK. MADRID TALKS are held at the headquarters of the COAM. They are carried out in different formats.

They include CROSS DEBATES, which are based on the idea that the city is not built only by shaping new spaces but also by configuring and creating identities, images, stories, sounds, etc. Consequently and with the aim to reflect

about this reality, MADRID THINK TANK organises monthly CROSS DEBATES about the PAST, PRESENT AND FUTURE OF MADRID from various perspectives. Discussions are themed and public meetings are held to which personalities are invited who have contributed with their specialities to the complex and diverse city construction. Its vocation is to become a platform of connection and dialogue, from which to analyse past experiences as the basis to suggest and propose future directions.

In parallel other events are taking place, such as MEETTINGS 5X10, the PECHA KUCHA or the DESIGN JAM. All of them are designed with the intention to show the talent that resides in the population, as well as to valorise the ideas that emerge from the participation process inherent in MADRID THINK TANK.

The MEETTINGS 5X10 are a free presentation format through which any citizen, team, group, organisation or company can present their work in a simple and informal way, in a maximum of 5 minutes. The event consists of 10 presentations that are recorded and displayed on various MADRID THINK TANK web platforms.

The PECHA KUCHA respond to scheme 20x20 (20 slides, 20 seconds each) and is conducted in collaboration with the owners of this international brand. Once the presentation of the various works is finished, a public discussion is carried out, where audience can ask questions, exchange points of view with the authors and make suggestions.

Finally, DESIGN JAMS are design sessions lasting one or two days, during which the people gathered collaborate to produce an answer to a specific topic. In addition to providing solutions to a specific challenge, the objective of the DESIGN JAM is to get designers to learn and work together.

The work of these platforms is complemented by a range of activities proposed and organised by MADRID THINK TANK. They include a number of general events, such as the public presentations of MADRID THINK TANK to different discussion forums. One of the most outstanding of these events is the MADRID WEEK. The MADRID WEEK is an annual event, which coincides with the current Architecture Week, in which the results achieved during the previous year are presented.

Presentations continue with the exposure of the different structural lines of MADRID THINK TANK, which are held once a quarter (TRANSFORMING MADRID, IXM, MTT CHAIR). In addition to the above, some other activities that are tied to a particular challenge coexist, the form of conferences, lectures, films or debates specifically designed for a challenge or for a solution.

Implementation

All these activities are carried out following a specific path that orients them in a certain direction.

Periodically, THINK TANK MADRID selects a theme able to reach across the multiple aspects that affect the city. In 2012 THINK TANK MADRID chose as the core theme MADRID 2020. This global theme has very different implications, as it integrates issues related to urban planning, with the Olympic Project or Environmental Sustainability.

This global theme is divided into ten specific areas of action, which are:

- Madrid Global City. Madrid, Ciudad de América.
- Economic Activity. Más Madrid/Turismo en Madrid/ Emprendedores.
- Quality of Life and Participation. Madrid Vive.
- Historical and Natural Heritage. Legado Madrid.
- Space and Urban Landscape. Experiencia Madrid.
- Sustainability and Energy Rehabilitation. ECO Madrid.
- Mobility and Accessibility. Madrid se mueve.
- Intelligent and Knowledge Management Society. Smart Madrid.
- Cultural Identity. Todos nos/otros somos Madrid.
- City and Sport. Madrid Olímpico.

Miriam García García

SPANISH COASTAL LANDSCAPES AFTER THE SPECULATIVE TSUNAMI

INTRODUCTION

During 1997-2006, Spain led the European real estate explosion. This stage has been seen as the largest increase of urbanised space throughout Spanish history, transforming the landscape as no other natural or artificial phenomenon had done before, especially in coastal areas. That is why many authors called it the speculative tsunami.

The construction fever ended when the real state bubble burst in 2008 and now is the time to analyse the causes and effects of an economic and social model organised around brick and mortar, without any respect for environmental, urban or landscape aspects. It is necessary to show the logistics that have fuelled real estate speculation to reach these limits and also the resulting spatial effects, with the aim to offer some possible ways of intervention to restore its territorial outcomes.

THE EFFECTS OF SPAIN REAL-ESTATE URBAN GROWTH MODEL: THE SPECULATIVE URBANISM

This period has been so intense and devastating, not only from an ecological, but also from a social point of view, that many experts in different disciplines worldwide have noticed it. Most of them have warned the citizens and the international scientific community, inviting them to reflect about its causes and its effects. All this research comprises a double value backed up with documentary evidence and supporting awareness of the real dimension of those landscapes. These landscapes may have an urban appearance, but that have truly been 'castles in the air'.

In fact, that was exactly the title that the German-American artist Hans Haacke selected to design the exhibition displayed last year at the 'Reina Sofía' Museum in Madrid. *Castles in the air*[1] revealed the failure of an extended model

of city production through his personal opinion about the Ensanche de Vallecas, a suburban area of Madrid. The exposed images managed to seize the visible and invisible characteristics of a desolating scene due to the unsatisfying, banal, disarticulated and soulless features that define this specific urban development. That is to say, sceneries without any social motivations, which keep no relation with the environmental and territorial structure, which lack a global vision and which therefore, also lack sustainability standards.

Meanwhile, the German architect Julia Schulz-Dornburg, in a book entitled Modern Ruins. A Lucrative Topography[2], published in 2012, describes twenty-five development projects 'with no connection with the existing urban fabric, of a considerable size, built during the years 1996-2007 and never inhabited'. The photo that illustrates the title page, for instance, shows the current conditions of the Fortuna Hill Nature and Residential Golf Resort (see Figure 1). This project was initiated in 2003 when Fortuna's Local Council, in Murcia, comprising ten thousand inhabitants, agreed to rezone some pieces of land to build dwellings for eleven thousand additional inhabitants. This development would double the total number of inhabitants in the municipality and it was carried out by means of simple land rezoning. This neither took into account its impact over the existing infrastructures and networks nor the surrounding natural environment. Between the years 2007 and 2008 the current housing was built and the activity went on until 2010, when the developer entered bankruptcy and later went into liquidation. The outcome consists of a completely urbanised battlefield, where urban orphan buildings, unfinished ones and a huge urban wasteland (much bigger than the village of Fortuna) live together. A ruined landscape, a territory abandoned to its own drifting.

1. Fortuna Hill Nature and Residential Golf Resort
Source: Julia Schulz-Dornburg, Modern Ruins. A Lucrative Topography

Unfortunately, this is not an exceptional case but just the opposite. There are examples of similar projects in almost every Spanish region. The amount of statements from the arts, science and societies, that have already condemned, and continue condemning, the 'no criterion' urban growth, are innumerable. These interventions were without criteria, because its only aim has been to go after profit, without considering common good. This period had its best friend in boundless urbanism. It is necessary to know the effects of this urban model and its variable characteristics as a means of reporting a foolish and absurd process but, above all, as an urgent disciplinary reflection to elaborate a new urbanistic model.

Changes in the occupation and uses of the land

The transformation of the land for touristic and residential uses and its complementary infrastructures has been felt in Spain since the 1960s. During the late 1980s and the early 1990s, a strong upturn commenced, with the height of its expression in the period between 1997 and 2006. For instance, the total number of dwellings that were started to be built in Spain during this decade was over 5.5 million, almost double the number of the previous decade.

In 2006, the Sustainability Observation Committee[3] in Spain published a research report entitled: 'Changes in the Occupation of the Land in Spain; Implications towards Sustainability'[4], which offers a very illustrative panorama about the transformations related to the occupation of the territory between 1987 and 2000. This period coincides with the real-estate boom. Despite these frightening figures, apparently, all this information may turn out to be irrelevant if attention is not paid to the environmental and territorial nature of the specific geographical contexts. A certain change in the occupation and use of the land, when it involves a more or less severe transformation, has ecological and territorial consequences that go beyond the mere physical vestiges of its transformation. This fact has favoured, among other processes, a relevant loss of biodiversity and, moreover, the increase of erosion of our territories.

Artificial land cover increased and fragmentation

The most harmful fact is not the extension of artificial land but its dispersion over the territory. While the traditional urban pattern in our country is characterised by being dense and continuous, typical of a compact city, during 1987 and 2000, the new urban pattern is characterised by lax set-ups and free-standing urban developments that represent 85% of the newly built areas.

This extension and dispersion of the urban phenomenon implies the ecological, functional and social fragmentation of the territory. The effects of that fragmentation increase the vulnerability of the undeveloped areas and they obstruct the social cohesion of those areas that have been developed. It deals with an inefficient model for both frameworks, yet the one preferred by developers during this period.

Long-shadow urban planning

Over this decade, continuous urban expansion at rates much higher than population growth has resulted in a massive urban footprint in Spain. For example the intensity of the building process has left its mark on the growth of the mining areas, which are also very important. Above all, those whose purpose is the extraction of materials intended for the building trade.

In the same way, the zones assigned to be dumping sites have increased, many of them being illegal. The recent rise of greenhouse gas emissions and energy consumption at all levels during this period is another indication of the lack of efficiency of this model. In addition, there is the distinctive feature that energy consumed comes mostly from fossil resources that are not only scarce, but also imported. Nowadays, it is generally accepted that the modification of a piece of land cannot be restricted to 'officially transformed' soils, that is to say, those that are already occupied, but it also affects that land that is involved in its development. In this context, this period presents a clearly unsustainable outcome which destabilises the natural and territorial environments.

Coastal developments

The number of homes whose construction began in this decade and, therefore, the amount of land directly transformed highlights the relevance of the urbanising activity in some regions over others. The Autonomous Community of Madrid, and Barcelona, Malaga, Alicante, Murcia and Valencia provinces are responsible for 41% of all of the dwellings that were started to be built in Spain in 1997-2006. Adding Almeria, Castellon, Tarragona, Girona, Sevilla and the Canary Islands, amounts to 13 regions where 60% of the newly constructed homes are located. This data gives an idea of the 'littoral focus' of the typical developments realised in this decade. The massive introduction of leisure, tourist and residential resorts has transformed vast regions of the Spanish coastal areas. This transformation has affected, not only the perception about coastal landscape, but also the system itself as a whole (soil waterproofing, fragmentation of habitats, biodiversity loss, pressure about the quality and quantity of hydric resources, pollution, waste production and urban sprawl, among others).

THE SPECULATIVE TSUNAMI

The urban explosion of this period and its effects can be seen from almost any part of the country, although, as in the case of tsunamis, the highest concentration and, consequently, the most damaging impact, have taken place in the coastal areas. Continuing the analogy of a natural phenomenon, this speculative tsunami has been the highest wavelength reported so far in Europe and, no doubt, it has prompted some of the most devastating effects[5].

In July 2010, Greenpeace studied the situation of the Spanish coastline after the real-estate bubble effects in its annual report[6]. The implications of this phenomenon on the coastal areas are the following:

2. Speculative urbanism and coastal areas
Source: Greenpeace

Consolidation of the strip that is closest to the coast as an urbanised sector (the first two kilometres), with the saturation of traditionally touristic areas and the reproduction of this model in other coastal sections that were scarcely developed until then.

The increasing and fast constructing colonisation of a second coastal strip (between 2 and 5 km, or even further inland in certain geographical and touristic areas).

The occupation of the interior of some coastal regions has also been taking place. In these cases, touristic occupation affects high and lower mountain environments, by using several building typologies that range from big residential complexes that are usually related to golf, to discontinuous residential areas.

In all these developments, must be added a growth of the risks of erosion, flooding and fire to the considerable loss of natural heritage and scenery.

The predominance of touristic dwellings, that are usually occupied and used with an intensity that is over the average during the summer seasons, involves high water consumption levels at certain moments and in the cities where the highest hydric deficit of the Peninsula takes place.

There are several reports that forecast clear warnings: within 20 to 40 years, Europe's Mediterranean Basin could experience severe

damage, in turn forcing the closure or economic demise of many coastal tourism destinations.

It has been revealed that a tourist offer based on increasingly congested areas, copes with more limitations to compete in a market as open and dynamic as the touristic one, in which the quality of the landscape is gradually more valued. Facts like human pressure and the deterioration exerted on certain essential tourist resources, such as beaches, have resulted in the most demanding visitors seeking new paradises. In certain areas of great touristic importance such as Costa del Sol, the term 'flight effect' is already being used.

THE URBAN COMPONENTS OF THE SPECULATIVE TSUNAMI

Many analyses, from an economic point of view have been carried out in order to find out the causes of this speculative tsunami. However, very few authors have looked into the nature of its urban elements. Many architects and town planners prefer to accuse the politicians and the financiers, instead of admitting that the urbanism which has occurred during these decades has been an accomplice and a 'necessary co-operator' of this boundless development. All those areas have been created and share analogue characteristics of spatial planning and development processes.

A dramatic urbanism

While in 1995 approximately 200,000 private homes and 60,000 government assisted dwellings were started, in 2006 over 800,000 dwellings were initiated, yet only 40,000 of them were part of the government assisted category. This data significantly expresses what has been happening during the last years and what has been widely broadcast by the media, that is, the production of residential areas in Spain has surpassed the total amount of dwellings built in France, Germany and Italy, countries whose total population is four times that of Spain.

In the central period of the 'prodigious decade'[7] of Spanish urbanism the annual volume of 'artificial land' grew up to 75.8ha per day; which means that during these five years, an area as big as Barcelona's enlargement was 'artificialised' every ten days.

An urbanism that thinks and acts locally

Contrary to the contemporary 'think globally and act locally' reasoning, and followed in an evidently short-sighted way by many experts and administrations, this model has led to the execution of local plans and projects which have neglected the assessment of their effects over the wider geographic environment.

This frenetic construction rhythm favoured a total lack of reflection on its effects over the territory, both over the natural system (fragmentation, biodiversity loss, natural risks increase) and over the urban one (regarding the disruption of mobility planning, the demand of endowment areas, facilities, water supply, waste collection etc.), paying no attention to the fact that the sustainability scale is eminently regional.

An a la carte urbanism

This progressive loss of planning as a public tool for a rational and sustainable use of the land and its resources has been facilitated by the changes which occurred in the normative and in the spatial planning practice during this period. No doubt this circumstance brought about the 'a la carte urbanism'. The new urbanism framework established by the 1998 Law was focussed on eliminating the "rigid factors" (as they were called by the politicians) that had been accumulated by spatial planning. What does this change means? The fact, is that its explicit purpose was

to make the increase of land offer easier, making it possible that all the land, in every place in Spain, that has not been incorporated into the developing process yet, can be considered likely to be urbanised (if there are no proven reasons for its preservation). But, as in Spain there was a lack of regional planning and the local plans had been traditionally made to grow, without considering the global scale.

The consequences were catastrophic. Hundreds of land reclassifications for new developments were carried out during this period with no regional framework to assess potential outcomes. The aimed flexibility of the new law has favoured dispersed and low density urban processes.

An urbanism that subsidizes the local Treasury

The governments, especially the local ones, experienced their most flourishing moment during this period. In a progressively clearer way, income derived from urban activities constituted one of the economic resources of municipal finances, maybe the most important of all. In this way, urbanism has become a means to obtain income to meet a wide range of public needs. Most of the time, its main objective, promoting a rational development and management of the city has been set aside. For this reason this period has been characterised also by the intensive use of 'planning agreements': something similar to 'barter', where local authorities got revenue in exchange for land reclassifications. These practices have attracted critical comments from the international community.

Planning based on a fictitious 'demographic demand' of residences

During this period, there has been no urban planning that has based its high expectations about first home dwelling on a judicious demographic projection. On the contrary, a demand related to leisure and residential tourism was also justified, together with the demand for a first home.

The motivation came from the selfish dreams of the municipal representatives, of the developers and many self-proclaimed town planners have 'invented' an endless number of 'leisure and vacation cities'. This situation has been fostered both by an increasing longing of the Spanish middle class to have a second home, and by the eminently touristic conditions of the Spanish economy within the European context. This longing is the fruit of the very favourable financial conditions offered by the market, which also attracted investors and operators from all over the world.

From a city for the citizen to a city for the tourist

A remarkable percentage of this fictitious demand was based on leisure time programmes that were directly related to the climatological conditions, the appeal of the scenery and the real estate profitability. 'A share of paradise for a modest price' was offered. This amounted to a change of paradigm which sets aside the traditional urbanism and gives itself over to the 'explorer spirit': people in search of new paradises. From a professional and ethical point of view, the direct consequence of this change is the creation of a conflict between land that is suitable for a rational growing (of our towns and cities) and land that is wanted by property developers.

Dispersed landscapes vs. diffused landscapes

During this time, the most generalised model consisted of huge, disperse and low density extensions. The vast majority of these homes

are detached from their inherited urban fabric and from the infrastructural systems. As a consequence, this model relies on private transport. Apart from the considerable consumption of land and resources for infrastructures, these changes on the urban patterns (from the traditional compact pattern, to the dispersed and diffused ones) have had an uncontrolled effect on the urban planned model.

Dispersed and diffused landscapes result in unsustainable models of organisation of the territory. The most characteristic effects of this model are fragmentation, increase of private mobility, intensity of building, morphological perturbation of natural systems, and deficiency of networks and local equipment (water consumption, waste management, etc.).

Landscapes as a product

These landscapes emerge as a stereotype of a banal ideology about the culture and the architecture of the country. One of its defining characteristics is the lack of recognition of the variables of the place: climate, topography, vegetation, dynamics, perception etc. It deals with products that have been 'pre-cooked' in the offices of property developers. This results in bland and banal landscapes that can be cloned and sold, regardless of the place. Just by being aware of some of the advertising slogans used in many of these real estate promotions it becomes easy to realise the typology that is hidden behind them.

Landscapes of illusion

Although many of these places were offered as idyllic resort towns where people could find everything they might want, they are actually mono-functional places (even if they are residential, commercial or touristic). Environments without a wide range of uses, where there is a lack of diversity and of meeting, working and production places, are leading to a disturbing loss of urbanity. That is the reason why many of these locations are deserted, like empty stages or theatres before the performance of a play.

Another consequence of these models is the remarkable growth experienced by industrial, commercial and service zones. These zones have replaced public spaces, such as squares and streets for private ones, such as 'department stores' resembling American malls.

Broken landscapes

This urbanism made of fragments dispersed in the territory has proved to be an inefficient model. The natural areas, but also the social and cultural ones need to be connected to make the system work properly as a whole. That is the reason why today there is international recognition that a landscape scale approach is fundamental to the understanding and management of ecological processes and the appropriate spatial framework for the analysis of sustainability. Among all the landscape urbanism proposals those focused on green infrastructures have become the central approach.

THE FUTURE: WHAT CAN WE DO NOW?

The economic crisis has managed to put the brake on this tsunami, but in its path, it has left a heart breaking scene. On the one hand, it is true that we have to coexist with these 'modern ruins', using Julia Schulz-Dornburg's reference. But this does not mean that we should not reflect about how to rectify them in search of more sustainable and efficient urban areas.

I think that it is necessary to re-construct the habitability and the society of a territory in a more equitable way and in harmony with the environment.

Re-classify to connect: The tsunami has left enough land classified for development for

35 or 40 years in its path. While the construction companies become entrenched, digging in their heels, waiting for better years to come, some experts are stressing the necessity of taking advantage of the real estate halt to protect this land. Scientific and ecological circles want to rescue this land in reserve to make landscape urbanism proposals for it by focusing on green infrastructures. However, this land has a certain market value, and is predictably placed next to the 'toxic assets' (were asset values are below mortgage debts). So this is not going to be an easy task.

Re-think. Finally, this period of crisis in Spain has left a whole generation of short-sighted and unsustainable local Master plans which need to be reviewed by taking into account an appropriate sustainability scale developed within a global perspective.

SOME EXAMPLES OF GOOD PRACTICES

I would like to mention some projects that have developed these ideas. I have chosen three types of projects related to coastal areas:

- At a regional scale: two Coastal Management Plans which I directed (Cantabria and Galicia)
- A spatial plan related with tourism: The case of Menorca
- An environmental and landscape recovery at Cabo de Creus

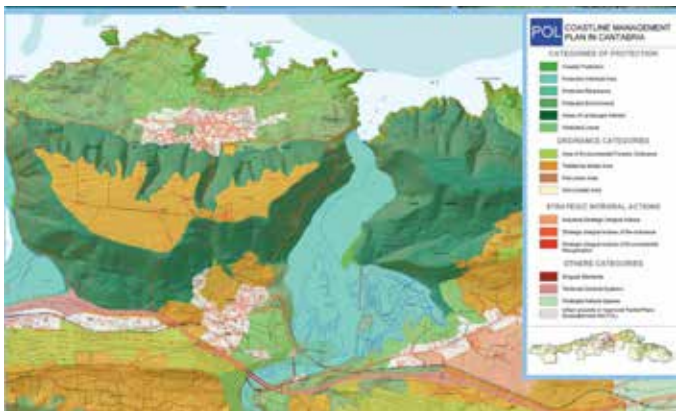
All of them have been recognised with national and international awards which show the interest of their methodologies and proposals.

The regional plans: Coastal Management Plans

The coastal areas do not only stand out for being the areas where the effects of the speculative tsunami have been more devastating, but also for being one of the first ones that suggested reacting against it. In this context, coastal areas have been a contemporary laboratory of techniques and tendencies for regional planning. Those large-scale plans are the best way of rethinking the territory at a global scale. At present, in Spain, almost all the regions next to the coast have implemented Coastal Management Plans.

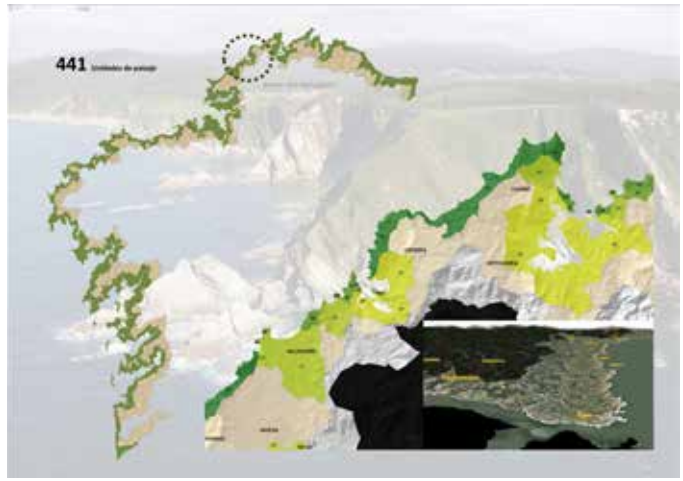
The Cantabrian Coastal Management Plan[8] was one of the first plans to try to stop the effects of the speculative tsunami. It is a regional plan approved by law since September 2004 for the government of Cantabria for its region in the north of Spain. This Plan establishes a regional spatial model that considers some concrete protection regulations, planning criteria, strategic actions and intervention suggestions. Thus, it deals with a plan that not only protects (re-classifies) but also organises (re-thinks).

For this, it defines its own coastal area (several kilometres off the coastline) mainly linked to the existence of physical phenomena related to marine dynamics; it also defined a series of interventions whose objective is to re-qualify some specific areas and to recover the environment and the landscape of certain fragile and valuable environments.



3. Example territorial mapping model of the Cantabrian Coastal Management Plan
Source: POL

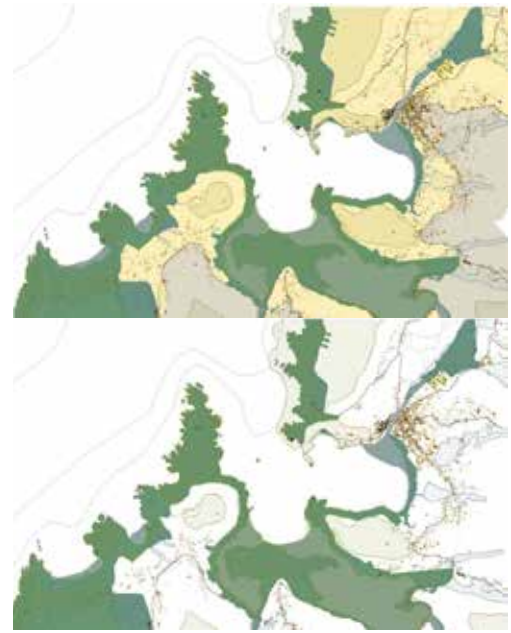
Also at a regional scale, some years later, the works carried out during 2008-2011 developing the Galician Coastal Management Plan[9] allowed us to implement some of the key components described in this article. We use the landscape approach first to define the scope of the study, together with the types of costs and sectors and units (see Figure 4).



4. Example territorial mapping model of the Galician Coastal Management Plan
Source: POLGA

The aim of the proposed model proposed was to define the territorial structure to garner all the wealth and particularities of every aspect of the landscape, by identifying where the different elements which contribute to this structure relate to, and complement each other, Thus, the areas which connect places with similar characteristics in a continuous way within the region contribute to connecting the discontinuous areas shaped by different elements of interest - landscape, geomorphological and natural - into corridors.

What I want to stress here is that the plan design consists of a green infrastructure utilising a layered approach from regional to local scale. The proposed green infrastructure network mode is composed of elements of the natural dynamic of coastal and ecological corridors. Besides, this network is complemented by a group of elements of cultural heritage, tangible and intangible which form the 'brown infrastructure'. Both networks are drawing up an environmental and functional 'skeleton' for the plan (see Figure 5).



5. Example territorial mapping model of the Galician Coastal Management Plan
Source: POLGA

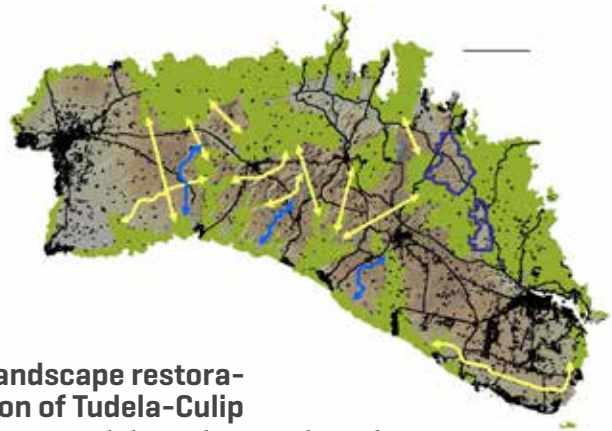
All of these plans arose as a reaction to the way Spain was changing the coastal landscape at the moments of greatest intensity of the speculative tsunami. These plans re- classify land by protecting vulnerable and sensitive areas; re-think local planning by establishing mechanisms to prevent the dispersion and diffusion of territorial construction, and re-connect the natural and social system by proposing a green infrastructure that enables the integration and coordination of policies into the territory's environmental functionality.

Land use and tourism: the case of Menorca

Menorca is a relatively quiet island but during this decade it developed and increased tourist resorts and residential areas. These processes needed to stop on this island, as it was one of the most natural areas in Spain. Political cooperation and coordination between the different levels and scales of government of the territory was very important, but Menorca´s plan was only possible thanks to a solid professional team led by the architect and urban designer Jose Maria Ezquiaga and the geographer Rafael Mata. This plan is highlighting their important contribution to the protection of the nature and of the landscape of the island. Nevertheless, I also want to stress here the proposed intelligent management of tourism and space for urban development. Without it, classical conservation actions would be difficult to achieve as would de-contextualised global sustainability. The reduction in land available for development has been accomplished, after careful legal and environmental analysis, by declassifying some developable land that had no established urban rights or where deadlines had expired. This land has become reclassified as protected, but the main objective is not only to protect, but also to connect natural environments to make the system work as a whole and restore its ecological functionality.

In response to the housing boom, the Plan aimed to reduce the number of places buildable to a horizon of 10 years following the approval of the plan. This is a technical survey, but also a social and political one. The previous provisions, approved from an expansionist perspective, had not taken into account the natural heritage of the island. The motivation for this decision reflects the findings of previous studies, showing that the capacity of the territory was being exceeded, or was about to be, in relation to the balance of certain natural resources (water, biodiversity changes, status habitats, etc.) Further, recognising the frustration of many of the island's tourists who were discouraged by the loss of quality and resources, the plan chose a tourism model based on the quality and uniqueness of Menorca.

This change of policy has not only prevented ground clearance, but is also planning the construction pace of new developments. The aim is to avoid an eventual depletion of the growth potential in a few years, and to guarantee the ability of the territorial system to integrate new developments. Thus, the tourist proposal is consistent with the ecological sustainability plan that makes it one of its priorities. This integrated view is a guiding methodology of this plan, as it does not only gamble on urban planning but goes beyond by integrating spatial planning and tourism.



6. Example territorial mapping model of the Menorca regional plan: connect and expands natural protected areas, preserves cultural landscapes. An ecological approach coordinated with a renewed tourism: 'restrict to change'.
Source: PTI Menorca

Landscape restoration of Tudela-Culip

In 1962 Club Med opened its doors in Cadaqués (Girona), in a unique coastal location of geomorphological interest and beauty. For this reason in 1998 the area was declared a Natural Park of Cabo de Creus. This place was also loved by many artists like Salvador Dalí. for its geological forms. It was a resort town for French tourists in the eastern tip of

the Iberian Peninsula, in the Punta de Cap de Creus. It was constructed as a private holiday village with 400 rooms that accommodated around 900 visitors in summertime. In the summer of 2003 it was permanently closed, and in 2005, the property was acquired by the Spanish Ministry of Environment to dismantle the resort and restore the affected natural space and to erase the imprint left by urban development.

In 2008 the restoration of the site from Tudela Culip-Club Med began. The landscape project was made by the office of Ton Ardèvol and Martí Franch. This project is a showcase for landscape driven nature restoration projects[10] (see Figure 7).

The project included 5 lines of intervention:

The removal of Invasive exotic flora planted for gardening.

The selective deconstruction of the buildings with innovative and respectful deconstructive techniques.

The management and recycling of 100% of the 45,000 cubic meters of construction waste.

The revival of the ecosystem dynamic by remaking the topography of the original site and re-establishing runoffs and sediment exchanges between land and sea.

The discovery and social value of landscape, what the authors called: the visitor's choreography around three main interventions

7. The project turns a demolition order into a creative landscape restoration development.
Source: Paisea

(path system, a network of viewpoints and the animal-rock identification and the double perception).[11]

CONCLUSIONS

These projects are just a small sample of the concept of landscape as a medium as conceived by Waldheim.[12] They add to the understanding that the concept of medium has to do with its double role, as a framework for connectivity conditions, (physical, chemical, biological, sociological, etc.), and as a spatial project itself. It allows us to set up concrete actions and carry out projects based on a new architectural concept of time and space in a sustainable way. There is still a long way to go to return the previously lost ecologic and social functionality back to many areas in Spain. This has to be a steady, scientifically motivated programme, able to provide the territory with legibility, functionality and structure. We encourage to move ahead with planning decisions which arise from a sustainability and landscape scale.

8. The project's approach is based on the narratives and interpretations put on the landscape by scientists, artists, fishermen and kids, reinterpreted in a didactic playful way. Example of viewpoint
Source: Paisea

1. Hans Haacke, Castles in the Sky, Reina Sofia Museum, Madrid (15th February – 23rd July 2012).
2. Julia Schulz-Dornburg, Modern Ruins. A Lucrative Topography. (Barcelona: Ámbit, 2012).
3. The Sustainability Observation Committee in Spain (OSE) is an independent project which became operational in February 2005, as a result of an agreement endorsed by the Ministry of Agriculture, Food and Environment, the Biodiversity Foundation and the General Foundations of Alcalá University. The OSE shut down due to lack of funds on the 31st May 2013.
4. The Sustainability Observation Committee in Spain, Changes in the occupation of the Land. Implications for Sustainability. Main Outcomes at National and Regional Level (Madrid: Ministry of Environment, Alcala University Foundation, 2006).
5. Ramón Fernández Durán, Spanish and Worldwide Developing Tsunami (Madrid: Cities towards a more sustainable future, 2006). http://habitat.aq.upm.es/boletin/n38/arfer.htm
6. Greenpeace, Destruction at any cost 2010, http://www.greenpeace.org/espana/es/reports/100709-04/ http://www.madrid.es/
7. Eugenio L. Burriel de Orueta, The Prodigious Decade of Spanish Urbanism (1997-2006), online magazine on Geography and Social Science Vol.XII, num. 270 (64), 1st August 2008. http://www.ub.edu/geocrit/sn/sn-270/sn-270-64.htm
8. The Cantabrian Coastal Management Plan is the first plan for littoral management that I had the honour of managing: http://www.territoriodecantabria.es/Contenido/plan-ordenacion-litoral-pol/43, was first prize in the Vth National Urbanism Prize at the Law, Urbanism and Nature issue, 2006.
9. The Galician Coastal Management, directed by Manuel Borobio and Miriam García García. http://www.xunta.es/litoral/index.php?lng=es, has been awarded as Good Practice 2012 by the Comité Un-Hábitat, and First Prize in the XII Biennial of Spanish Architecture and Urbanism, 2013.
10. In 2012 this project received the intervention Award VII European Landscape Biennial and has been the only European project chosen by the American Society of Landscape Architects (ASLA) among the 9 best landscaping projects in the world.
11. Traditionally fishermen had identified rock formations with animal names for their orientation, as Dalí did and Kids still do. The project, proposing a game of perception, constructs a sort of 'lecterns' outlining the 'animal-rocks' silhouette. (see: http://www.emf.cat/new/index.php?op=detall_projecte&id=184&idioma=eng&ca=8)
12. 'Landscape is a medium (...) uniquely capable of responding to temporal change, transformation, adaptation and succession'. Waldheim, Ch. (2006) 'Landscape as Urbanism', in Waldheim, Ch The Landscape Urbanism Reader, New York: Princeton Architectural Press, 39.

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3. García M. and Borobio M. (2012) 'El paisaje como medio para la planificación territorial' (Landscape as a médium for regional planning) in Ciudades nº15. Institute of Urban Studies of Valladolid University. Land Planning, foundations and practice of a discipline in process, 115-132.

4. García M. and Borobio M. (2013) 'Landscape as a framework for coastal areas' in C.Newman, Y.Nussaume & B. Pedroli (Eds). Bandecchi & Vivaldi/ UNIESCAPE, Landscape & Imagination. Towards a new baseline for education in a changing world. Conference, Paris 2-4 May 2013, 401-404.

5. García M. (2009) 'Pla d´ordenació del litoral de Cantàbria' in Paisajes en transformación (Landscapes in transformation). Llop C. (coord.). Barcelona Council, 411-413.

6. Schulz-Dornburg, J. (2012) Modern Ruins. A LucrativeTopography, Barcelona: Ámbit.

Cristina delPozo

LANDSCAPE ORIENTED URBAN DESIGN STRATEGIES

INTRODUCTION

This presentation is set into the contemporary discourse of landscape which has shifted during the twentieth century from being considered as just a scene to a dynamic system undergoing processes.Landscape evolves from the pictorial to the instrumental, operational and strategic. This dynamic condition gives it the ability to create itself and can be introduced into the basis of landscape design.This shift emphasises the interactions between natural, cultural, economic and social processes, and landscape can be characterised both spatially and temporally.

The transformation of these processes is an inspiration and a model for the new urban condition. Projects that reflect the emerging trend of orienting urban form through the landscape will be reviewed. We will also look at urban expansion and renewal projects that incorporate this approach and become instigators of a set of interrelated dynamics between the social, the economic, the ecological and the cultural. This specificity enables the landscape to articulate with the urban, and through its dynamic to understand how cities are formed, are revitalised and evolve over time.

"LANDSCAPE ORIENTED" URBAN PROJECTS

The projects reviewed have been selected because they include ecological processes and landscape strategies at the first stages of new urban form and demonstrate their ability to create urban development. All the examples represent the current practice of landscape architecture in different parts of the world and meet the following requirements:

- They include a variety of different types and forms of urban landscapes: open spaces, urban regeneration, urban expansion areas, and new residential developments.
- They include different scales of urban

landscapes: regional scale, city scale and neighbourhood scale.
- They cover all types of land uses, including residential, commercial, industrial and recreational.
- They have different locations: urbanised consolidated areas, peri-urban fringe areas, or areas outside the urban edge.

The projects selected are included in the following table:

Project	Place	Country	Authors	Scale	Occupation pattern	Natural features	Local character
Lower Don Lands	Toronto	Canada	Michael Van Valkenburgh Associates Inc. (MVVA)	Local (300 km²)	Urban regeneration, new developments	River estuary	Infrastructure and postindustrial landscape
Water City, Qianhai	Shenzen	China	James Corner (Field Operations)	Regional (1900 ha)	New developments	Water system, soil and drainage, flat topography, marshes	New urban landscape
Confluence district	Lyon	France	Michel Desvigne	Urban (150 ha)	Postindustrial urban regeneration	Savone and Rhone rivers	Postindustrial
Water City, Vathorst	Amersfoort	The Netherlands	Aadrian Geuz (West8)	Urban (560 ha)	New development - Vinex Plan	Lake Iselmeer	Traditional Dutch water tows

Lower Don Lands, Toronto, Canada

Major world cities such as Toronto are in transition and many need to integrate post-industrial landscapes while also radically reframing their interactions with the natural environment. The Lower Don Lands project is unique among these efforts by virtue of its size, scope, and complexity.

In 2007, Waterfront Toronto, with the support of the City of Toronto, launched an international juried design competition to determine a master vision to tackle the challenge of redeveloping the Lower Don Lands. The goal of the competition was to produce a unifying and inspiring concept for merging the natural and urban fabric into a green, integrated and sustainable community. The design teams were asked to produce a compelling concept for the Lower Don Lands with the river as the central feature, while at the same time providing for new development and new linkages to the rest of the city, using the following key principles to guide their designs:
- Naturalise the mouth of the Don River
- Create a continuous riverfront park system
- Provide for harmonious new development
- Connect waterfront neighbourhoods
- Prioritise public transit
- Humanise the existing infrastructure
- Expand opportunities for interaction with the water
- Promote sustainable development.

1. Lower Don Lands.
Courtesy of:MVVA, Inc

The office of Michael Van Valkenburgh Associates (MVVA Inc.) won the competition. In the MVVA team's design, the engine of transformative urbanism is a dramatic repositioning of natural systems, landscape systems, transportation systems, and architectural environments. A renewed recognition of the functional and experiential benefits of river ecology enables a sustainable approach to flood control and river hydrology to become the symbolic and literal centre around which a new neighbourhood can be constructed.

This master plan brings together transformative landscape methodologies with innovative scientific approaches to natural reclamation and makes them operational at the scale of the city and the regional ecology. Within its plan to recycle 115 hectares of Toronto's waterfront, the Port Lands Estuary project unites the client's major programmatic initiatives into a single framework for the study area that will simultaneously make the site more natural (with the potential for new site ecologies based on the size and complexity of the river mouth landscape) and more urban (with the development of a green residential district and its integration into an ever-expanding network of infrastructure and use).

Both the urban and the natural elements of the landscape are seen as having the potential to introduce complex new systems to the site that will evolve over the course of many years, and give form and character to the development of the neighbourhood.

Water City, Qianhai, Shenzen, China

The Qianhai Water City site includes a 1.900 ha of reclaimed land surrounding the QianhaiHarbor, on the western coast of Shenzhen, at a key point of the Pearl River Delta. The area has exceptionally poor water quality. Upon implementation, Qianhai is envisioned to be the financial, logistics and service hub of Shenzhen, and a major new urban centre in the Pearl River Delta mega-region, linking Hong Kong to Shenzhen and Guangzhou.

Landscape Architect James Corner and his office Field Operations envision a new "Water City" for 1.5 million people. A new and vibrant 21st century city: dense, compact, mixed, sustainable and centred around the area´s most important resource – water.

2. Qianhai Water City Masterplan. Courtesy of: Field Operations

The great opportunity is the occasion to embrace the water as the defining feature of the landscape´s identity.

This watery identity is an approach to processing, remediating and enhancing the water on the site and in the harbour that is environmentally innovative, while simultaneously generating a wide range of watery urban environments throughout the territory´s 18 square kilometres. (18km2). Shenzen should aspire to create a waterfront city that rivals Hong Kong, Sydney and Vancouver in its quality, character and globally recognisable physical, economic and cultural identity.

Given this aspiration, the successful planning proposal for Qianhai cannot have a conventional planning that privilegesbuildings over landscape,or infrastructure over ecology. Rather, the successful urban plan must outline a strategy that synthesises these systems in order to create a robust and resilient urban matrix capable of continuous adaptation, transformation and revision.

This design proposal achieves this synthesis in a creative and realisable way. The proposal breaks down the massive territory of the site into five manageable development sub-districts through the introduction of five Water Fingers that extend along the line of the existing rivers and channels.These fingers hybridise an innovative hydrological infrastructure and an iconic public realm, serving to process and remediate on site water.It also expands the amount of development frontage and creates a series of public open spaces that structure and organises the development of the overall Qianhaiarea.

The urban fabric within each development sub-district takes the scale of the typical Shenzen block, but breaks it down further through the introduction of a tertiary network of roadways and open space corridors in order to promote pedestrian movement, avoid the isolation of the super-block format, and generate diverse range of urban neighbourhoods within each sub-district.

The result is a hyper-dense, ecologically sensitive urban landscape that offers an iconic waterfront, diverse building stock, cultural and recreational destinations, as well as a series of public open spaces that are all easily accessible from any point within Qianhai.

The “water-finger” landscapes remediate on-site water. A network of large-scale filtration landscapes will purify water. There is a strong relationship between the wet landscape and the green open spaces.

3. Water fingers.
Courtesy of: Field Operations

Confluence District, Lyon, France

Today one of the biggest urban development projects in Europe is being carried out in Lyon, in the Confluence of the rivers Rhône and Saône.The city centre of Lyon will be doubled using 150 hectares of industrial area, with high qualityarchitecture, and landscape architecturein terms of urban planning.This area is the southern tip of Lyon’s central peninsula, long devoted to manufacturing and transport. Reclaimed from the waters in past centuries, this riverside site is re-embracing its banks and natural environment. The redevelopment is gradually highlighting an outstanding location and unique landscapes. Only a few years ago it was little more than a neglected wasteland. Instead, aneighbourhood for living in and sharing is being built. This new urban development consists of two phases:

Phase One (In French: ZAC1) is four hundred thousand square meters (400,000m2) of new buildings in 41 hectares, distributed as follows:

Confluence District, Lyon		
	Phase **1**	Phase **2**
Total area	**400**,000 m²	**420**,000 m²
Housing	**145**,000 m²	**140**,000 m²
Retail	**130**,000 m²	**230**,000 m²
Hotels and shopping	**95**,000 m²	**15**,000 m²
Recreation	**30**,000 m²	**35**,000 m²

It stands around centre pieces, such as the Place Nautique, the Saône Park, thePlace des Archives and the Retail and Leisure Cluster. This Phase One will also continue with the conversion of the old Rambaud Port buildings - La Sucrière, Les Salins and the Espace Group complex- into recreational, cultural and business buildings.

Phase Two of the Lyon Confluence urban project (In French: ZAC 2) was masterplanned by Herzog & de Meuron together with landscape architect Michel Desvigne. It is 420,000 m2 of new buildings in 35 hectares, distributed as shown above in Figure 1. Around 30% of the existing market buildings will be conserved. Phase Two features three new bridges: Pont Raymond Barre for the extended tramway; Pont des Girondins to connect Lyon Confluence and Gerland (on the Rhône's east bank) and La Transversale, a straight route for pedestrian travel, including two footbridges over the Rhône and the Saône.

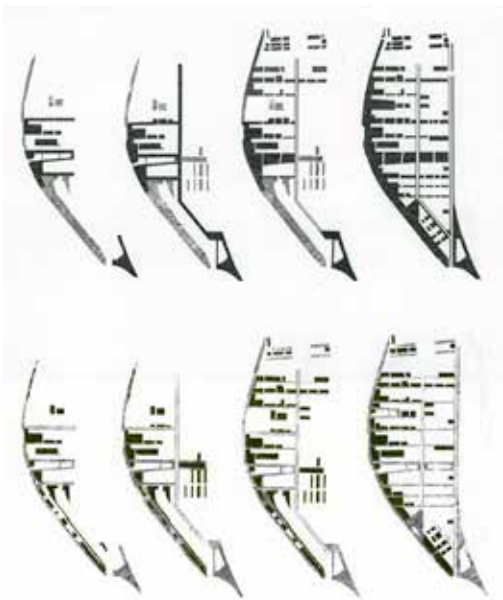
As opposed to rigid and inflexible redevelopment plans, Francois Grether (architect and planner) and Michel Desvinge (landscape architect) have devised a "strategy of infiltration" for the Confluence District in Lyon.It is a flexible occupation, as parcels become available for new programmes, structured by a "dispersed and mobile" system of parks.

During the 30-year transformation process, all exterior land will be a park at one time or another, either provisionally or for the more long term.As Michel Desvigne says:

"We are not envisaging a hypothetical, definitive state but a succession of states that correspond to the different stages of the metamorphosis. Exterior areas will be born, disappear, shift, according to the evolution of the building and the rhythm of the freeing of land, to make up a sort of moving gap, like that of crop rotation".

All of the buildings of the Confluence District are directly related to the park system and every inhabitant will have a relationship with a garden or walk. A network of walks and gardens weaves between new blocks throughout the southern end of the peninsula. The phasing of the project depends on the different industrial parcels being available for new development at different periods, led to the natural evolution of a "two speed" landscape. Temporary and perennial elements could be staged on the territory. Temporary features instantly enhance the site´s public perception: meadows of flowers, tree nurseries, and a 2.5 km park as the spinal cord of the park system along the Saone. The perennial elements, such as lines and clusters of trees, infrastructure and buildings progressively define the projected spatial configuration.

Water also plays an important role in the project; its organisation corresponds with the pedestrian walkways. The port along the Saone is redefined and several large basins prefigured by temporary gardens will be built towards the



4. Lyon Confluence Masterplan.
Michel DesvignePaysagiste

district interior. New waterways are established parallel to the rivers, providing protection against the strong tidal variations of the rivers. The new waterways are filled by recuperating water with a system of channels, drains and pools within the park network.New flora is establishing itself in the protected ecosystem. The rainwater recuperation is also phased, allowing certain lots to serve as temporary retention basins. The hydraulic mechanisms determine, to a certain degree, the design of the park.

Vathorst, Amersfoort, The Netherlands

In 1995, WEST 8 developed the Master Plan for Amersfort with a programme that consisted of 10,000 homes for 30,000 to 40,000 inhabitants. Adrian Geuze is the principal of the office WEST8 of landscape architecture and urban design, in Rotterdam. He is one of the creators of large urban transformation projects (Among them, the Madrid RIO Project).

This project comes under the Vinex Plan, which has proved to be a smart strategy that has accumulated some interesting new urban developments, with high quality architecture and careful treatment of the landscape.Amersfoort is a city located on the banks of the river Eem, in the central region of the Netherlands. With 135,000 inhabitants, it is the second city of the region in size, after Utrecht.

The new developments in Vathorst and the Water City are an example of the efforts made by the design team since the initial proposals to avoid tabula rasa.The intention is to build a new urban growth in a periphery without previous references, avoiding the homogenisation and mono-functionality of the suburban landscape. In this case the landscape of the site becomes the main concept idea of the project.The shape and character of the project is derived from the landscape structures and inherited attributes of the site and its surrounding territory.It is a high density housing area (65 inhabitants/ha) designed in the tradition of the Old Dutch canal cities, with a water connection to the Ijsselmeer Sea.

The master plan is for 11,000 dwellings, 90 hectares of commercial, industrial and office programmes and required public facilities. It is divided into four zones:

- A concentration of industry, commercial and office programme at the junction of national infrastructure (railways and motorways).
- A low-density urbanisation respecting the existing rural landscape with tree lines
- A high-density cluster around a clean water basin
- Urban morphology is recreated by the traditional Dutch landscape and the water channelled towns.

5. VathorstMasterplan
Courtesy of West 8

6. Aerial View of The Water City, Vathorst
Courtesy of West 8

In the Water City masterplan, a new network of channels is designed, connecting with the Ijsselmeer and inspired by traditional bridges: high, so that ships can pass underneath.It looks for an individual housing typology reminiscent of traditional single Dutch houses, narrow and high, of different heights and colour of stone or brick.The low houses can also be considered as a free interpretation of the traditional Dutch house with canal frontage, reformulated here as house-yard.

CONCLUSIONS AND DISCUSSION

In the projects reviewed, we see a trend where urban growth does not simply expand on the surrounding territory, but rather transforms it so that it can reintegrate into the cycles of nature and cultural background of the place.

Landscape architecture projects that interpret the landscape as a complex dynamic system can enhance a set of interrelated dynamics: social, economic, ecological, cultural and infrastructural. We also note that the landscape is a medium that can:

- Read and understand the complexity of the territory
- Act at different scales and transcend administrative boundaries;
- Recognise historical and cultural values and retrofit them with a contemporary logic;
- Accommodate the different needs of land uses at different scales;

- Act at different cross-sectorial issues
- Be the bearer of the processes that move between society and space.

We have seen projects emerging where regional and urban development goals are expressed by landscape strategies, based on the specific features and characteristics of places and where the dialogue Ecology – Landscape - Urbanity gives identity to the territory.

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Cynthia Echave

USES OF PUBLIC SPACES AND URBAN REVITALISATION

ECOLOGICAL URBANISM

Cities are bringing together activities and services that define a particular urban life. The morphological characteristics of the urban structure, the distribution of activities, socio-economic capital and mobility are some of the main aspects that condition life styles and have an impact on the wider urban context. Ecological urbanism has arisen as an alternative management process for cities, with emphasis on both efficiency and liveability in guiding urban contexts towards less environmental impact and greater quality of life.

Applying sustainability criteria in urbanism has become inherent to planning and urban management in many cities. These cities have devised sustainable urban policies and are in the process of implementing them. Most of the measures are focused on reducing environmental impacts and improving quality of life.

A holistic vision of applying sustainability criteria means that planning is focussing on prevention and adjustment in response to fundamental issues: sustainability and impacts due to climate change and resource consumption, as well as requirements derived from the information and knowledge society.

Regarding the adjustment to climate change, measures applied to improve urban mobility are having a substantial repercussion on the need to reduce energy consumption and toxic emissions to the atmosphere associated with transport. Mobility also affects concerns about citizen's health, not only in terms of accidents but also because of pollution which may lead to respiratory diseases.

Urban ecology as conceptual reference

Urban ecology is a discipline based on the study of urban environments and ecosystems. An ecosystem characterises the presence of

living organisms which require a physical structure and a series of processes that regulate and allows functionality. Together they produce a certain degree of organisation which can acquire greater complexity (Rueda 1994). When an ecosystem reaches a higher level of information per unit of consumed energy it increases its level of organisation and hence its complexity.

If cities are conceived as ecosystems organisation is influenced by urban planning and urban management processes and how they regulate land use, mobility, delivery strategies and waste resources or how they issue guidelines and governance policies for urban living. In this sense, ecological urbanism sets its own criteria based on the general guideline to achieve maximum system efficiency and to ensure adequate liveability conditions.

PUBLIC SPACE

Public space is a catalyst of society because it reflects economic, sociological and cultural characteristics of a community. History shows that since the early civilization the built environment had been stratified, and relationships within a given society were regulated between the private and public spheres as well as between individuals, families and communities.

This stratification has been consistent throughout the evolution of cities, but perhaps the use of public space has become more rigid in the twentieth century with the introduction of the motor vehicles. As a result, the use of public spaces by citizens has decreased over time and been reduced to a frantic coming and going of pedestrians with people moving through rather than interacting.

However, policies aimed to revitalise historic districts or to consolidate commercial areas, have led to a gradual re-conquest of public space. Europe it has a long history of the recovering old town centres. While until recently such approaches were focused on traditional areas or on tourist value they are beginning to happen in ordinary neighbourhoods. It is therefore important to establish measures to increase liveability for citizens in all public spaces. However, some factors are limiting this purpose, such as motorised mobility, social exclusion and regulations regarding the occupation of public spaces.

Constraining car mobility

At present, urban mobility is characterised by allocating a greater occupation of public space to the functions of motor vehicles (see Figure 1) than to other users. This brings about several environmental and socio-economic impacts, ranging from emissions of pollutants, noise, loss of liveable space and biodiversity, accidents and visual impact. In most urban contexts, the private motorised vehicle tends to occupy nearly two-thirds of public roads space, leaving only a third for other transportation uses of the population[1]. This discrepancy makes public space not coherent to main needs. For that reason it is necessary to reorganise mobility networks to organised space more comprehensively by diversifying uses of public space.

Superblocks as a strategic planning tool

The superblock is a management tool (Rueda, 2000) whose main goal is to halt and reverse the trends of the current mobility model based on the private car and to create a new kind of public space to increase its habitability[2].

The superblock is a new urban cell of about 400m x 400m, enabling mobility networks to adapt to the morphological characteristics of the restructured urban fabric. The perimeter of this cell is constituted by a basic network which accommodates the circulation of passing

vehicle, including public transport and, where appropriate, cyclists on segregated lanes. The combination of superblocks results in a basic network of roads adapting velocity and continuity to the urban fabric. With this measure the functionality of the system is guaranteed, reversing the current hierarchy of road occupation into 60% and 70% in favour other of non motorised uses.

Inside superblocks speed is restricted to 10 km/h to create calmer environments. All vehicles such as residents' vehicles, urban freight, emergency and urban services are allowed to circulate through the interior of the superblocks, but not passing vehicles[3]. Economic activity, play, party, stay, etc. are possible when the right of way it is inverted and with it comes the revitalisation of the environment (Gehl, 2006).

1. Barcelona, contrast between streets with different configurations related to cars.
Source: Googlemaps.

Uses of public space

Uses and activities within public space depend on the socio-economic profile of the users (Delgado, 1999), the morphology of urban spaces, the presence of motorised vehicles and the set of spatial entities. According to this, uses of public space can be classified into types of activities and related functions. Each use has a different temporal and spatial requirement. Some uses are occasional and others occur daily in the streets, squares and parks of the city. Some of these uses have to be identified through fieldwork because there exist only few statistics about this kind of data. A general classification of these uses is:

1. Stay uses
2. Sport & leisure uses
3. Popular & cultural uses
4. Lucrative & exchange uses
5. Political uses

Stay uses represents the occupation of public space and activities related to walking, conversation and contemplation. It is linked to the provision of benches and playgrounds in areas of Stay.

Sport & leisure uses refer to the occupation of public space for play and some physical activities. This type of street activities is mainly related to sports, such as marathons, racing, soccer games, volleyball, basketball, table tennis, even yoga, tai chi, capoeira, and the provision of children's playgrounds.

Popular & cultural uses refer to all activities related to the promotion of art and artistic expression, such as concerts, art exhibitions, workshops, painting, sculpture, theatre performances or circus. They require large areas to accommodate a larger number capacity of people and they are usually aimed at the general public. Some of the most common cultural uses are festivals, gastronomic fairs, wine-making, crafts, including religious traditions.

Lucrative & exchange uses refer to the use of public space to make room for a permanent business, such as terraces of bars and restaurants, fast-food stalls, etc. Exchange of second hand items are included in this group of uses. This category is sub-classified into formal and informal activities, the latter including the illegal sale of products and services on the street (see Figure 2).

Political uses refer to the spatial occupancy of public space by people who aim to demonstrate and express an opinion or an ideology. Political uses in public spaces become visible as collective manifestations, electoral campaigns, referenda and discussion assemblies.

These sets of uses are present in any public urban contexts, and their frequency depends on the existing social and cultural characteristics. In order to increase interaction among people and to create a dynamic and inclusive society, it is important to identify the existing uses and to try to diversify them.

2. Barcelona, lucrative uses of open space in streets.
Source: Cynthia Echave.

EXAMPLES OF REVITALISATION

Revitalisation processes occurs in different manners. Sometimes they are a consequence of urban planning that carries out a specific transformation of a pubic space, and sometimes they are the fruit of ephemeral interventions. The aim here is to think about different dynamic processes in public spaces and what impact they have on community and society, either through dignifying common space, revitalisating the local economy or communicating ideas.

Some examples of revitalization of public space are described which have derived from different strategies. Each of the cases corresponds to realities in European cities which contrast from one another.

Northmoord Homezone, Manchester 2003

This is an example of a marginal neighbourhood in Manchester, UK where the revitalisation strategy focused on improving the city's image and security. The strategy consists of improving streets and pavements by changing traffic regulations (see Figure 3). Security was improved by optimising and improving street lighting and through the provision of playgrounds and a community centre as a means to promote social cohesion among neighbours. The programme includes the post of a guardian to monitor social aspects of the neighbourhood, especially youth concerns. The project and the work took place between 1997 and 2003 and John Delap, Urban Solutions Team, Manchester Engineering Design Consultancy (MEDC), Ian Finlay Architects were in charge.

3. Public space transformation in Northmoord.
Source: www.publicspace.org

Rebskoven. København, Denmark 2010

This example refers to the transformation of the old parking space of the Factory Carlsberg brewery in København, Denmark into a game park for public access. The initiative has

4. Transformation of the parking plot into a playground use.
Source: www.visitcopenhagen.de

been promoted by Carlsberg to compensate the neighbourhood for the dismantling and removal of the factory. The result is the reuse of the cover of the parking spaces to support a series of ropes hanging from it (see Figure 4) to be used as a climbing park for children and adults (25,000m2).

Solar roof. Figueres, Spain 2009-2011

This example is the installation of a photovoltaic roof in one of the squares of the city of Figueres in Catalonia. The new ecological cover creates an open space with public access to various activities, such as markets, book fairs or concerts (see Figure 5). This is an example of revitalisation whose added value lies in the incorporation of photovoltaic solar collection for the production of electricity for public lighting. This transformation constitutes also a strategic element in the energy policy of the municipality as a means of introducing renewable energy into the public sector. The roof has been promoted by the city of Figueres and the authors of the work are Xavier Rafael Caceres and Caceres.

5. açade and interior of the solar roof in Figueres.
Source: http://caceresarquitectes.com

Magic blocks, Bucharest 2010

This project is located in Bucharest in Romania and consists of a series of ephemeral interventions whose concept is based on countering the grey image of soviet architecture by adding orange colour. It is an initiative promoted by the Institutul Cultural Roman - Programul Cantemir , ERSTE Stiftung and by a group of artists (Zeppelin , Point 4 , Studio Basar, Hackenbroich Architekten, Berlin Archis Interventions) whichm together with inhabitants managed to formalise funding in four spaces in the area Calea Mosilor .

The installations are called “A passage between two worlds”, “A place for the community”, “Please step on the lawn” and “A living urban” (see Figure 6). Each claims to evoke a better use public space by people and to humanise this message by emphasising some elements with orange colour (chairs, benches, floors or walls). This is a good example of society involvement. It also has the particularity that the authors had asked for perceptions and reactions by those using these spaces.

6. Magic blocks.
Source: www.publicspace.org

Flatspace. Chiinu, Moldova 2008 - 2010

Here the revitalisation of public space is provided by the installation of a small theatrical space (see Figure 7) called temporarily flat space. This cultural initiative aims to reclaim cultural activities in neighbourhoods where cultural and public spaces are emerging from existing characterless spaces which are not conducive to human relations and contacts. The name pays homage to the story that during the Soviet regime cultural activities were carried out clandestinely. The project is sponsored by the European Cultural Foundation and the authors of the idea are Stefan Rusu, Vladimir Us, Oberliht Young Artists Association.

7. Flatspace installation.
Source: http://chiosc.oberliht.com

Campo de la Cebada. Madrid, Spain 2010

This example of revitalisation consists of the temporary use of a brownfield site in the middle of Madrid. The empty site is located in the neighbourhood of La Latina, after the demolition of a public sports centre. Since the local government had decided to delay construction of a new facility, local inhabitants and associations took the decision to make a formal proposal for a temporary use of this site.

This case is characterised by a strong social component of representation. The formal administration has overlooked the capability of local organisation to initiate and manage a space for their own use, making this an example of civic responsibility within urban administration. At present, this brownfield site is an active forum (see Figure 8) where several cultural activities are performed, such as exhibitions, workshops, plays, among others.

8. Plaza de la Cebada, cultural activities organized in a brownfield site in Madrid.
Source: www.elcampodecebada.org

Puerta del Sol Square. Madrid, Spain 2011

The final example is the temporary use of one of the most representative and symbolic public

9. Politic use of public space in Puerta del Sol Square in Madrid
Source: http://www.publicspace.org/es/obras/g001-acampada-en-la-puerta-del-sol

space of Madrid, the Puerta del Sol Square (see Figure 9), where citizens had established camps for massive demonstrations, demanding a better democratic system. This temporary camp exemplifies the political use of public space.

On this camp, the protest itself against crisis and the current economic model led to the organisation of this space into a small neighbourhood where different services and uses where located. People improvised services for the protestors, such as the sale of supplies, kindergartens and libraries. The social effect that 15-M movement had in Spanish society was blunt and generated multipliers. The movement was replicated in many other cities in Spain making history which earned it the European Prize for Public Space 2012.

CONCLUSIONS

The revitalisation of public space is a key element in the transformation of the prevalent urban model, and in particular its impact on social cohesion. Based on experiences so far we can say that the revitalisation of public space requires three strategic areas (see Figure 10):

- Urban planning and design. It is necessary to design attractive spaces with lower priority for the use for the car. It has been shown that reorganisation of the mobility pattern and recovery of public space for citizens by diversifying the uses has improved urban quality of life. Urban planning based on ecological urban planning criteria is improving the degree of liveability and efficiency.
- Governance. There is a need for cross participation of all actors involved in planning, management and use of public space. Partnership between the public and private sectors for funding and responsibility are key elements for the proper regulation and functioning of temporary and eventually permanent use of public space.
- Observatory. The creation of information and knowledge through monitoring and tracking applications in public spaces, especially those that are the result of actions of revitalisation is considered essential. This is a good way to learn from cases through recording users' experiences over time and deriving indicators.

10. Strategic elements for public space revitalization.
Source: Cynthia Echave

1. According to studies developed at BCNecologia, most of the Spanish cities intend for 60% of the road space to cars, and sometimes until 70%.
2. Echave, C. and Rueda, S. (2008) 'Habitability Index in Public Space', Walk21Barcelona.
3. Currently, Vitoria-Gasteiz and Barcelona are examples of superblocks' implementation: the neighborhoods of Gracia and Ciutat Vella in Barcelona, and the central neighborhoods of Vitoria-Gasteiz.

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Veronika Kovacsova

Urban permeability: on plants and plinths

INTRODUCTION

Human civilisation is becoming ever more urban. With the growing densification in our cities, green and open (public) spaces are put under pressure. As the number of built, non-permeable surfaces (such as asphalt and concrete) increase, storm water absorption, biodiversity and a pleasant microclimate in our cities is threatened. All non-permeable materials contribute to extreme water conditions in the city (low ground water level or flooding) and to the 'urban heat island' effect. Alongside with this development, the number and quality of public spaces is put under pressure. How do we provide the necessary built urban environment (housing, infrastructure) of a growing city, and at the same time enhance and offer lively, inclusive public spaces with a comfortable microclimate?

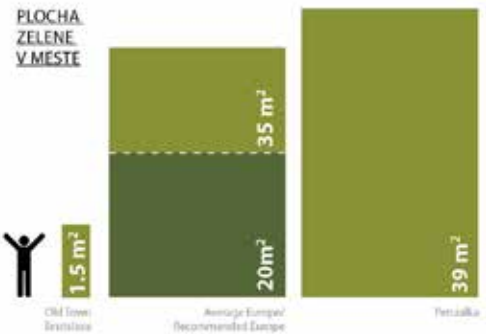
Climatological factors such as sun, temperature, wind and humidity largely influence our behaviour in, and usage of public spaces, and they even determine why we like to stay in certain places more than in others. They have an effect on how we feel, how 'comfortable' the circumstances of being outdoors are. Human comfort is a subjective concept. In a public urban environment it has to do with people's acceptance of spaces and their conditions. In this paper, I will introduce and highlight the concept of urban permeability, influencing not only human comfort but also climate resilience in urban spaces: open, breathing, absorbing and cooling green spaces in cities, on the one hand; accessible, inclusive, lively plinths and the public space formed by and in-between them acting as catalysts of social interaction on the other hand.

The focus here is on two districts of Bratislava, the Old Town and Petralka. Like in many other post-communist cities, the urban fabric (built environment) has gone through

degradation to a certain extent. The city does not grow and develop hand-in-hand with its ecological and climatological processes. The surrounding green hills and vineyards are gradually turning into housing areas erected by private developers. The city does not have a central park, and only very few urban parks which are threatened to turn into asphalt squares or underground parking lots. Reduction in green permeable areas of cities is one of the main causes for the increasing urban temperature, poor storm water management and decreasing air quality. Currently Bratislava does not have any legislative regulation on the protection of green areas in urban areas, as well as an economically sustainable strategy to create and maintain existing and new green infrastructure in the city.

What can a dense historic centre and a mass-housing neighbourhood learn from one another?

The two areas studied and compared in Bratislava are totally different (Image 1). One is a dense historic centre (Old Town) with scarce porous spaces and a vibrant social city life; the other a 1970s prefab mass-housing neighbourhood (Petralka) with an excess of unused greenery, but only a limited supply of vibrant public spaces for its inhabitants (Image 2). Both neighbourhoods have approximately the same density of inhabitants (around 4000/km2), however their urban fabric is totally different. Only 6% of the total surface of Old Town is open and green, while the European average is 35% (de Roo, 2011) within a direct urban living environment (Image 3). This dominant non-permeable surface area is contributing to the urban heat island effect. Density of functions (shops, cafes, ...) on ground floors is the highest in the whole of Bratislava and is the foundation of a vibrant urban life. Conversely, Petralka has a high amount of ground vegetation (about 66%) (Image 4) and open corridors letting fresh air enter, but a deteriorating public life due to large distances between buildings, disorientated planning and marginal social functions on ground level for people to pass by and meet. I will investigate how these two neighbourhoods can reinforce themselves and identify measurements that can be taken to fix the missing social and microclimatological links in their urban fabric.



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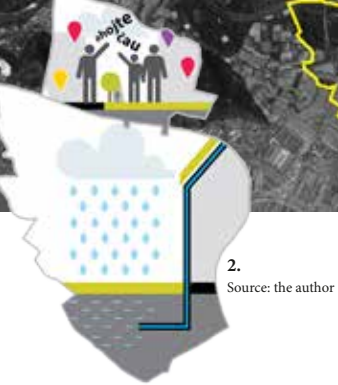

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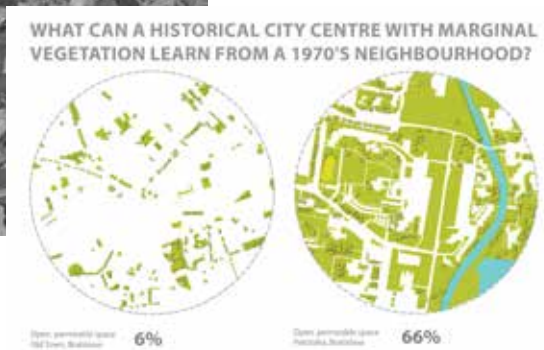

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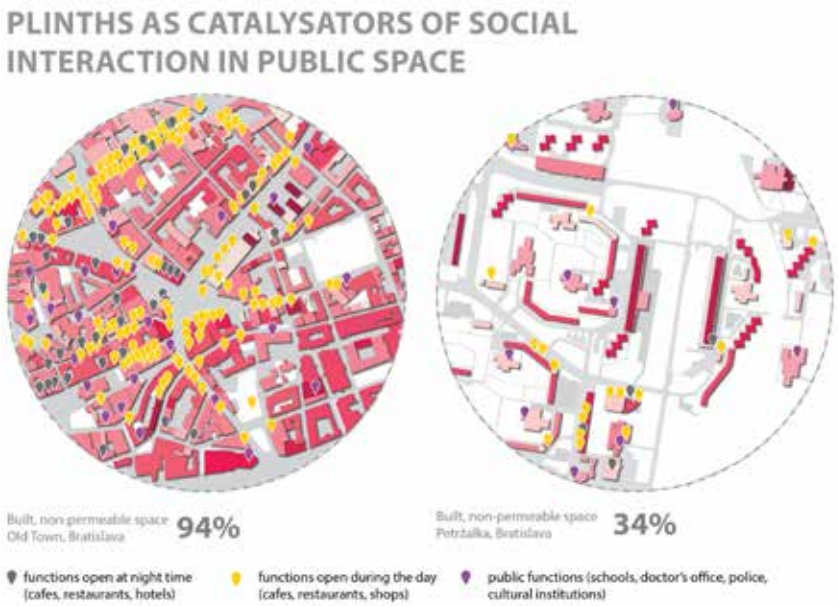
Learning from Old Town: urbanity through social action

A study by the Dutch office Stipo, The City at Eye Level (Karssenberg 2013), suggests that public functions in plinths on a 15m distance (approximately 6-8 times per 100m) contribute to a liveable, socially interactive environment. Petralka, a neighbourhood built in the 1970s – 1980s, is based on the principle of functional segregation. Although density of public functions within the plinth varies, a shop, restaurant or a school are located every 30 – 70m on a main street (Image 5).

One can also experience a very undemocratic street-scape, where cars dominate on every sidewalk, and sometimes hinder any connection of pedestrians with the ground floor (Image 6). Although the area is characterised by an excess of green public spaces, which the planners originally intended to be used for recreation, this excessive grass land is mostly used for taking pets out for a wee (Image 7). Hence, quantity of green open spaces does not correspond with an equally high quality of use. Nevertheless, the green areas of Petralka are the most valued characteristic by the inhabitants, and protect it, for instance, against a top-down development of a highway[1]. The question remains: how can the vast green areas be used better by the inhabitants, and could nature possibly act as a catalyst of social change? Urbanity of the Old Town in Bratislava is achieved through high density of the build environment and the great number of public functions which bring people not only socially but also physically together. Conversely, when buildings in a mass-housing neighbourhood like Petralka are tens of meters apart from another, they creates spaces difficult for social interaction as people cannot see or hear one another from such distances. What could be done to transform these spaces between buildings into a driver of social



5.
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interaction while preserving the beloved ecological structure and pleasant climatological characteristics of the area?

One of the most important ingredients of urbanity, besides density, is active participation of the inhabitants in a community4. During the socialist times in Slovakia, the notion of the „empowered" citizen was not common, because it was perceived as resembling someone's private interest rather than that of a community. At present, an growing number of people are not only expressing an increasing need to go out and meet in public spaces, but they are also demonstrating their right and responsibility for public spaces[2].

What does this have to do with climate resilience? By letting people adopt and re-create the green spaces between their buildings, they will feel more responsible and connected to their living environment (Image 8). Why not plant an urban forest in these vast green areas (slowing down but not blocking the air circulation coming into the city) (Image 9 and b) with tree nurseries or playgrounds and sport facilities (with permeable pavement and bio-swales to capture storm water)? If well designed, thus transformed large open areas can act as incubators of social action, as part of a network of green infrastructure to attract people on foot or bicycle. Such a design would reconnect the built environment with the ecological and climatological processes of the city. Besides environmental development, such green urban areas are enhancing health and social benefits and are considered as community builders, and thereby strengthen social ties between the citizens.

Together with the development of a new green infrastructure, sidewalks would regain their role as pedestrian zone by removing the current car parking to obtain more open and accessible plinths. Permeability of facades would be made possible through letting local entrepreneurs settle, allowing partial integration between the public realm (square, street, sidewalk) with the private sphere (shops). This kind of development creates interaction, broadens our understanding and improves our experience of our urban environment. In Petralka, the currently weak layer of semi-public spaces can be strengthened through supporting small neighbourhood shops. Some of these already exist (Image 10), but because of the strict regulations of a mono-functional zoning plan, regulative barriers are imposed on private initiatives and local, small scale entrepreneurship.

9a & 9b.
Source: the author

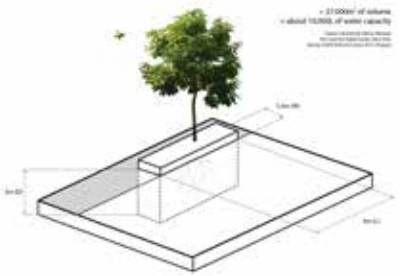
10.
Source: the author

Learning from Petralka: reconnecting the urban with nature

Green, permeable surfaces form spaces in Petralka which do not only collect storm water (runoff storm water can be held up to 80%), but also cool the surrounding urban spaces. Because the Old Town lacks these kind of open spaces, a new strategy is needed to improve the (micro) climatological comfort of the old city, but also to reconnect urban life with nature.

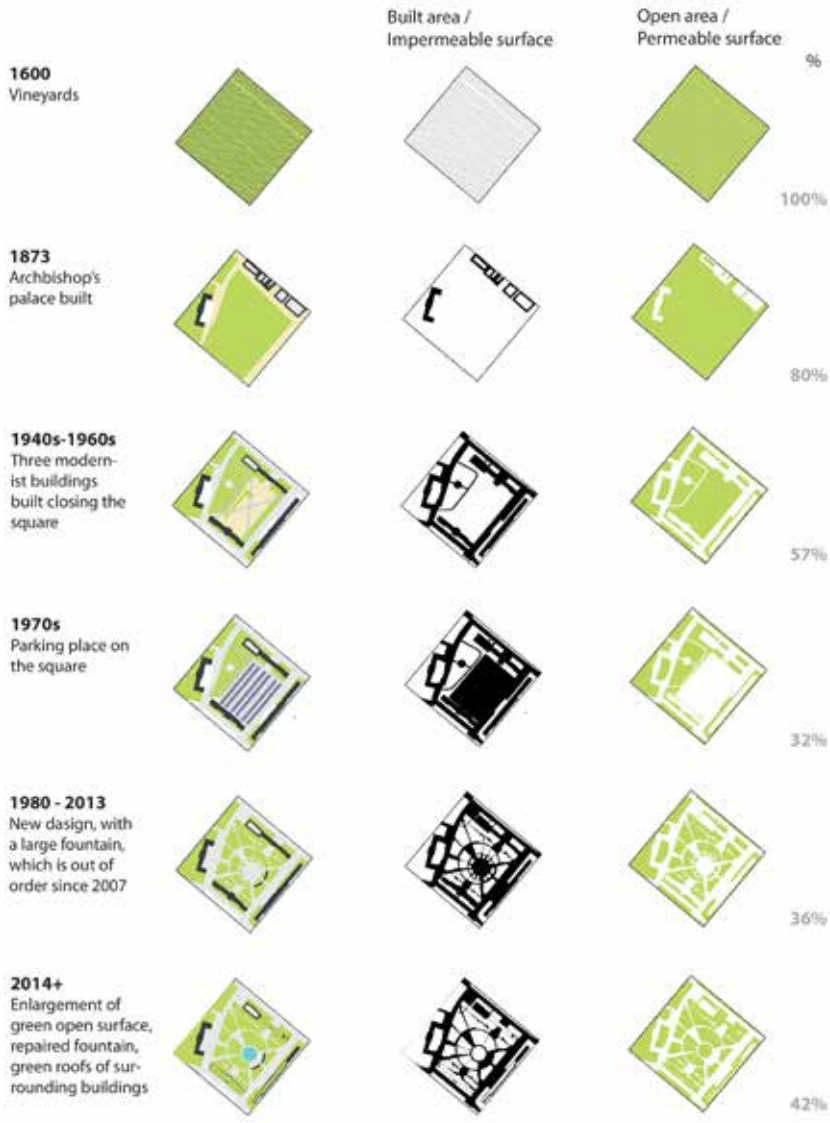
The most obvious method to introduce permeability is by opening sealed, non-porous surfaces in the city, adding new vegetation to support storm water collection and absorption, and to contribute to a cooling effect during the hot summer periods. In the Old Town, the open places with a permeable potential are the unused empty plots, parking lots, tram tracks and roofs of buildings. During the last two years, the first community gardens have been set up in Bratislava, on both public and private land. Many of them have been initiated by active citizens who have decided to take things into their own hands and to transform empty, unused voids in the city into a new public space for people, a permeable space allowing water absorption, as well as a green space offering shade and a cooling microclimate.

The city administration and the citizens have to realise that it is never too late to improve their urban environment, and the scale of the interventions into the existing urban fabric does not have to exceed a couple of m2. Where there is no space for larger green areas, a simple tree-bed instead of a parking place (Benepe, 2013) would be a solution to let storm water run-off or to be stored. Such green pockets can store about 10,000 litres of storm water (Image 11). Also, a fountain or public drinking water tap can improve the human comfort during hot summer days in the city. Many of the fountains in the Old Town of Bratislava are out of order due to lack of finances for their maintenance. Since 2007 this is the case of the largest fountain called "Unity" on the Freedom Square (Image 12), which is considered one of the most unpleasant public spaces in the in the city in the hot summer days[3]. This square went through a number of transformations in the last two centuries, covering up 64% of its surface with heat-radiating and non-permeable asphalt and concrete. With small scale interventions like collecting storm water into smartly enlarged existing green surfaces, forming volunteer groups for park management, maintenance and repairing the fountain with the help of local volunteer plumbers and engineers, the park will become not only more lively, but also a cooler public space (Image 13).



Towards a resourceful and responsible city

Such a paradigm shift does not mean less care by the city administration, but a partnership based on mutual responsibility and shared maintenance. It seems that every year the local municipality is cutting maintenance costs of public spaces, resulting in the transformation of green open surfaces into lower maintenance paved squares4 or demolished public elements or facilities such as fountains, pavement materials or benches. In the current economic situation and lack of finance, it would be good to remember unused and even renewable resource, both: climatological (such as storm



water, wind or sun energy) and social (sharing tools and skills). Establishing public-private partnership could offer a new strategy for the city as a step towards a more resilient and resourceful city. The city would save costs by collecting storm water (less load on the drainage system and stored water to be used for watering the parks in the hot summer months) and create attractive cooling urban spaces, by using existing resources - human capital and natural renewable resources. Public-private partnership between the city and citizens or local initiatives would create a platform where both parties would decide and be responsible for creating, protecting and maintaining urban open spaces by creating new permeable spaces, planting new and protecting existing trees or repairing existing public fountains and installing new drinking water taps in urban 'hot-spots'.

The notion of rediscovering and creating a relationship between the city and nature is strong in both the Old Town and Petralka. The Old Town has the potential to become more resourceful with new climatological processes, such as ecological storm water management and would create a cooler and more attractive urban environment for its citizens. Such solutions would also be more cost-effective, by putting less load on the drainage system and mobilising and letting people maintain and re-establish a relationship with their urban environment. Petralka is home to one third of Bratislava's population, offering an anonymous city-scape to anonymous city-dwellers. By re-creating, rediscovering and reconnecting with the social and natural components of the city, the living conditions of the city-dwellers will improve. Any ideas of citizens are welcome and allowed, provided they do not interfere with the permeable character and ecological processes of the area. Interventions can include a tree nursery becoming an urban forest, growing food or a sport area for children and adults.

After presenting the strengths and weaknesses of these two areas it is shown how both areas can benefit enormously from simple and smart environmental and social injections which help the city to become more resilient. However, such initiatives are not in the hands of "someone" or a centrally responsible institution, but in the hands of all those who want to live in a healthy and attractive urban environment.

1. http://petrzalka.otvorene.sk (Website only in Slovak, last accessed on July 24, 2013)
2. Approximately since 2011, Bratislava has experienced a growing number of engaging civic communities based on volunteering such as ' Zelena Hliadka' (a well-networked, active group of citizens cleanig up specific locations in Bratislava on a daily basis; http://www.zelenahliadka.blog.sme.sk) or 'Bratislavske dobrovolnicke centrum' (a community around the newly reopened Old Markethall, offering 'donation' of people's helping hands and skills; http://www.dobrovolnictvoba.sk).
3. Mapping urban comfort in Bratislava <http://urbanclimate.stadachtig.nl/mapping-urban-comfort-bratislava/>, author Veronika Kovacsova
4. An example of this is for instance the Main Square (Hlavne namestie) in the historical centre of Bratislava which till the 1980s used to be a green square covered partly with grass and paths.

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Clenn Kustermans

APRÈS NOUS LE DÉLUGE? CLIMATE ADAPTATION AND URBAN DEVELOPMENT IN ANTWERP, HAMBURG AND ROTTERDAM

A CLASSIC AND A MODERN APPROACH TO THE DELUGE

Fear of water is embedded in our human minds. This natural reaction (based on the indisputable knowledge that we cannot survive in water) has been portrayed in many forms of classic and modern culture.

1. The Biblical flood myth of Genesis 6-9 depicted by John Martin (1834). The Genesis deluge was intended by God, who wanted to destroy the evil of mankind. Noah, his family and certain animals survived on the Ark
Source: commons.wikipedia.org

2. Beasts Of The Southern Wild, a movie by Benh Zeitlin (2012). In this movie, Hushpuppy and her father make part of the Bathtub community between the ocean and the levee in New Orleans
Source: pathe.nl

Although Biblical examples and Hushpuppy lived as nomads in an ever-changing world, the majority of the world consists of permanent urban structures. Cities are normally perceived as strongholds of culture and prosperity, and must therefore be protected against external threats such as water.

Water issues in port cities

Despite a growing consciousness of shortening production chains and reducing energy consumption, port cities are still the turning wheels in national and international economies. While their economic importance remains unscathed and local populations are growing, port cities are increasingly challenged by major climate changes.

Port cities have always intertwined with water, and they therefore encounter the advantages and the disadvantages of water. Of all climate implications, water level rise is perceived as the most important one for port cities. Besides the rise of the general sea level, the unpredictable occurrence and implications of storms have increased too. Longer and more intense periods of drought and heavy rainfall inland lead to flooding of the main rivers on their way to the sea. These climate changes necessitate new water protection measures.

Climate adaptation in times of scarcity

The article shows spatial measures for the adaptation of port cities against water and how these measures are (or could be) integrated in urban development projects. The aim is to find building blocks for a new urban development model that serves social, environmental and economic goals.

Especially in times of scarcity, when our natural systems are continuously under attack, private and public money is scarce and social issues remain unresolved, climate adaptation measures could also be used to improve social cohesion and sustainable economic growth. It is about spending the scarcely available money on measures that serve several needs.

Comparative study

The article is a comparative study of climate adaptation measures and large-scale urban development projects. Three port cities in North-West Europe are chosen: Antwerp, Hamburg and Rotterdam.

These three major ports of Europe share several common characteristics. First, these ports in low-lying deltas are directly connected to the North Sea and face the threats of turbulent water tides. Secondly, all three are fluvial ports that have to cope with inland water rise and floods as well. Thirdly but not least, these cities are the second and non-capital cities of their respective countries. There are no ballrooms, but shunting yards; no first class, but second and third class; they are 'arrival cities'. These places face major social challenges too: gaps between the very poor and the very rich, gaps between native and foreign. Moreover, these cities of contrasts face other 'climate extremes': in political terms, that is.

On the other hand there are significant differences in terms of national economic situations and national and local political conditions. The Netherlands, for example, has experienced the strong power of water boards since their very beginnings. Crises have now halted investments. While Belgium is endlessly discussing the division of responsibilities in three regions, local political power turns out to be effective and supportive. Is Germany, the leading economy of Europe, an example for others? How do the cities and countries react to scarcity? Are they determined to cut costs, skip planning and set sail under the neoliberal flag? Or are there alternative ways?

3. Flooded land if sea level rises only 1 meter and no precautions are taken .
Source: flood.firetree.net

Current spatial developments and climate change measures

In many cities there is a trend of disappearing manufacturing and trading activities from the inner city to outlying districts. There are a few economic reasons for that: cheaper rents and better accessibility for employees and deliverers (trucks). More relaxed zoning regulations are often a very important reason to move to outlying districts as well. After decades of terrain vague, the inner city docklands are often transformed into new city quarters. New, fancy architecture in dangerous flood risk areas shows the power of human kind.

ANTWERP
Brief context

Antwerp is expanding its harbour toward the sea. The area between the city centre and the harbour is being redefined by urban development projects.

Partly realised urban development projects: Eilandje and Park Spoor Noord

The city of Antwerp primarily focuses on the development of Eilandje, a new residential area in the indeterminate zone between city centre and active harbour area. As times progressed and ships needed bigger docks and deeper waters, the former Napoleon harbour directly north of the city centre was abandoned. Due to its location on the fringe of the harbour and the city and its spatial recession, Eilandje was known as a focal point of (semi) illegal activities based on trade of goods and human beings. Since the 1990s, however, the city of Antwerp has initiated large-scaled development of Eilandje. Along with a striking marketing campaign, the city attracted private investments by building a new eye-catcher in the skyline of Antwerp: the MAS museum. Planned expansion of the city's tram network and the beautification of public space have also brought a boost to the area. In the end, the MAS museum, the public domain and the fairly well-connected location have indeed started a fast gentrification process. The once shabby docklands are now turned into a mixed city quarter where apartments are refurbished into lofts and where public space is walked-on by international tourists. Directly north of the MAS museum, a new city quarter (Cadix wijk) will be built by predominantly private investors.

This concept of public leveraging projects to attract private investments has been effective in Park Spoor Noord as well. In Park Spoor Noord, a former shunting yard has been transformed into a very successful park. The park, a relief for many city dwellers who live in the densely-built working class areas Noord and Borgerhout, has also initiated private investments in apartments and services (including a hospital). Eilandje and Park Spoor Noord have stimulated local enterprises and jobs in different economic sectors (culture, leisure, sports, shopping etcetera). They have become meeting places for everyone. The projects therefore contribute to the local economy and to resolving social issues.

4. The MAS museum and the surrounding public domain have initiated the gentrification process of Eilandje
Source: gva.be

5. Park Spoor Noord is a relief for those who live in densely-built urban neighbourhoods
Source: architectura.be

Planned urban development project: Nieuw Zuid

While Park Spoor Noord and Eilandje are partly realised and partly under construction today, the next development seems to be the Nieuw Zuid project: another new city quarter on another unused site. Nieuw Zuid is a housing project close to the water of the Scheldt river, south of the city centre. In contrast with Eilandje, Nieuw Zuid it will not quite be a mixed use urban area. The project aims to accommodate people who earn more than average. Moreover, and more importantly, the Nieuw Zuid project is not engaged by the city in terms of investments in a public building or public transport. The city is a facilitator instead of an initiator, which means that it tries to stimulate investments by permitting a lot. Nieuw Zuid seems to be a quick win of developing unused ground on unused land, without a collective agenda.

Climate adaptation

Simultaneously, water level rise implications and the protection of the city centre and the new quarters Eilandje and Nieuw Zuid are used as a starting point for the reconstruction of the piers. Other goals of the pier reconstruction are the improvement of public space and the relation between the city centre and the river.

Like the Eilandje area, the 'Antwerpse kaaien' (Antwerp pies) lost their industrial use a few decades ago and are now perceived as urban wasteland. The increasing chance of storms and water level rise and their implications lead to the reconstruction of the piers. The Sigmaplan of the Flemish government for the Antwerp piers is based on three aspects: strengthening, increasing and redesigning of the pier walls[1]. Antwerp is searching for a new 'relation' between the inner city and the Scheldt river. For years there has been a linear development alongside the river (pier with industrial activities, street, terraces, pedestrian and cyclist paths). The piers are now primarily used as parking space adjacent to the city centre. The redevelopment of the pier zone can be summarised in these plan elements:

- increasing the height of the piers
- creating a new public space along the river (boulevard)
- making a new connection between city centre and water (although the pier's height is increased)
- maintaining parking function beneath the new ground level (that is, at the same level as today).

The two urban development projects (Eilandje, Nieuw Zuid) will be secured from the water of the Scheldt river by the new piers. In Eilandje, much of the water management is done by the docks water system (apart from the Scheldt river). Within the docks, the water level is controlled by a network of sluices and pumps.

6. The unused space between the city centre and the highway will be transformed
Source: gva.be

7. Proposal for Nieuw Zuid by Secchi Viganò
Source: cartoon-productions.be

8. Great place for a pick nick with your beloved, but not appealing for tourists. That's why the city wants to redevelop the piers as well.
Source: author, 2013

9. Although functionally relieving the city centre by offering parking space, the pier area is not really contributing to a fruitful relation between city and water.
Source: author, 2013

10. The concrete wall on the left and its metal doors are too low for the future water level.
Source: author, 2013

11. Instead of increasing the wall shown on the left, an entire new slope will be built as a new public space.
Source: PROAP + WIT, 2009

HAMBURG
Brief context

Hamburg is expanding its harbour deeper inland (south of the city). The area between the city centre and the harbour is being redefined by urban development projects.

Partly realised urban development project: HafenCity

Hamburg is of course famous for HafenCity, a huge inner city development. An entire new urban quarter is built on former docklands and water next to the city centre. For HafenCity, the city of Hamburg also applied the urban renewal model of public investment as leveraging project for other developments. The two main investment attractors built with public money are the Elbphilharmonie (a concert hall) and the extension of the U-Bahn (underground public transport) network.

12. Overview of the HafenCity project
Source: skyscrapercity.com

Planned urban development project: Wilhelmsburg

While public attention goes out to the realisation of HafenCity and the costs of the Elbphilharmonie, the city has announced new developments in the working-class area of Wilhelmsburg, an island in the south[2]. Wilhelmsburg hosts the 'internationale Gartenschau' 2013 (international garden show). Moreover, the institutionalised IBA Hamburg (internationale Bauausstellung) is involved. The Wilhelmsburger Reichsstrasse (B4-B75, a heavy road infrastructure with four lanes) will be placed adjacent to the railroad tracks. The existing course of the Reichsstrasse will offer space for the international garden show and new urban development.

13. Wilhelmsburg will undergo much development initiated by IBA
Source: hamburg.de, IBA

14. Reducing noise caused by infrastructure makes space for urban development
Source: hamburg.de

Climate adaptation: city protection and building adjustments

Hamburg is used to high water: there are floods every year. The city is partially protected by high pier walls and 'locks' along the Elbe river.

HafenCity is built within the Elbe river delta and outside the city's water protection walls. In HafenCity, water protection is implemented at building level. This means that property owners are responsible for their own and their tenants'

15. Many first floors of buildings in HafenCity can be shut by steel doors to keep the water out
Source: quartier-magazin.com

16. At strategic spots, Hamburg has 'flood gates' as part of a collective protection system
Source: pro-wohnen.de

17. Hamburg designs a water protection measure as new public domain
Source: hafencitynews.de, LBSG/ON3

safety. Many first floors of buildings have been equipped with steel doors and concrete walls. Although the function may dominate, the form is unfortunately forgotten.

Wilhelmsburg is located in the Elbe river delta as well. The publication 'Climate Factor Metropolis'[3] underlines the importance of water protection measures. In Wilhelmsburg, IBA is set up a centre for climate engineering "to accelerate the information transfer on innovative technologies and processes, initially in the area of flood and coastal protection. The first research project will pursue the development of a standard for mobile flood defence systems." Unfortunately, there are no concrete protection measures applied in Wilhelmsburg. Most probably, however, the 'dikes' around the island will be made stronger and higher.

18. Historical parts of the collective Wasserschutzmauer
Source: the author, 2009

ROTTERDAM
Brief context

Rotterdam is expanding its harbour toward and into the North Sea. In Spring 2013, the Maasvlakte II in the North Sea has been put into operation. The area between the city centre and the harbour is being redefined by urban development projects.

Partly realised and planned urban development project: Stadshavens

The city is transforming former harbour areas into new commercial and residential zones. Other parts of the harbour are maintained as

19. Overview of the Stadshavens area
Source: officielebekendmakingen.nl

20. Inner city harbour areas are transformed into mixed urban neighbourhoods
Source: the author, 2013

21. The Maeslantkering (part of Deltawerken) protects Rotterdam from sea water
Source: rijkswaterstaat.nl

22. Flood risk in the Stadshavens project area
Source: rotterdam.nl

business districts (after intensification). The overall project name for the inner city harbour development is Stadshavens project. The economic crisis seems to have halted major investments in Rotterdam, both public and private.

Climate adaptation: Deltawerken and Stadshavens

Rotterdam is protected by the Deltawerken. This chain of national water structures shields the entire country. The Dutch context is very specific. Through centuries of retaining, creating, losing and recapturing land, the Netherlands has built up a steady water planning system. The national Rijkswaterstaat and the regional water boards (waterschappen) know how to deal with the impetuosity of water. Moreover, the Dutch share a collective consciousness of the threats of water. This has had its political consequences: the sector dealing with water issues is very powerful indeed.

Stadshavens is not protected by 'dike' infrastructure. Therefore the main questions are: how is water protection guaranteed, and has water management changed as a result of harbour transformation?

Because of the lack of 'dike' infrastructure, the ground level must be raised to minimise the possibility and impact of floods.

Climate resilient planning is necessary to create a place to work and live. In order to carry out pragmatic planning, there is a differentiation of norms. Vulnerable activities (such as a residential area) must be protected dramatically as opposed to other, less vulnerable activities (such as a park or a container terminal).

Instead of raising the ground level, increased pier walls, floating buildings and dry-proof and wet-proof building techniques are possibilities too.

'Dikes', roads and railroad tracks that surround Stadshavens are physical barriers today. It might be worth researching a multifunctional use of these 'dike' zones.[4]

Building blocks for climate adaptation and urban development

After comparing these three cities I reflect and contemplate, and I end up trying to rethink the entire urban development and planning system, its parties involved, its money flows, its mechanisms, its culture.

Urban development is a mixture of (shifting) public and private interests. The urban renewal model in Antwerp and Hamburg (approximately 1990-now), in which public investments have been used to trigger private speculation, has turned out very effective with satisfactory results. In this model, the public administration is a solid and reliable partner. If the city goes for it, private developers will follow. In this model, collective and private interests are both served.

There is a global trend of shifting city strategies. Instead of investing (there is no money!), cities tend to loosen regulations in order to stimulate private development. Some people call this rationalism and cost-saving. Others tend to call it neo-liberalism. Whatever you may call it, it often does not give pleasing results. Because of mainly satisfying self-interest, private 'island' developments are often not beneficial for a city. For example, the climate adaptation in Hamburg HafenCity is perceived as private responsibility which leads to 'dead' ground floor level of many buildings. In Antwerp, the Nieuw Zuid project does not comprise a collective agenda either and it will probably become a residential stronghold for a happy few.

On the other hand, public engagement alone is not enough. In Rotterdam, for example, the water boards are doing a great job securing

the city's welfare and economy. However, public investments are quite often not followed by private investments, notwithstanding a great need of private will in the case of Stadshavens project.

So: urban planning is not yet fit for scarcity. There is no public money. Governments are rusty. Private developers only think about themselves and they are often too slick. Let us rethink the city development system! And because of intertwining collective and private interests, climate adaptation could be an important trigger to do so.

If a city is secured, investments are secured. The city administration will keep a key role and responsibility in guiding (not just relaxing regulations). Adapting to climate change and creating new urban quarters may lead to a system in which a percentage of private profit flows back to public funds. In many countries, the foundations of such systems exist. In Belgium and the Netherlands, for example, private investors pay a certain amount if zoning regulations are changed by a public authority (and if the potential land value increases). It can also be agreed on in PPP contracts. It can be expanded to climate adaptation measures.

Paying a part of the profit will be accepted by the private investor if the solid partnership between him and the public administration leads to a smaller investment risk and a greater chance of profit - especially in times of scarcity. In the end there will be a well-running city budget that can satisfy the collective demands (schools, parks, roads, maintenance, jobs, etc.) and that can trigger private development.

Climate adaptation projects will become more and more urgent in the coming decades. Cities have the opportunity to change the communication and participation strategies as well. Climate adaptation projects (and urban planning in general) can be democratised.

In addition to the two key actors comprising government and private development parties, there is an important third actor involved. Especially when economic tides are low, people tend to share their sorrows with others. They think, speak, protest, they form groups and stand for certain beliefs. They achieve goals without spending large amounts. This third group of (partly) organised or non-organised people can be embraced by the government (because of the collective agenda) as well as by private parties (because they will need the public vote too).

In the case of democratisation and the true involvement of citizens, climate change and urban development can contribute to resolving social issues too (inequality, poverty, unemployment, lack of chances).

ONE LAST NOTE

Back to Hushpuppy and the Bathtub community, a microcosm in marginality. They are still there; somewhere between the Gulf of Mexico and the levee that protects New Orleans from further doom. The community is struggling, but they are keeping their heads above water, literally.

Adaptation to climate change is a short-term policy for leading world economies to ensure their status as leading economies. The daily experience of other, less wealthy places is the wrath of nature and the human role in this changing nature. These less wealthy places will disappear one day or the other. But in the long run this will be true for the leading economies as well, as it will not be enough to just adapt space to climate change. It is therefore at least as important to adapt our behaviour in producing and consuming, with other words mitigating, with other words changing the fundaments of our economic system.

1. The Sigmaplan is the Flemish (regional) plan for adapting land-use to water changes. Within the general framework of ensuring the country and its inhabitants against water, concrete projects are launched. Except the Antwerp quays, the Sigmaplan indicates controlled flood areas and dike projects along the Scheldt river. More information can be found on www.sigmaplan.be/en.
2. See masterplan 'Neue Mitte Wilhelmsburg' and http://www.iba-hamburg.de/themen-projekte/wilhelmsburg-mitte/projekt/wilhelmsburg-mitte.htmlMapping urban comfort in Bratislava <http://urbanclimate.stadachtig.nl/mapping-urban-comfort-bratislava/>, author Veronika Kovacsova
3. IBA Hamburg Climate Factor Metropolis, Projects for the future of the metropolis, Climate Protection Concept for a Renewable Wilhelmsburg
4. Structuurvisie Stadshavens Rotterdam 2011

23.

Guido Cimadomo

A DIFFERENT PERSPECTIVE ON ARCHITECTURAL DESIGN: BOTTOM UP PARTICIPATIVE EXPERIENCES

1. FROM THE "RIGHT TO THE CITY" TO THE "RIGHT TO CONFIGURE THE CITY"

The weight of the financial and real estate components in the present crisis, and their impact on millions of people give a renewed importance to the right to housing and the wider right to the city. The paper of architects in planning the city is also changing due to new social relations and the empowerment of citizens, and we have not to forget that scarcity is a great impulse for social and technical innovation, among them architecture. Henry Lefebvre's "The right to the city" (Lefebvre 1968), can be considered the starting point for the understanding and reconnaissance of the right to urban life, transformed and renewed (Paquot 2012). At the present moment, the idea is growing that to change the life would be necessary to change the city, and the same concept of "right to the city" should be filled with new contents.

The right to the city can be related with the right to freedom, to the individualization of sociability, the right to habitat and to live. The right to the work and to the appropriation, the right for inhabitants to meet, and also the right to reject be quitted from urban space by a social and economic organization moving to segregation and discrimination. It has been developing for almost 40 years, with a renewed interest at the beginning of this century, evolving to the more contemporary "right to configure the city". Also if many steps have been done with the approval of several charts - being the most relevant the European Charters for the Safeguard of Human Rights in the City (Saint Denis 2000), and the Charter for the Right to the Cities (Porto Alegre 2001) - many steps have also been undone: privatization of water and education, cuts to the construction of social houses and public transportation, but also gentrification are increasing since 1968, hardening in

1. Still frame from the video Taksim Gezi Park – Interviews with Turkish Demonstrators.
Source: Robin Rothweiler

periods of scarcity. In this scenario citizens are rebelling and manifesting about these abuses that government and big institutions impulse to follow new liberal models. To cite just few of the most recent claims related with urban issues, we find the Taksim Gezi Park riots in Istanbul, or the manifestations against the construction of an hotel in the Natural Park of Algarrobico, Spain, all showing that the public opinion can have a relevant rule in the transformation of the cities.

In this paper we are not interested in the already widely analysed contemporary city, at the base of the exponentially urban growth of the last century, but in what is left in-between: in the places where contemporary flows - economic, migration and IT - move to reach the cities, the non-places (Augé 1995). The interest is now focused in these satellites hubs, so that everything in-between is not considered at all. These voids are anyway really important, and as they are the spot where this workshop is reflecting, it may be interesting deepening more first from an historical point of view, and then observing contemporary experiences dealing with the threats and opportunities they offer.

2. VOIDS IN THE CITY

Voids are part of the development since the beginning of our civilization, but in the past century we can find the most important experiences, starting from 1921 when Dadaists organized several excursions in Paris's less interesting places. For the first time art rejects historic and artistic places to reconquest urban spaces, considered as an aesthetic performance that should replace the established art system. (Careri 2006). On June the 11th 1954 at the Galerie du Passage in Paris, the opening event of the Lettristes: "66 metagraphies influentielles" exposition took place. The influential maps by Gil J. Wolman and Guy Debord are collages of images and phrases from newspapers, called metagraphies, but Gilles Ivain's one is a map of Paris, with islands, archipelagos and peninsulas, meaning that the other-places are everywhere, in Paris too. The walks realized by Dada are also the origin for the Situationist idea to formalize the perception of urban spaces through influential maps, a further development of the metagraphies. The Situationist International movement, funded by Debord as a split from the Letterists, active since the 1950s, believed that urban space could be crossed like our mind, offering a new invisible reality, and that to be lost in the city was a politic tool to subvert the capitalist system of post-war (Careri 2006).

The act of deríve (drift) is at the base of the experiences realized by these artists, it accepts fate, but has anyway some rules to follow: especially about what to analyse, hence the importance of psycogeographic maps that help to define the extension to analyse among other different and complex reflexions. In 1957 Debord realized the first ever psycogeographic map: "The Guide psychogéographique de Paris", a folded map to be distributed to tourists, inviting them to get lost. Paris is presented exploded in several pieces, where the historical

fragments are floating in the void, and tourists have to move from one unit (neighbourhood) to the other. Only homogeneous areas, based on psycho-geographical relations, are presented, while the rest of the city is erased. In the same year Debord published another map: "Naked city: Illustration de l'hypothése des plaques tournantes en psychogéographique" where the distance between different pieces of the city are the result of several soul feelings experimented by the artist. In this map plaques are islands where you can freely move, and arrows are the fragments of all the possible drifts, paths in the void. The city is a psychological landscape built with holes: whole parts are forget or erased to make possible to create infinite new cities (Careri 2006: 72-73). These tools show a naked city, but also make possible to build a joyful discovery of the territory. Circulation is not the result of a functional division of the city, but is now an adventure and a joyful experience.

"A line made by walking" (1967) by the English artist Richard Long is a fundamental piece in contemporary art, related with new relationships with the landscape. The work reflects the essence of absence: the grass walked on shows the absence of the body that walked there and also the absence of the action of walking. Anyway looking at this work the presence of the body or object that generated the line is strong, and its absence gains all its importance. The place outside London where the picture was taken is not important – the same author doesn't remember exactly where he created the line – but the action reflect a way to transform the landscape, experiencing it and making the walk a new way to comprehend the space around us. The minimalist aesthetic of this work, and the repetitive gesture needed to perform it can also be linked with the interest for the production of a void, or absence, through the behaviour of depersonalised, repetitive acts (Roelstraete 2010). The artistic movement of "As found" is a critic process that recognize the everyday routine as an artistic expression, and the appropriation of the space through doubt and reflection. In the early seventies Gordon Matta Clark bought several small plots between tall buildings in Manhattan, for $25–$75 each, and declared that through the "negative space" a void exists that make possible to observe the built things in a mobile and dynamic way. As part of the Anarchitecture group, he was interested in the idea of metamorphic gaps, and leftover/ambiguous space. "Fake Estates" was a project engaged with the issue of land ownership and the myth of the American dream, but ironically, these "estates" were unusable or inaccessible for development, and so his ability to capitalize on the land, and thus his ownership of them, existed virtually only on paper.

The experience of Stalker in Rome is the continuation of all these previous experiences, as they consider crossing and walking in the abandoned plots and suburban spaces - actual territories or territories of change, according to their own definition - as a creative act. In this way it is possible to participate in the spontaneous urban transformations, whose perception is possible only through our presence in the natural environment, the negative of the built city. The voids are considered as the base where to read the urban form, that otherwise would be experimented as a continuous and homogeneous pattern. A second layer of the researches of this group deals with the relations between time and space that the direct experimentation of these places offer when a change between the everyday and the uncertain happens (Cimadomo 2013).

All the artistic experiences here presented – selected for their innovative perception of the voids existing in the inner city - should

give the understanding that their presence is of great importance in the definition of the urban landscape. These spaces are used in several different ways by their inhabitants, and are the last opportunity to get lost in the city, the last place where you can feel out of control, but also ephemeral, as they move each time that power attempts to modify and to plan them. They also show new ways to experiment the city, as traditional ownership, control and planning can be upset, and new opportunities, related with porous urban spaces can be defined by new empowered actors, the neighbours. The control of voids is easier than the control of other kind of plots, as usually there is no interest by the strong powers on them, but to feel the control over some part of the city, and see the transformations derived, give the neighbours the sensation that change is possible, and that new models for planning the city, where co-participation and new ways of use and management of public spaces are required, are accessible (Cimadomo 2011).

3. CASE STUDIES

Recetas Urbanas, Seville

The Sevillian architecture practice *Recetas Urbanas* (Urban Prescriptions) offers real recipes on how to occupy the public space, without breaking master plan and heritage regulamentations, but with a creative interpretation of city codes. In the past years several actions were realized in Seville's down town, in order to provoke neighbours and offer them the possibility to replicate on their own these solutions. The relation of the architect with citizens in this case is limited, also if the manual on the web page of the architectural practice offer the possibility to disseminate and spread these experiences, to be realized in most of the cases without the participation of an architect.

Scaffoldings

This experience came out from the difficulties that the Protection Plan of the historic centre of the city of Seville to rise new constructions and refurbishments due to the extensive protection grade given to the buildings included in this area, and offer a liveable space in down-town Seville, without prejudicing existing cultural heritage. The solution consists of a temporary scaffolding installed next to a centric building catalogued with a very high protection, that had no relation with the architect, for instance a regional government property.

The permit was given to situate a scaffolding on the street, for a duration of three months to paint the façade of the building, necessary for the presence of graffiti, made previously by the same architect to justify the application. At this moment no requirements existed to justify the ownership of the building, aspect modified in the following reforms of the code. Installing this scaffolding was seen as a cheap and reversible solution for a temporary increasing of the houses' area, a spontaneous growing generated by the neighbours and not by the real estate system. This solution is obviously temporal, as the same technical solution is considered ephemeral, something that frightened architects until the contemporary situation of scarcity and uncertainty. The same occupation of the public street shows that there is no interest in consolidating the increasing of volume, or to generate new private property, but only to respond to punctual needs that a family could experiment. In fact, also if in this experience a foreign building was used to extreme its impact, it can easily be considered as an extension of somebody's house, to host some friends, some family or for other uses that contemporary live could occasionally demand.

2. Scaffolding project built in the historic district of Seville.
Source: Santiago Cirugeda

3. Kuvas s.c. Self-managed Playground in a square of the historic district of Seville (2001).
Source: Santiago Cirugeda

Kuvas S.C.
It is one of the earliest projects of *Recetas Urbanas*, that investigates the occupation of public streets according with the construction code of the city of Seville, in order to offer new facilities in a dense neighbourhood where, until the beginning of this Century, didn't exist many facilities for their inhabitants. A permit to occupy the street (preserving the flow of urban traffic) with a container for the removal of construction debris of a supposed reform was required, but suddenly it was transformed in the first self-managed playground of the city. Soon some citizen filed the "strange" use of the container, but no legal infringements were found by the police or the building committee of the city. It was then used also for several different uses, from an info-point for recollecting citizens suggestions on the transformation of the neighbourhood, to a flamenco scenario, creating and recollecting new ideas that couldn't be predictable with traditional design tools.

When the container was removed, it was offered for free to other citizens that could be interested in creating new public activities near their houses, but it hadn't the results expected, demonstrating that citizens were still not used to participate actively in the construction of their surroundings.

Puzzle House
The idea at the base of this project is to use abandoned plot inside the historic city, reaching an agreement between the owner and the new dwellers, who limit their permanence in the same plot for a maximum of two years, before moving to another plot, dismantling their puzzle house, a prefabricated solution that can be easily built an infinite number of times. It is a nomadic and temporal way of life, that take advantage of the voids of the city for a limited period of time. This kind of houses can be assimilated to a provisional and dismantling construction – it is important to point out the difference between dismantling and demolishing - for temporal use established by the construction code, so that obtaining the occupation license would be easy, and do not require the fulfilment of all the regulations related with new buildings. Apart of the possibilities to modify the historical city, only for short periods of time and without onerous efforts, when the owner decide to develop his plot, it can be easily given back, moving the puzzle house to a nearby location.

The main issue of this experience is the agreement and confidence between neighbours, and the possibility to have several new (temporary) uses inside the dense historic city, for personal use or to be shared between a collective, like in the case of the pilot experience realized by *Recetas Urbanas*. For the first time the project showed that it is much better to have a meeting point for the neighbourhood, or any different use that could arise, than keep a plot abandoned and without use.

Esto no es un solar, Saragossa

The experience of *Esto no es un solar* (This is not a plot), first in Saragossa and later in many different European cities, can be seen as a continuation of the Puzzle House project, looking for plots to change their state - at least for some months - and be transformed into urban spaces that neighbours can use and enjoy. In this city in the North of Spain, it started with the need to clean plots abandoned, where their owners didn't follow the rules about keeping clean and safe their properties. The municipality had to act subsidiary, and then reclaim the costs occurred to the same owners, but it happened that some of these plots were property of the same Institutions, making easier to accept the realization of temporary uses, especially thinking as in

this moment the National, Regional and local governments didn't have the economic power to start new facilities, delayed several years in time. With the financial help of the European Union - around 1 mill. Euros - 16 plots have been refurbished to host squares, gardens, playgrounds and gardens that serve the neighbourhoods. Being a public investment, some conditions are required, starting from the period of lease, that should be superior to six months, and a rigorous process of analysis and participatory process previous to the definition of the uses. [Figure 4: Esto no es un solar, plot destinated to social activities, Saragossa. Source: Grávalos & Di Monte arquitectos.] [Figure 5: Beit Arabiya Peace Centre after the last demolition. Source: ICAHD.]

4. Esto no es un solar, plot destinated to social activities, Saragossa.
Source: Grávalos & Di Monte arquitectos

Israel Committee Against Houses Demolition (ICAHD), West Bank

The state of Israel implements a policy for the demolition of Arabs houses lacking the required official construction permit - that is very difficult to obtain due to the arbitrary limitations arose by the Israeli Government - and at the same time promotes new settlements for the Jewish in the same territory and under the same laws. It is definitely a political decision with the scope to enclose Arabs in a constrained territory, depressed and overcrowded (Cimadomo 2013). In the most cases this policy pushes Palestinian families to build their houses without the required permit, facing the risk to see them demolished. It is anyway the only solution to live in very narrow spaces for the growing families. The demolishing order is an arbitrary process – it can also never be notified – and also if notified many years can pass before it is effectively carried out. But when Israeli brigades arrive, they concede only 15 minutes to bring out all the family goods, before starting the demolition. In this frame was created in 1997 the ICAHD, a peaceful organization with the aim to fight against this injustice, especially in the Arab culture, where an house represent the dignity of their owners and a safety place for their family. The demolition of a house has several effects on their owners, according with Meire Margalit, from the Jerusalem municipality: for men is a deep humiliation, for women is the destruction of their status of wives and mothers built around the concept of dwelling, and for kids is the origin of traumas and suffering (Meade 2011).

5. Beit Arabiya Peace Centre after the last demolition.
Source: ICAHD

The procedure established by ICAHD take the form of an active resistance, blocking the work of bulldozers, mobilising diplomatics and reporters against these actions, and also helping and financing reconstruction of houses when it is not possible to stop their demolition (Halper 2009).

The experience of Salim Shawamreh's family, who during the nineties bought a plot near the

city of Anata to build their own house is worth to be presented to understand the implications that these orders have over the Arabs and the activities of ICAHD. After two applications for a construction permit, costing more than ten thousand dollars, the permit was denied, the first time for being an agricultural land, and secondly for the excessive slope of the plot. The same authority suggested to present a third application, that was also denied for the lack of a signature by the previous owner of the plot. In 1994 the necessities of this family, a couple with four children, pushed them to start building the new house, without the required permit, but soon received the demolishing order, that will be accomplished only four years later. Thanks to the help offered by ICAHD, as an act of resistance against this abuse, the house is rebuilt, but is demolished three more times, until it is destined to host the headquarters of a Peace Center, shared by Israelians and Arabs to investigate new solutions to reach peace – the Beit Arabiya Center – that is also demolished, for the sixth time in November 2012.

The demolition of houses is part of a wider policy that attempts to expel Palestinians from their land, against all established International Law and that has been compared with similar processes held in South Africa or Kosovo, with ethnic cleansing means (Halper 2009). Fear that a house can be demolished is considered as a deterrent to the construction of new buildings, even if the lapse of time until the demolition can push many families to risk, and gain some years also if it has to be shared with a permanent state of fear and uncertainty. Each summer ICAHD organizes an International Volunteers Camp to rebuild houses demolished in the Anata's area, and has been used to rebuild the same Beit Arabiya Center five more times in the last twelve years. It is a declaration of friendship and dignity between the international participants and Arabs and Israelis, that work together to (re) build a symbol of peace. It brings closer different cultures, answering in this way to the repression acts held by the Government of Israel with cooperation will. ICAHD's actions attempt with active resistance and small scale activities to dismantle discrimination against the Arab minority. Also if the houses rebuilt are really only a small portion of the number of buildings demolished every year, what is considered more important is the awareness of this activity for the participants and the multiplier effect into the international community.

Decolonizing Architecture, West Bank

The architectural studio funded by Alessandro Petti, Sandi Hilal and Eyal Wiezman in Bethlehem in 2007 has among its aims to research on the spatial realities of the Israel – Palestinian conflict in a proactive way. It looks for a political action through the transformation of space, working with the concept of decolonization meant as a process of reuse and deactivation of the infrastructures built with control and defence aims by the occupiers (Hilal et al. 2010). Against the risk that is inherent to keep the same function by the new dominant forces, they consider the act to profane as an opportunity to offer new uses that will delete the historic footsteps of the original ones and will also offer shared uses where the previous establishment impulsed division and fragmentation (Agamben 2010). They finally don't look directly for the end of the conflict, but to give a new sense to the term 'decolonization', in order to transform it in a vehicle of change in the deactivation of the previous systems, through the model of a reference handbook, offering several actions detailed at an architectural scale. It is anyway to be considered as an anti-manual, if compared with the one published by the Israel's Housing Minister in 1984, as it follows the same

logic but reversing and using several adjectives that undermine its sense.

One of the projects realized by Decolonizing Architecture that uses the concepts of Ungrounding and Un-homing is related with the military base of Oush Grab (the crow's nest), built by the English army in the Thirties, next to the city of Beit Sahour, in the south region of Bethlehem. It was later used by the Jordan army between 1948 and 1967 and later on by the Israel army until they retired from the region in 2006. Afterwards it was used alternatively and sporadically by Palestinians, which in 2007 inaugurated a park and several public utilities, and by Jews, that every weekend occupied this place, celebrating meetings and hoisting their national flag, protected by their Army against the protests of the Arab citizens. There is an alternate occupation of this space, through graffiti and superimposed architectural transformations, among which blocking off the doors of the buildings, to limit the possibilities of their occupation by Israel colons. This is the point from where Decolonizing Architecture, together with the Palestine Wildlife Association and several others NGOs started a project giving great relevance to the place where the birds migrations use to rest in their way from Lebanon to Egypt, and origins the proposal for a park and nature observatory, as a profaning experience to give new uses to this military base. Controlled demolitions are proposed, to make the buildings less liveable for humans, but not for birds. In this way the modification of topography is a key-aspect of the design, remembering the demolitions of 'illegal' houses carried on by Israel[1], and with the problems generated by the demolitions of Israeli's settlements in Gaza previous to its return to the Palestinian National Authority, when a large amount of construction wastes was very difficult to recycle. The architects also proposed to assume the transformations already happened, as wastes from the construction processes of the nearby Beit Sahour were gathered in the base, that served also to extract earth necessary for new buildings. The selected demolitions served also to bury the buildings remained, reorganizing the relations between the same base and the landscape (Hilal et al. 2010).

Teddy Cruz, San Diego – Tijuana Border

Teddy Cruz is an architect established in San Diego, whose research is centred on borderlands as places where new opportunities to share resources and infrastructures appear, taking advantage of border urban realities. The critical work he develops feed also his practice, that will be analysed in this chapter for the repercussions on the problems generated in borderland areas.

Tijuana: tactics of invasion

The most radical ideas in urban development are being generated in scarcity situations, where new institutional protocols for unorthodox collaborations face with complexities of everyday life (Cruz 2011). The projects realized in Tijuana can be defined in this same context, where new informal settlements occupy the territory with a common pattern, managed by community activists that organize invasions on the territories identified. Being public or private properties, usually on heavy slopes not suitable for formal developments, they are occupied at sunrise when new colons bring recycled materials – usually imported from San Diego – to mark the footsteps of their new dwellings on the land. With the passing of time and with community help, these houses grow adapting new materials to the original structures, improving and substituting the construction elements. Once the shanty-town is consolidated, the

neighbours start to require basic services, and infrastructures follow the occupation of the territory, reversing the common practice of urbanism.

The project developed by Teddy Cruz aims at the collaboration with the maquiladora industry, where the majority of invaders work, to give back some of the benefits these companies earn by the facilities offered to them, sharing their own technical and productive capacity. The architect designed a metallic frame, that should be produced in the same assembly plants and that can be used as the main structural element where to adapt the different recycled building materials. It can be described as an inverted U, made by aluminium tubular profiles that define rectangular frames, one to support the roof or the first floor soil, and the second to hold a fibre glass deposit to offer a reserve of potable water for each house. The third side is defined by two metal bars to be plunged in the soil, improving the mechanical resistance of the whole system. The design can be seen as an acupuncture intervention, according with the same definition given by Cruz, that offers colons a light prefabricated element to improve the whole process of building their houses, also from the safety point of view. This structural frame comes with an handbook that shows different ways to optimize its use with pallets and tyres, improving their features and comfort. It is in last instance, to give citizens something tangible, something really important to improve their life and that they cannot obtain by themselves, with the scarce resources they can reach (Friedman 2009).

Contamination of Zoning

On the other side of the border where zoning is rigid but is also experimenting informal transformations due to immigrants that adapt the places where they live to their own way of living, Teddy Cruz is experimenting with simple transgressive strategies to defy established urbanism codes. The project developed with the NGO Casa Familiar in El Pueblito (San Ysidro, San Diego), on the American border starts from the reconnaissance of the transgression tendencies that informality create in certain communities, to force rigid rules to adapt to their cultural idiosyncrasy (Cruz 2006). Questions about density and the mean of housing in these realities are at the base of small scale interventions, based on collaboration among neighbours and public establishments that can generate a fertile base for a chain of new projects.

The participants defined a planning tool known as Affordable Housing Overlay Zone (AHOZ), approved by the municipality in 2005, where a higher density is permitted, together with mixed uses very different to the common American standards. The process can be resumed in the following points (Cruz).

1. The NGO becomes an urban Think Tank. It would manage an initial research project to identify and document properties on which illegal construction has taken place in the last decades, as small extended families share resources in building non-conforming additions. These stealth companion units usually are located in the back of a parcel flanking an alley.
2. The municipality would allow a small overlay zone, within which these illegal and fragile units could be legalized, allowing their replacement by new ones without penalizing the property owners.
3. The non-profit sector, with the support of alternative funding would generate the design of a series of small, ready made housing additions that can be combined in a variety of scenarios and assembled by human resourcefulness within the community.

4. The non-profit sector would act as mediator between city and financial agencies (banking), managing and facilitating construction permitting and loan processes.
5. A property owner would select a particular combination of dwelling and the non-profit would assist in expediting its permitting process. The municipality would pre-authorize the construction documents for these new dwellings, allowing the Non-Profit to facilitate the end of the process and managing the actual construction permit.
6. The property owner promises to participate in the construction of the unit, therefore allowing sweat equity-hours of labour – to become equity in the development pro-forma. This introduces the notion of "Barter Housing and Services". Property owners join forces to produce alternative services and programming. Two house-holds get together to produce a micro-nursery or a free-rent studio is given to a gardener as exchange to maintain the premises, a dweller participates in a pedagogical project organized by Casa Familiar for the neighbourhood's children, generating a "Time Bank" for the dweller who in turn can invest it or exchange it for other services, etc.
7. How to make the units affordable? The Non-Profit would manage a series of micro-credits. This is not only achieved by inserting the notions of "bartering housing", "time banking", sweet equity,neighbourhood collaboration and exchange, but in a more "official" economic process, it is achieved by breaking the loan structure allocated to large affordable housing projects – out of tax credits and other subsidies – into small pieces that can be distributed throughout the community:
8. The construction of housing units at the back of parcels would support the activation of a network of alleys into a circuit of pedestrian and landscape corridors.
9. Some of the amenities included in these community housing projects would include small, social service infrastructures as support systems for non-conforming community uses, such as informal public markets and gardens.
10. The guidelines proposed by the AHOZ could be distilled into a series of new relationships, so that private developers who want to benefit from the higher densities proposed by this overlay zone would have to comply with the social and public programs that accompany these developments.

123 of the total 153 plots interested by this zone are apt for increasing their density according with the AHOZ, while the survey recognized that illegal constructions occupied up to 50% of the total plots, showing the need to make policy and analysis on the built tissue of the city, and to update the codes as they do not respond to the real needs of the neighbourhoods.

Another project inscribed into the 2006-2011 San Ysidro plan is the "Living Rooms at the Border", the rehabilitation of an old church to improve and create new dynamics for the revitalization and coexistence of the neighbourhood, through the construction of fifteen houses for rent. It is a good example to understand the theory behind the AHOZ plan, as it includes several complementary solutions to answer different and changing needs of the neighbourhood. Open facilities, like collective kitchens and urban furnitures are built to let the neighbours to organize several kind of activities and meetings. Four different typologies are developed, for young single mothers (type 1), duplex for artists (type 2), two independent flats that share collective functions for large families with grandfathers (type 3) and small flats for people collaborating with the neighbourhood (type 4). These houses

are not rent only for money, but are also offered in change of the participation in the neighbourhood management and social programs for the community. The aim of the project is to look for changes in urban politics that will benefit all the neighbours, taking advantage of unused densities and moving from the "number of houses for hectare" to the "number of social interchanges for hectare", which let the neighbours to define their surroundings according with their particular needs, and reach their right to live the city (Anderson 2011).

4. CONCLUSIONS

Giancarlo de Carlo said in the sixties that "Architecture is too important to leave it alone to architects", proposing a participative design model where horizontal dialogue let the reduction of fails thanks to a levelled management of power. In the same years Yona Friedman was developing manuals for selfplanning, due to the difficulty of architects and clients to understand each other. These models didn't consolidate, being only experiences that were looked at as innovative, but showed the necessity to dialogue with the neighbours, as a relevant social act. While in many other areas the Do It Yourself (DIY) model developed during the crisis period, our field has experimented the much more richness Do It With Others (DIWO). The case studies here presented show the possibility to create new models of urban transformation that respond to the needs of citizens, but also to the new social responsibility required in the new productive model of our society. They also reflect a new way to plan the city, where co-participation and new ways of use and management of public spaces are possible. It is also the reflection of different ways to act: informality, cohesion, subversion, contamination, hybrid responses, transgression and appropriation are revalued, and not considered as negative.

If we consider the voids existing in our cities as opportunities to develop in times of scarcity, it can be easy to impulse a change. We have always to remember that architecture has to satisfy the citizen and to be useful, something that during the last years moved to satisfy the real estate companies, leaving the people as passive actors. As many of these experiences included in their projects manuals of use for the citizens, they also show that the change is in the hands of the neighbours, and can be accomplished without the strictly condescendence of powers. The right to configure the city, presented at the beginning of this paper, is now easier to accomplish than ever, matured after many claims of citizens related with basic rights. Architects have at the same time recognized these opportunities, and while during the bubble expansion period followed the orders of these strong powers, they have realized that joining the neighbours at the same level in participatory activities offers great new possibilities.

What is again up to date are few questions that Yona Friedman formulated in the Sixties, that these experiences answers alone, also if it is important to remark and remember, in order to have always present the risks that forgetting them can generate in our built environment. They also serve as open questions to close this work, in order to make everybody to reflect on the possibilities that architecture offers when correctly developed (Friedman 2009).

Who has the right to decide in architectural affairs?

Architecture has to modify things to adapt them to men, or has to transform the way men use these things?

1. See the ICAHD experience in this same chapter.

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Pablo Campos Calvo-Sotelo

UNIVERSITY IMPLANTATIONS AS FACTORS OF TRANSFORMATION. TOWARDS EXCELLENCE OF URBAN ENVIRONMENTS AND PROMOTERS OF INNOVATION FOR THE POST-SPECULATIVE CITY

PREAMBLE: EDUCATION, SPACE AND CITY

The quality of the University is directly connected with the quality of its urban & architectural spaces. Any educational environment, especially the one involving elements of Architecture, ought to express a special engagement to its specific natural, social and urban context. Some principles are critical when planning a University precinct, to follow coherent guidelines before starting any campus design. As a first approach, the interference of foreign styles improperly understood should be avoided, in particular those whose origin, essence or formal display would not fit into local cultures (Chaabane, & Mouss, 1998).

Universities have the essential mission of providing an integral formation for human beings. Analysed throughout history, this university mission has also included the raising of good citizens (Nussbaum, 1998). With all these convictions in mind, the key objectives of higher education have to be hosted in an adequate urban and architectural body. This requires special emphasis on the proper arrangement of the physical spaces in which the important enterprise of human formation has to take place.

University architecture incarnates an interactive dialogue between buildings and individuals. Its planning process has therefore to exceed a mere provision of available spaces. The clear artistic intention of the design of the university complexes must be a mandatory requisite, which entails that open spaces are as taken in account as much as the built volumes (Gaines, 1991).

The conception of an educational nucleus must bear a special commitment to its own social, natural and urban environment. Thus, the organisation of the built environment must be deeply rooted in a vocational symbiosis

between the university and its urban context. Such a symbiosis provides excellent opportunities for the conception of post-speculative cities.

General urban & architectural features of universities in Spain

The following aspects could be singled out in a description of the general features of the way institutions of the Spanish university system are physically implanted in the territory and the urban areas at present.

- Universities are essentially linked to the city, although in the 20th century a dichotomy had developed between integration and segregation.
- Following its historical tradition, universities have been located within the old city fabric over centuries. It was during the second half of the 20th century when displacements to the outskirts of cities began. This meant the beginning of some tension between integrated and segregated precincts.
- Universities do not respond to a unique model, they are both complex and diverse
- From a global point of view, universities respond to quite a large variety of patterns in their physical implantations. There is often a direct relation between the institutional profile of the university and its urban and architectural diversification.
- Tendency to compact and macro-dimensional buildings

As a kind of historical heritage of the ancient "Colegios", contemporary universities in Spain (and Europe) show a tendency to make use of big architectural structures, where quite a large number of functions and spaces are hosted. Besides the construction benefits of these typologies, they introduce some kind of impersonal scale, which it makes difficult for students to identify with the "house" where they acquire and share knowledge.

- Return to the interpretation of the cultural memory
- In the last three decades, there has been a sound policy of moving the university facilities back to the heart of the cities. This has implied the formulation of neat proposals of innovation in relation to the post-speculative city.
- Spanish universities are not properly adapted to the European Higher Education Area (EHEA)

In spite of the years passed since the EHEA was iitiated, the physical implantations of universities have not carried out the necessary processes of adaptation of their buildings and open spaces to the paradigm shift that is inherent in the EHEA.

A model for transformation of universities: the "educational campus"

New urban and architectural spaces for universities should be conceived akin to the innovative proposal of the "educational campus", designed toward the achievement of excellence. This global concept tries to link education, architecture, the city and nature. The physical spaces designed to host education & research activities must try to go beyond acting as a mere built context. They must accomplish the goal of becoming "lessons" in themselves. Amongst other values, the design of physical spaces should look for the transmission of virtues, such as the ten principles of the "Educational Campus" (Campos, 2010):

First. -Utopia and integral planning. Inspired by the energy of utopian visions, universities must create a "sense of place" for the campus users, and their performance as "learning communities". If there is a lack of identity with "place", the feeling of "belonging",

of being supported in both study and research, evaporates.

Second. - Community of learning and research. (Gabelnick, 1990). A sense of close personal contact is essential amongst students, faculty and staff. Transmitting human values within the global task of integral formation, an ad personam relationship is needed. In such a context, architecture assumes an extreme importance, in promoting that direct contact which is inherent in human relationships. (Boyd, V., & Hord, S.M., 1994).

Third. - Achievement of spatial harmony. This feature is closely connected to sensorial and psychological perception, and to the requirement of arranging masses and voids at a human scale which must be a sign of identity of institutions devoted to higher education.

Fourth. –Affective and intellectual embracement. While performing such a condition, teaching attitudes are reinforced, and learning occurs in a more effective and motivated way. This implies the creation of a built allegory that reflects a "mental reference type" closely aligned with contemporary values and attitudes in education. Well-designed urban and architectural spaces provide those values, being of high relevance to the formation process.

Fifth. - Nature and Art. Incorporating both as active cultural values, the educational spaces experience a sound enrichment. This conviction implies a sound sensitivity of urbanism and architecture to the environment. A well-designed overall architectural framework is a powerful medium for integrating the individual with the natural context, as well as with the urban frame.

Sixth. - Image and accessibility. It must be taken as a prerequisite that universities project themselves in a sensitive way towards their contexts. This implies paying attention to local culture and traditions. As a consequence, the design of all university spaces should project a suitable interpretation of the locality's heritage and multiple cultural values.

Seventh. - Sustainability. An university must be exemplary in the application of systems and techniques associated to that value. A built environment must a necessary factor among the conditions present at a particular site. If architectural elements are appropriately adapted to the global context, the advantages achieved in terms of sustainability, are considerable.

Eighth. -Memory and avant-garde. The design of educational precincts must incorporate an acknowledgement of past educational urban and architectural paradigms, harmonised with a commitment to avant-garde artistic ideas. Together with that, sharing knowledge with other cultures (building "bridges" between educational architectures) can be an outstanding tool to plan innovative changes in the universities of a particular country. (Campos, 2006).

Ninth. - Relation between university and city. Increasingly, universities are being required to be innovative as much in laying down new pathways of transformation as in defining new procedures for increasing synergy with society, whether through spatial solutions, facilitating a vibrant interaction of campuses with their social and economic contexts, through raising scientific output, or stimulating economic growth. (Clark,1998). Overall, the presence of educational precincts is a key instrument to plan alternatives for the post-speculative cities.

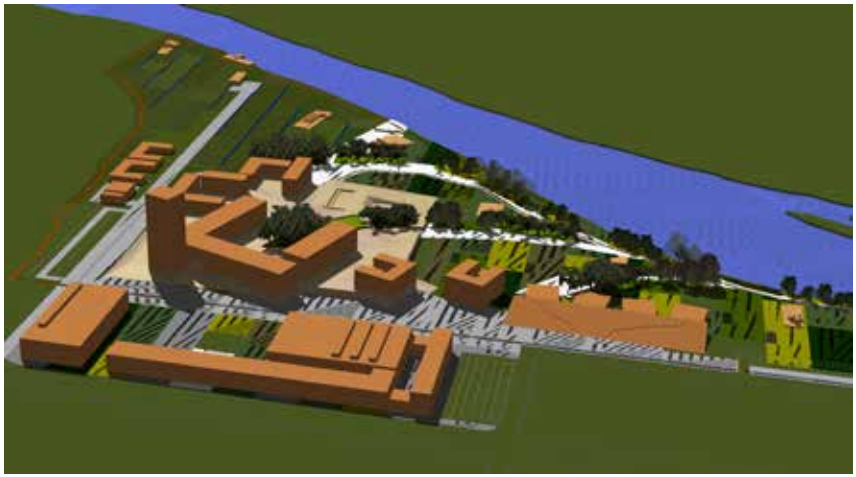
Tenth. - Innovative teaching amd learning modalities. The incorporation and enrichment of university spaces that result from the activation of innovative teaching and learning modalities is a very strong strategy to increase the quality of the whole process of human formation. Besides, it can be of extreme usefulness when adapting universities to the EHEA.

Proposing these Ten Principles of the "Educational Campus" has the purpose to offer a sound instrument of planning for universities, under the acknowledgement that their presence and development can provide very valid alternatives for the post-speculative cities.

UNIVERSITY AND HERITAGE: EVOLUTION TOWARDS EXCELLENCE IN THE POST-SPECULATIVE CITY, PROJECT CASE STUDIES

New Campus of Villamayor - University of Salamanca, Spain (2005)

In 2005, we received the commission to design a Master Plan for a new Campus. The emerging precinct would be located in the adjacent municipality of Villamayor, along the bank of the river Tormes. The distance between the campus areas and the core of the historic city of Salamanca is shorter than 2 miles. The Master Plan defined the basic guidelines for one of the most important projects under development in Europe. One of the most relevant features of this future complex is that it would imply an extension of the University's existing buildings, which will remain as a world heritage in the old town of Salamanca, where they have been located since its foundation in the year 1218.



1. Villamayor Campus – South Area

Regarding the student population, the idea is to have a low-density campus in the future, designed to host up to 1,500-2,000 students (in @005, the University had 32,000 students and 2,300 faculty). From its early development, it will be adapted to the EHEA recommended parameters (25 students/teacher).

The design of the Campus consists of three academic areas, connected through a linear botanical park along the Tormes riverside. The whole precinct is divided into three main areas: the South Area (Agronomic-Environmental), the North Area (Communication & Arts), and the East Area (Scientific Park). There have been several sources of inspiration. One of them is that the project develops innovative interpretations of traditional university and city typologies, like the "plaza" and the "cloister", which define medium-small scale areas to foster human contact within a properly scaled built environment. Another conceptual foundation has to do with the fact that the town of Villamayor has a strong tradition of sandstone quarries. The campus refers to the sandstone expressiveness (blocks) and extractive techniques, in order to design the assembly of architectural volumes. But not only architecture characterises the complex, nature plays a critical role as well. The Tormes riverbank, together with the indigenous vegetation and cultivations are integrated into the university campus as spatial elements of a unified scheme. Along the mentioned riverbank, a large botanical park will include two miles length of indigenous trees and plants interacting with the university, architecture and life.

The implantation of the new campus will give a transcendental role to learning, going

beyond the limits of the academic area. The basic circulations are to be pedestrian, bicycle and river navigation. Public transport is recommended for the communication with Salamanca (two miles) and the small town of Villamayor (one mile). Within its boundaries, the campus will generate strong interaction, fostering participation of all kinds of members of the academic and urban community and thus transforming the social, urban and economic dimensions of the adjacent town (the scientific park, which will act as an engine for economic growth).

Regarding other principles, the Villamayor Campus was conceived as a sustainable complex, designed according to principles of bio-climatism, orientation and ecology values, which will create a healthy environment for university life. The Tormes river water will be recycled for campus use. Overall, the "Educational Campus" in Villamayor brings an outstanding opportunity to create a modern, deeply rooted and sensitive new academic space: the future of this eight century old university for the next decades. In such a challenge, architecture is called to play a transcendental role in education and research, the first lesson to be received both by users and visitors.

Sustainable Campus – Madrid, Spain (2007)

The Spanish energy company Iberdrola organised a competition in 2007 for the design of a project, a campus dedicated to the corporate training of its employees at San Agustín de Guadalix on the site of a former learning centre on the outskirts of Madrid. Our project's philosophy was based on two aims: first, to create an "Educational Campus", where architecture and nature serve as cultural elements, conveying values of environmental harmony and quality; second, to generate a sustainable urban and architectural environment using renewable energy to promote sustainability and represent the identity of the company.

As a basic leitmotiv in the conception of the complex, architecture is expected to show people how to relate to nature, transmitting ecological values and environmental sustainability.

The project was conceived at a human scale, in both the educational and functional sense. Any place on the campus is a potential site for meetings and teaching and learning events. Besides, the complex gives pedestrians priority over wheeled traffic.

2. Iberdrola Sustainable Campus – Global view

The Iberdrola campus project incorporates basic geometric shapes. They have been chosen according to the following reasons: to encourage appreciation of the visual meaning in the different volumes, and to associate each shape with types and uses of renewable energy. A section dedicated to the sun will be characterised by rectangular shapes (a symbol of stability and passiveness), a section devoted to water will take the form of triangles (representing movement and instability), while a section for wind will incorporate circular shapes (evoking dynamism).

Regarding nature, native vegetation (sustainable and ecological grass) would be planted in the general garden areas at minimal cost (EURO 200/hectare). Pools, in addition to offering visual relief, will contribute to the campus with a fresh breeze and serving as a storage cistern to supply the complex and for use for fire fighting. Ecological binding materials such as recycled powdered glass will cover paths and road surfaces.

The architectural design pays special attention to the roofs of the buildings (the so-called "fifth façade of architecture"). For sustainability, ecologically green types of roofing and storage will be combined. In terms of structure, a double skin system with wood on the outside and glass on the inside would be used, along with adjustable timber shutters sliding on metal frames. The shutters would be made of either natural coloured bamboo slats with an oil finish (a highly durable, minimum-maintenance ecological material) or cedar wood autoclave treated with fungicide and insecticide (also low-maintenance).

Educational Research Campus – University of Alcalá, Spain (2008)

In 2008, the University of Alcalá commissioned us to develop a master plan of the new campus, situated in the northern periphery of the city of Alcalá (a town located 20 miles east from Madrid). The precinct (870 acres) was located in areas belonging to the very attractive geological terraces of the river Henares. Due to the fertility of the soil and the direct relation with the natural and agricultural environment, the campus represented an enormous strategic zone of unaltered nature able of hosting landscape projects. Those projects could help to transform the site under the principles of quality and sensitivity towards the cited landscape.

The demand of carrying out a planning document (master plan) for the external campus was launched as an urgent need to gain efficiency in the use of spaces and resources, as well as to reinforce the atmosphere of a community of learning. Besides, it was one of the aims of the institution to facilitate a sufficient positive interaction of the university with its economic and overall social context.

Besides all these opportunities, the university demonstrated an intense demand of renovated spaces for research and development, together with some new buildings for academic purposes.

The Master Plan that was designed in 2008 under the supervision of the Technical Office of the University of Alcalá, tried to accomplish coherence between the environmental quality improvement and the need of fulfilling the new university function and space requirements. Together with these basic aims, the planning document included some criteria to improve the adaptation of the different spaces to the new EHEA.

One of the basic aims of the master plan was to provide the external campus with a solid spatial character which corresponds to the relevance of the University of Alcalá, one of the oldest in Spain, as it was originally founded in 1293, and later re-founded in 1499 by Cardinal Cisneros as the first "University-City" ever conceived as a complete entity in history.

Secondly, the planning process intended to transform most parts of the existing precinct (south area) providing solutions for the punctual functional and image problems identified, and defining opportunities for sound development. As new uses it will incorporate a new central library (which will adapt an existing old helicopter hangar for this purpose) and a dining facility. The new library would fulfil the requirements of the innovative Resource Centres

for Learning and Research, which are being inspired by the European Higher Education Area. The planning of this south area would also include a reinforcement of the "academic axis", where most of the faculties and schools are aligned.

As a third objective, the master plan ought to face the design of the new areas that were located in the north area of the campus. As this was conceived as a kind of semi-autonomous part of the precinct, the guidelines of the composition were based on the principle of conceiving an environmentally advanced campus, following as well the main decalogue of the concept of "Educational Campus".

As a consequence of such an orientation, the precinct was meant to show a sound commitment to nature, as well as being flexible in its expected evolution through time. This north area of the complex would be structured by an emerging "research and environmental axis", whose direction would be almost orthogonal to the mentioned academic one. The two axes were designed to meet in a sort of "kneecap", which would be in charge of hosting uses of research and development.

The "Research and environmental axis", which consisted of a long and rectilinear element, came to organise the north area through a progressive increase of building density, dedicated to the main functions assigned to this north area of the whole campus. The core of this new axis will be occupied by a big linear park, where nature and landscape are expected to play a key role. The described linear scheme would run somewhat parallel to the natural unaltered areas (slope which brakes the two geological terraces) towards the east, where the campus finds its limits, at the existing railway line. This large rectilinear model would host the new architectural components of the scientific park extension, together with university research and development facilities. In order to achieve all these goals, the composition of the project establishes a system of modules, as a recommendable urban strategy to enable a flexible and progressive process through several phases or stages.

3. University of Alcalá Research Campus – General plan

All the new areas of the campus were to be ordered following the criteria of the master plan commissioned by the University of Alcalá; those criteria were applied in the design towards the accomplishment of the mission that the spaces built together by architecture and nature involve themselves in an active way in the tasks of experience, study and research. And, overall, the master plan conceived the transformation of a big urban peripheral zone that would contribute in a critical way to the development of a city where knowledge should be a clear alternative to the current post-speculative situations of many metropolises.

Educational Campus - University of La Laguna, Spain (2009)

The University of La Laguna was founded in 1792. Its implantations are located in the Spanish Canary Islands, mostly within the area of La Laguna, a historic town seven miles west from the capital, Santa Cruz de Tenerife. The main precincts of this university are placed within the urban fabric of the town (San

Cristóbal de La Laguna), whose magnificent historic district was acknowledged by UNESCO as World Heritage in the year 1999.

4. University of La Laguna – Central Campus with the new Resource Centre for Learning and Research

After a long period of complex evolution over the last decades, the university has been planning its next future, in terms of physical implantations and territorial structure.

For this purpose, the university commissioned us to develop a strategic plan and a master plan in 2008-2009, choosing the principle of the "Educational Campus" as a global inspiration source for the design of the future evolution of all the university spaces. This brought an outstanding opportunity to create a modern, deeply rooted and sensitive new series of academic spaces.

Amongst the layout of other areas, the University of La Laguna planned the requalification of its central space (adjacent to the Plaza Cruz de Hierro). The Institution decided to renovate the great open core ambit to achieve a sound transformation of this traditional location, by removing the current parking lots and redesigning the space as a new pedestrian environment (enclosing a new botanic garden). A new building was planned to be erected, Resource Centre for Learning and Research, to reinforce this urban nucleus. The outcome of such a modern transformation will be the birth of a big urban and academic agora, which will exemplify the close union between the university and city.

CONCLUSIONS: SOME RECOMMENDATIONS FOR CAMPUS PLANNING

Education is a spatial act; this conviction must be noted to fully understand the decisive role that architecture and cities have in the correct conception of spaces dedicated to the formation of human beings (Alexander et al., 1976, Di Bitonto & Giordano, F., 1995).

University urban planning and architecture provide the frame for an ever-renewed connection between buildings and individuals, which goes beyond the mere supply of available built areas. (Orr, 2002)

Developing a masterpPlan for a campus is a redoubtable undertaking (Turner, 1984). The principle of human scale must be compatible with organising the urban layout of a very large site. The "Educational Campus", which emphasises both the spiritual and the ideal, can help universities in their unceasing search for excellence, offering post-speculative cities new opportunities for coherent and solid transformations. The emerging concept of the "Educational Campus" was assumed by the programme "Campus of International Excellence", developed during 2009, 2010 and 2011 by the Spanish Ministry of Education (Campos, 2010), (Campos, 2011).

Finally, it is recommendable to elaborate a list of criteria of excellence, in a general understanding, whose application to each campus project must end up with detailed suggestions in each case. (Nair & Fielding, 2005) Among the most relevant criteria are:

- University spaces must bear a commitment to their own social, natural and –especially- urban environment: the place
- The clear intention of the complexes must be a mandatory requisite and open spaces should be as essentially taken in account as the built components.
- University design must be conceived under integral planning; when possible it is of high interest to plan it to correspond to the city General Plan.

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DIGITAL SOCIETY AND SMART TERRITORIES

INTRODUCTION

At present, the massive use of information and communication technologies (often called ICTs) is changing everything faster than ever. We are living in a new revolution era that will bring us from the industrial society, characterised by the intensive consumption of energy to the digital society which uses information as a power to transform.

These changes will affect every single aspect of our lives and, in the near future, no matter what our profession will be, we will need to understand, deeply, how to adopt and use these technologies.

Our ability for adopting digital services will be crucial in the path to a successful professional career, even if our personal way of life is not very "digital" we will work, with and for digital citizens, and digital companies.

It is not an option. We need to digitalise as much as we had to mechanise in the past, because it will help us to build a better world, and improve people's living conditions.

It is important, therefore, for everyone to understand what lies beyond this technology, and have a good understanding of what to do, and how to do it to incorporate these technologies in our field of expertise.

As we will look forward, collaboration between professionals will be key for creating value in the future. For a better collaboration, a closer look at the ICTs and a better knowledge of the digital world could be useful.

We will try to explain, using simple words, the principal trends behind this "techy" invasion:

- The adoption of the smartphones as preferred and "never forget at home" every day multi tasking device
- Cloud computing or the democratisation of the powerful data centres and super computers

– A new hyper-connected world thanks to the machine to machine communications technologies (m2m) and the "Internet of Things"
– Big data… or should we say… the big brother? The ability of knowing everything of everyone, every time
– Open Innovation as the new way for research and development, for making business and, may be, the opportunity for a global collaboration at the next stage
– The social Internet. or when the world becomes our neigh borough

Understanding this, we will try to answer some questions like: why are digital services growing and growing with no end, and what can we expect in the future?

And we will anticipate changes in the way people will work, enjoy and behave.

And finally, this knowledge will help us to discover new ways to face our own professional activity, collaborate with others and find ways for creating real value for people.

Let us begin an exciting journey to a digital society.

TRENDS THAT WILL CHANGE THE WORLD

Smartphones for all

A smartphone is an amazing device:

– Is an always on (permanently connected to the Internet) device
– It brings to you a remarkable process and storage capacity
– It is affordable for an increasing number of persons
– Using it is every day Is becoming easier.

Internet everywhere allows people to be permanently in contact with virtually anyone else (or anything), anywhere, any time. The implications of this are huge, and the number of people using this technology is growing faster every day.

No aspect of daily living is not affected by the adoption of this relatively new device.

We left Christmas Cards for email, email for the texting (SMS), texting for WhatsApp ….and this only took a few years.

Some devices are disappearing, simply because the smartphone is replacing them. The wired phones, the buzz clocks, navigators, photo cameras, wrist clocks … What do you think will happen to this device in the next ten years?

New business models are coming. In Kenya, most people (over 70%) use their mobile phone to pay every day because mobile payment arrived everywhere in the country before bank accounts and credit cards. This is happening just now.

We are changing our buyer habits. Now, you can compare prices and features in the store and make a decision "on the move" managing information from the world. The present store model must change.

Think of the crises of the music distribution model. Or the mass media changes… Amazon, a company that didn't exist in the 80's recently acquired "The Washington Post". This was unthinkable a few decades ago.

We are living a critical situation for business and institutions. Like in a glaciation period for the biosphere, only those individuals who will adapt to the changes will survive. It is evolution. It happened before. It was called the industrial revolution. What we are living now is a digital revolution.

So, we need to adapt.

Cloud computing

Today, if you want to be "in", it seems that everything must in the cloud. Your contacts, photos, music, applications… Yours entire life is there.

It makes sense. If you put your data in the cloud, you will access it from everywhere, using different devices and, someone (anywhere, in the cloud) will store it there and take care of it.

But, what is cloud computing? In simple words, it consists of moving the data processing and storage capabilities of a computer system from physical machines to virtual machines that are accessible from the internet. Instead of purchasing, installing and maintaining a computer system (including many software applications), you simply need to connect to a server that emulates the functionality of a physical computer system. Obviously, a virtual machine is composed of physical machines, but the difference is that in cloud computing, many powerful systems aboard the internet are working together to deliver a service that emulates the functionality of a system much more simply. When you are not using your service, these powerful systems can work for other clients. So, cloud computing is a very efficient technology.

Just as you usually do not have an electric generator at home because there is a reliable network you can connect to and obtain energy, with a reliable internet service you do not need to bring your computer, or a hard disk or complex software installed on your devices to enjoy powerful digital services.

This technology is changing the rules of the digital economy. In the past, if you needed to deploy a data processing centre (DPC), you needed adequate facilities, electric supply, expensive informatics systems, highly specialised technicians… patience, time and money. Now, you can hire a DPC in minutes with some help of a middle rank technician.

The production costs of the digital services have reduced dramatically over the last years. That is what is behind the explosion of digital services and the proliferation of apps.

Cloud Computing brings:
- agility
- simplicity
- economy
- flexibility
- globalism

But cloud computing must be managed with care because of some risks:
- security (of the information)
- law & regulatory considerations
- continuity

We need to adapt and some technologies, like cloud computing, will help.

Internet of things

The next revolution of internet technologies will come through things. Imagine a world in which everything is connected to the internet. So, virtually, it would be possible to read, control or program any device, everywhere, every time.

The set of technologies used to allow and automate communication between devices is known as the internet of things or M2M (machine to machine communication).

As it happened with the internet of people, the internet of things will not be radically influential until open protocols and services will be developed.

It does not mean that M2M is not relevant currently. It is, but I predict it will be more widespread in the near future. Although there exist many devices managed remotely today, we do not know how to communicate with them, unless we are the proprietors. This will change in the future. For example, the protocols for programming an air conditioner unit will be known by the community of software developers. It does not mean that everybody on the internet may program or read my air conditioner unit. Just as you need a permission to publish on my wall in Facebook, you will need me to grant a permission to interact with

my things. But the fact that all devices will be connected will change the rules and create new services, new business models and opportunities, new organisational and politic relations…

For now, M2M technologies are bringing growth, efficiency and transformation to many different sectors:

– In e-Health, many patients are being remotely supervised by their doctors reducing travels, making control more efficient and reducing costs of the public healthcare system
– Most of the energy meters are controlled remotely allowing energy suppliers to manage their electricity production better
– Vehicles of the future will be connected and monitored, thus increasing security with systems like e-call and improving the maintenance programs offered by car vendors
– There are many other sectors currently using intensively M2M technologies: electronic payments, vehicle fleet management, traffic control, consumer electronics…

These vertical applications are transforming sectors of activity and creating new business opportunities in each of them.

But, what will happen if you could manage and combine the information of different devices to offer new services and applications? Imagine you connect your GPS navigator with your remote air conditioner control. It would be possible to switch on your air conditioner when you were close to home. Imagine you combine this information with the measure of a thermometer to set up a comfortable temperature dependent on the weather.

The European Union is promoting the FI-WARE project which aims to develop the future internet. This is a step forward in the evolution of the internet that will create transversal platforms to facilitate information exchange between devices over open protocols.

An example of an application of a transversal platform like FI-WARE is a smart city, a city that uses ICTs to connect all the sensors and control devices installed in the city, making smart control of everything possible. Some examples:

– Irrigate gardens when the ground humidity requires it, not wasting water when it rains
– Collect the rubbish when the containers are full
– Switch on/off the lights depending on transit condition
– Establish parking dynamic rates or tolls depending on the contamination index
– Dynamical traffic control and public transport system management
– Allow citizens to look for parking places remotely from their navigation applications
– Open all this information to the community to support the creation of new services

All these things are currently possible. In fact, there exist real cases.

Open innovation

This is a crucial concept for a reasonable understanding of the digital society.

We could define open innovation as the strategy of innovation based on the open collaboration between different players to develop complementary solutions. Open means expose all the information to third parties to facilitate the creation of value added solutions.

Open innovation is the strategy behind the success of the smartphone ecosystems.

Why are people adopting smartphones?

Because you can communicate with them, and can use many exciting applications at a reasonable cost.

Why are there many different applications?

Because smartphone operative systems developers opened their systems to third parties allowing and supporting them to build

applications. Application developers benefit from this opening, creating applications to shell, and the owner of the operating system benefits from increasing the value of his software for the clients by increasing sales. More applications, more customers, more licenses sold, more application developers interested. It is a virtuous cycle that is generating value to the digital economy. More than 10 billion $ in 2012 and thousands of new jobs. 80% of the companies dedicated to the mobile application development created employment in 2012.

To create value in the digital world you need to combine the expertise and assets of a variety of players:

- "Real" service providers like hotels, entertainment, electricity, insurance, credit, software, healthcare, education …
- Digital service providers like music streaming, TV platforms, cloud service providers (email, storage, application stores)
- Network connectivity providers like operators
- Network platform providers
- Devices providers like Smartphone manufacturers, tablet, PC's, DESCO's, TV's, navigators…

All of these players must collaborate in an open way to maximise the value generated. Openness and collaboration are capital in the new economy.

It's not just about competing. When you are creating innovative services it is more important to develop the market than to compete to win a market share in an underdeveloped market.

Multidisciplinary profiles will be demanded in the future by the digital economy.

Social internet

The internet has become a global meeting room through the social networks that are changing social relations. Social networks are the preferred channel for an increasing number of persons. If Facebook was a country, only India and China would be more populated.

As the social networks are winning influence as mass media, other institutions are decreasing their power. Every day is more difficult to control your reputation through publicity or information campaigns.

People are more informed, may compare and contrast any information and can collaborate in an easier way than ever. Citizens are demanding more transparency and participation.

Have you ever heard about Politic 2.0, crowd funding, open educational resources…? Be curious, these kinds of movements are breaking rules.

Big data – open data

Think of everyone being connected to the internet, communicating through and using a wide variety of digital services. Think of those people who are broadcasting their thoughts and experiences. And think that all this information is somewhere in the cloud, stored in that kind of magical mega computing systems.

And when you notice that, not only people, even machines could be connected. Your car, your smartphone, the waste container, your conditioner air, your TV, the fridge…

Has someone thought how to use this information? Of course, the answer is yes. Many people with different purposes:

- Government. For your sake. What else?
- e-Commerce companies for offering you better services fitting your needs and interests
- Carriers, banks and other service providers that could use this information to characterise people's behaviour

It is possible to make a profit from this information.

Technically, big data is the technology able to manage, store and process (sometimes in real time) huge amount of data with the purpose to generate value. Open data is a policy than an institution may adopt, defining rules and protocols to make data public.

We are now talking about third generation systems. It means billions of users and millions of applications in a single platform.

Expert systems (meaning artificial intelligence systems) may access almost any imaginable information to automate decision makings.

There are many applications of big data:

- Analyse moving patterns of mobile phones to offer real time traffic information
- Identify threats
- Efficient resource management. For instance, smart electricity supply
- Situational marketing
- Socio-demographic knowledge

But there are remarkable risks to deal with:

- Privacy lose
- Law uncertainty
- Moral conflict.

What happens when you put it all together? Watch http://youtu.be/xca9v4zjV4s

CREATING SMART TERRITORIES USING TECHNOLOGY

Now is the time to link the real world with the digital world and discover how to integrate all this technology in an urban strategic plan.

First of all… Why use ICTs in the city? Because they can help get over many of the issues inherent in urbanisation and because the opportunity to develop new economic sectors based on digital society.

It is estimated that in 2007 the urban population overtook the rural one for the first time in history and by 2050 70% of total population will live in cities. This is a demographic challenge, putting pressure on public transport and mobility management, lighting, waste management, water/energy supply… a nightmare if we are not able to increase efficiency dramatically.Sociologic changes due to the adoption of technology. People are changing the way they live, work, enjoy, and communicate adopting these technologies at high rate. People are asking governments for more information, more influence, more transparency, more democracy… The city and its services cannot turn their back to this reality.

The city is plenty of connectable devices and people communicating and making decisions in real time. Possibilities and expectations are multiplying.

A model for a smart city

Cities were created around meeting places for interchanging goods and ideas. If I had to define a city I could say it is an open space for human iteration and collaboration. The purpose of the city is to serve inhabitants by providing spaces and facilities to live, commerce, share ideas and develop collective projects. It serves to articulate society.

Like cities, internet technologies are open (accessible for almost anyone) and facilitate collaboration. A simple recipe for success in attracting people.

To translate these concepts (openness and collaboration) to the ICTs of the city it is necessary to define a model in which:

- anyone may connect with anyone else (or anything else, remember m2m)
- there are protocols and rules known by all
- data generated by the city management are accessible by and to everyone

In my opinion, the ICTs of the city may not consist of a series of closed systems for partial management. The data collected by one system

should be available for others and should be public. Open to the public does not mean not ruled. Obviously, there must be laws and rules guaranteeing privacy, safety and respect of people rights. But, data collected from the city activities (including the activity of citizens) are a valuable asset that can be used to generate value for people and improve their lives.

I believe that data, when aggregated and anonymous, should be propriety of the community and may not be private. When personal, each one decides.

Strategic city planning must consider ICTs as an essential infrastructure as important as any other. Even more if you think that ICTs are used to interconnect infrastructures and services with their managers and users.

Let us have a look at the main elements of an open and collaborative ICT model:

- Network connecting different elements must be open, and the opener of anyone is the internet. So, why not the internet?
- VPN (virtual private networks). These networks are built over the internet for sensible services
- ICT Solution providers should use cloud technologies
- A few ICT infrastructures maybe physical to guarantee service continuity, protect sensible data or any other special requirement
- A Control centre must be deployed
- Persons and machines will be connected to this infrastructure:
- Citizens (including their smartphone applications and social networks)
- Devices like sensors (temperature, humidity, contamination, presence, noise…), remote controllers, vehicles, light control systems…

Open protocols and data access policies are critical topics for the management of the ICT infrastructure.

The city government must establish rules to access this infrastructure guaranteeing openness and promoting collaboration. It is essential for the success of this model that these rules fit the interests and needs of all the players.

Public services managers

Waste management, public transport, parking regulation, urban lighting, fire detection, water cycle management, energy supply…

There are many services to manage in a city. Some are managed by public institutions; others may be managed in a public private partnership model or may be delivered by private companies regulated by the government. In any case, the city government is responsible for the adequate delivery of these services. And managers will make efficiencies and get benefits by using appropriated ICT infrastructures and having access to the collection of data retrieved by all devices connected to the city technological platform.

An example of this would be the use of real time traffic information combined with the information of the containers fulfilment status that could make the waste management company assist in programming dynamically optimal routes.

Innovative digital service companies

A city that opens its data to the community of innovative digital companies can benefit their citizens because it is promoting the development of new services and creating new economic activities.

Would you like your mobile phone to get you to a parking place? Be sure that if your city opens data someone is going to offer you this application. Just watch http://youtu.be/ssNLjPIwPGw

Citizens

In a city with an open ICT infrastructure

citizens are best informed and have a chance to participate. They receive better services.

Benefits

The benefits for the city adopting these technologies are:

1. Cost savings and increased efficiency in the delivery of services
    a. Reducing the number of agents needed to control regulated parking places by controlling their use remotely
    b. Controlling electric consumption regulating illumination intensity
    c. Reducing water need to irrigate gardens controlling humidity
    d. Paying services for the results not for the resources employed
2. Economic growth and development
    a. Use digital signage as a publicity support
    b. Better management of tolls and fees controlling traffic
    c. Monetising data generated by the city
3. Better government and planning of the city
    a. Better resource management controlling all variables
    b. Prioritisation of investment depending on the population movement pattern
    c. Better understanding of socio-demographic trends
4. Sustainability and life quality
    a. Time saving locating a parking
    b. C02 emissions reduction
    c. Efficient use of water
5. Innovation
    a. Making the city attractive for innovators

CONCLUSIONS

We are living in a revolutionary era moving to the digital society. It is very important to understand these technologies, be able to incorporate digital services in our professional activity and collaborate with technological professionals (and for them to collaborate with non technological professionals).

ICT infrastructure must be considered as an essential part of city planning and digital services will impact in new designs.

Judith Ryser

METHODS OF MEASURING AND ASSESSING THE SUSTAINABILITY OF URBAN DEVELOPMENTS

IMPLEMENTING SUSTAINABILITY AT THE LEVEL OF THE URBAN PROJECT

Sustainability, discussed in the sister paper in the context of regeneration and gentrification, is a very broad concept and goes way beyond the rescue of the planet. In its broadest sense it implies an equitably shared environment which becomes increasingly urbanised. There are tensions, exacerbated in cities, between the diverse needs and wants of those who use them, residents (citizens, voters), the working population, visitors, transient people, etc., compounded by subjective perceptions of such needs and wants.

1a. ProjetUrbain – Urban Project, David Mangin and Philippe Panerai, Paranatheses 1999, book cover

1b. Site of Projeturbain 2nd phase Lyon 2010
Source: Google Maps

Sustainable development, management, maintenance and use of the city would require a system of government capable of upholding the principles of social and spatial justice to secure an equitable use of cities by all. It would require custodians of the collective good and the public interest, a method of holding decision makers to account, a public participation process which guarantees citizens a say, and third party vetted procedures to share out finite public assets equitably between all stakeholders while keeping the city open to all.

These processes would need to be accompanied by continuous monitoring as a basis for corrective action at the level of sustainable urban management but, most concretely, for sustainable urban projects ('le projeturbain'). Tools become necessary to measure, evaluate and accredit the current state of the urban environment and to anticipate the impact of urban regeneration projects. Criteria for such measures and evaluations tend to take the form of indicators, standards and frameworks. They will be guided by a number of policies as well as influenced by political demands which are

changing over time. At the forefront of current debates in this field are climate change, notwithstanding comprehending sustainable urbanity.

The current state of climate change

Key criteria of sustainable urban development are embedded in the political aim to reduce adverse effects of cities on climate change. They are expressed as targets for CO2 reduction at global and national levels. The implementation of these objectives takes place in the built environment, essentially at the level of cities which translate, and not seldom surpass such targets in their development strategies. The Agenda 21 movements have contributed considerably to more sustainable local solutions.

CO2 reduction targets are one thing, implementing them is quite another. It means specifying operational methods to do so, essentially in terms of mitigation or adaptation of the existing urban fabric or, somewhat less problematically, for new build. Such methods tend to be included in planning policies, plans and regulations. In Madrid for example, CO2 related initiatives are incorporated in the Plan for the Sustainable Use of Energy and Climate Change Prevention 2008-2012, and in London in the Mayor of London Plan 2011, together with subsequent amendments by the Committee on Climate Change approved by the mayor.

In reality, sustainability goals of cities go beyond climate change issues. While they may aim to ease the stress on the planet by reducing CO2 emissions, politically they often focus on more localised objectives, such as less public expenditure especially during periods of austerity, a more resilient building stock which would profit both owners and users financially, a cleaner urban environment with less pollution helping to reduce health costs and to attract foreign talent, boosting the green industry to diversify the local economy or, like in London, increasing carbon trading for the benefit of its financial sector.

Translating sustainability targets into masterplanning

CO2 emission reduction	Overall	Housing*	Transport	Commerce / public sector*	Other
Madrid *CO2 t/year* *(Municipal Plan)*	-728,419	*housing, commerce, institutional: -130,505	-111,631	* industry: -40,283	waste: -437,000 sink: -9,000
(Other initiatives)	-2,604.08	-104.7	- 2,500		
Total	-731,023.08	-130,541.12	-114,131.1	-40,283	-446,000
London Potential savings of Mayoral Group: 133,400 t CO2 (GLA own)	-60% by 2025 -33 m t CO2 pa = -600mt (2007-2025) (UK –60% by 2050). 2004: 15%by2010, 20%by2015, 25%by 2020, 30% by 2025. GLA demands targets for 2012, 2016 and 2020.	(1990 base) = -12.2 mt CO2 (-7.7 mt CO2 = realistic) -39% savings for London total by 2025 meeting level 3 by 2010, level 6 by 2016. Code for Sustainable Homes	-7.1 mt CO2 by 2025 (-4.3 = realistic) -22% saving re London total by 2025	-13.7 mt CO2 by 2025 (-7.6 mt CO2 = realistic) -39% saving re London total by 2025	More than a third has to be contributed by government action to reach the -60% target by 2025. Energy supply 13.8 mt by 2025.

2. CO2 emission reduction targets per key sector Madrid - London
Source: Madrid: Plan for the Sustainable Use of Energy and Climate Change Prevention 2008-2012. London: The Mayor of London. Climate Change Action Plan 2007. Greater London Assembly Environment Committee. Energy Action Group. London Sustainable Development Commission. 1st (and last) report 2003. Energy sub-group. London Leaders 2008, 2009. The London Plan and its Alterations. The Mayoral Group: CO2 emission reduction targets for own emissions.

When proposing masterplans and urban design solutions for specific sites, these questions are relevant and may contradict values embedded in planning regulations and urban design tools. Most importantly, they may neglect 'the right to the city' of those with different values.

One way of objectivising the evaluation of the sustainability credentials of masterplans is to resort to some of the many sustainability evaluation tools which are being developed worldwide. Considering the current slacking of mitigation and adaptation to climate change in the aftermath of the financial crisis, the efforts of the green technology community should be welcome, even if their agendas do not necessarily coincide with global or even local targets of reducing ecological footprints or curbing wasteful use of finite resources.

Masterplanners and urban designers would benefit from using such tools, even when they are not able to measure in absolute terms how sustainable their schemes actually are. Nevertheless, they may facilitate to rank order the sustainability content of masterplans and thereby assist urban designers to discover which aspects are worth improving.

Before presenting some of these tools, it is important to put them into the wider context of 'sustainable development' and establish what it actually tries to achieve, and in whose mind.

The wider context of sustainability targets

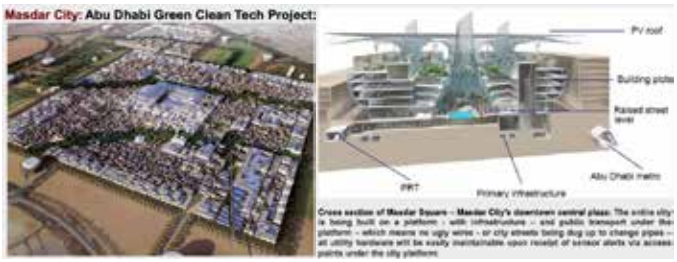
It is important to evaluate the sustainability of urban development within its wider, including spatial context. A project, such as the eco-city of Dongtan in China may be sustainable within its own 'green' logic and technological sustainability criteria. When setting it into the wider context of invading one of three relatively untouched alluvial islands in the Yangtze river by creating infrastructure links between the 20 million population of the Shanghai conurbation and the then yet unspoilt opposite bank of the river, it is clear that the 'green' credentials of Dongtan are unable to offset the unsustainability of such a macro-environmental intervention. This example is chosen deliberately because it has been advocated as an exemplar of sustainable development worldwide. Despite all the global hype, its construction has been abandoned although the infrastructure links have been built, the farmers displaced and ecological damage done to this river environment.

Similar critiques could be levied at Masdar, a high-tech eco-city in the desert of the United Arab Emirates also highly publicised or, at a much smaller scale, at eco-towns planned on greenfield sites in the UK.

All these examples constitute some form of sprawl or 'green field' developments rather than urban regeneration. Dongtan was clearly going to be a new, secluded ex-urbia for the wealthy Shanghai population. Similarly, Masdar was not meant to become a balanced environment open to a mixed population.

3a. Dongtan in its context
Source: http://www.onegreen.net/maps/html/25867.html

3b. DongtanEcocity Arup project
Source: DAC&Cities http://www.dac.dk/en/dac-cities/sustainable-cities/all-cases/energy/dongtan



4a. Masdar, aerial view of model
Source: www2daydy-bau.com

4b. Masdar section across city
Source: http://www.2daydubai.com/pages/masdar-city.php

The English eco-towns, now practically abandoned, were in effect small ex-urban neighbourhoods whose location was determined by the availability of discounted public land. The sustainability of these 'noble-savage' dreams was contested as they were marginal to existing settlements and infrastructure,

5a. UK EcotownNorth West Bicester in Oxfordshire, Masterplan
Source: http://nwbicester.co.uk/masterplan/masterplan-proposals/draft-masterplan/masterplan-overview-what-makes-nw-bicester-different/

5b. UK Ecotown Bicester in Oxfordshire, eco-boulevard
Source: http://nwbicester.co.uk/masterplan/masterplan-proposals/draft-masterplan/masterplan-overview-what-makes-nw-bicester-different/

and likely to become dormitory towns for car-dependent middle class commuters.

How do these projects and their questionable sustainability credentials compare with the speculative building craze in Spain before the bubble burst? The Spanish ex-urban speculative developments are clearly unsustainable and any attempt to retrofit them with sustainable micro-development technologies may not be able to reverse the ecological damage they have already inflicted. In their current stage of abandonment there is little danger for them to become gentrified, and without a massive turnaround they may simply remain ruins before their time. It may be more expedient to direct finite resources to urban environments in need of regeneration, such as the EUSS13 site of Delicia - Mendez Álvaro- Abroñigal on the fringe of the inner city.

These examples confirm the importance of measurement tools capable of assessing projects according to longer term sustainability criteria in a wide context when deciding on investment strategies or granting planning consent for them.

6a. Delicias site Madrid
Source: http://nwbicester.co.uk/masterplan/masterplan-proposals/draft-masterplan/masterplan-overview-what-makes-nw-bicester-different/

6b. Google map of the Delicias area in Madrid

MEASURING SUSTAINABILITY

"You can't manage what you don't measure" the City of New York affirms in its report on the state of its environment. Therefore, there is a need for the planning system to incorporate some means of measurement and evaluation, together with a process of continuous monitoring to assess the effectiveness of sustainability targets and their implementation. This is a complex matter. Achieving optima at one level, for example the building, does not necessarily mean an optimum at the level of neighbourhoods and their specific micro-climates, and even less so at the scale of the city as a whole. In the light of its practical experiences at various levels of operation in many parts of the world, BioRegional makes this case strongly in its "One Planet Living Principles".

The energy and environmental characteristics of buildings, urban transportation, workplaces, blue-green areas and the spaces in between are extremely difficult to grasp in reality, or even to model, especially when taking account of the actions of those who use them. Aside matter and space there is also a time element which changes the urban fabric as well as its uses and needs to be factored into such an equation. For BioRegional key to all this is human behaviour and how to foster change toward less profligate waste of resources. This is why it emphasises sustainable living rather than sustainable environments.

7. BioRegional One Planet Communities principles (see appendix 3) example: Zero Carbon, We-You contribution
Source: BioRegional

Reality imposes simplification when trying to measure the degree of sustainability of cities both quantitatively and qualitatively. The approach of cities tends to be one of iteration. They start by establishing broad targets and subsequently more detailed criteria of sustainability, for example what it would take to turn them into 'eco-cities'. Gradually, these criteria are translated into indicators, standards and frameworks which enable cities to compare their progress over time, as well as to measure their level of sustainability against other cities, an increasing necessity imposed by globalisation. To that end, cities need to establish empirical databases, but this is costly as it requires data collection capacity and specialist knowledge of data mining and interpretation.

Cities are protective of their political ambitions and aspirations and tend to set their own sustainability targets. Some are devising their own purpose built frameworks, standards and indicators. However many others are likely to involve recognised third parties to translate their targets into operational programmes. This includes relying on indicators, standards and frameworks established by agencies which are following their own agendas. They divide roughly into four categories: intergovernmental organisations, industry, national agencies, professional bodies.

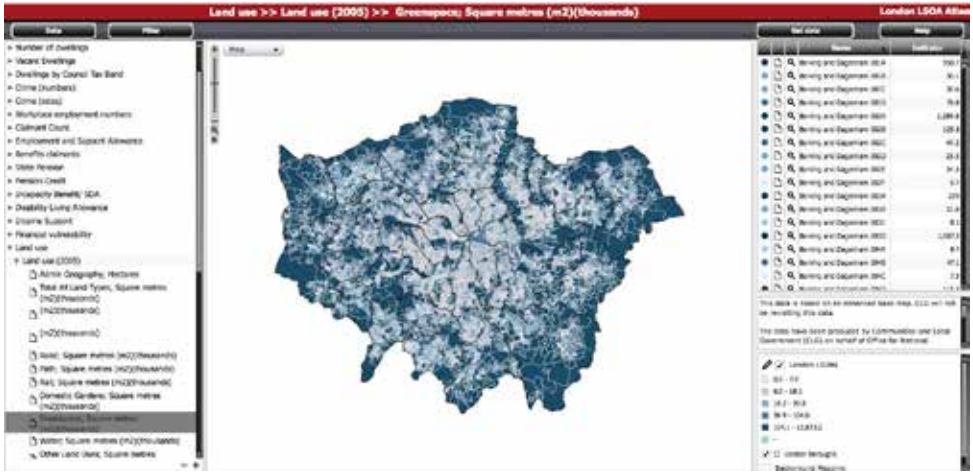
1	intergovernmental organisations	They aim to establish global acceptance of their policy frameworks and evaluations
2	industry	It wishes to get its technical tools and certification accepted globally and sell them as a service, preferably on a continuous basis
3	national agencies	such as green build councils or university consortia which devise assessment systems mainly for national but by extension for international use
4	professional bodies	those who endeavour to influence behaviour and related policies.

8. Third party agencies devising indicators, standards and frameworks

Capturing the sustainability of cities and neighbourhoods

Evaluating 'sustainability' is by no means easy. It presents many challenges and is not practised widely. For example, the fact that no sustainability audits have been undertaken of the state of the local economy and society in the areas in and around the Olympic Games of 2012 in London, means that there exists no base-line to evaluate the legacy effects from a sustainability point of view.

Although the Greater London Authority's Datastore is among the better public urban databases, reasons of commercial confidentiality were given for not making data available on the real estate transformation of the Olympic site.



9. London LSOA Atlas example: Green space distribution in Greater London, per London Borough
Source: GLA Datastore

Evaluating 'value for money' and improvement of quality of space and quality of life requires a lot of clarification as well as political openness. 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? Or is urban regeneration supposed to benefit the city as a whole, the nation at large?

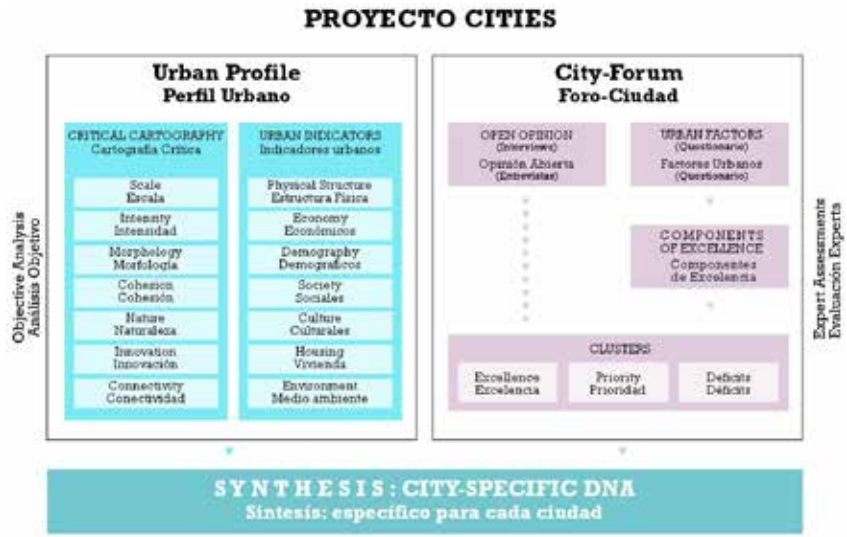
Some methods are briefly presented which may be of assistance to conceive sustainable development strategies and help evaluating them according to 'green' urban models such as eco-cities, by using indicators, standards and frameworks developed by various institutions: governmental, academic, commercial, or design teams themselves.

Evaluation methods

Those in the business of 'green technology', in the private as well as the public sector, are proposing criteria according to which the 'level of sustainability' can be assessed. This is one way of making their green technological innovations competitive. Their aim is to set international standards, preferably accepted worldwide. Increasing preoccupation with the adverse effects of the built environment on climate change has led to green technologies devised for buildings. They focus on energy efficiency, renewable energy sources, locally sourced building materials, indigenous plants, and generally passive as well as active methods of making designs more environmentally friendly. It became soon apparent that although such interventions are improving the performance of buildings they are not sufficient at the scale of neighbourhoods or cities as a whole. The configuration of buildings within a given morphology and climate is generating a micro-climate with the spaces between buildings. They warrant other methods and criteria to evaluate the integrated performance of an urban environment at a larger scale. Such tools would beuseful for urban designers and planners.

A designer approach

ProyectoCities is an example of a design team approach to incorporating sustainability criteria. The FundacionMetropoli is resorting to what it has conceived as 'landscape intelligence' to guide and evaluate its ecological design strategies. In a participatory mode it has devised over 180 indicators grouped into functional clusters to establish an urban profile as a framework for sustainable integrated design. An urban forum constituted by the key stakeholders of the areas for which the projects are being conceived is assessing and weighing the indicators. The aim is to identify the 'components of excellence' and the critical issues of these areas. Together they constitute a sort of urban DNA which acts as a basis to setting priorities and to phase sustainable development.



10. designer approach to measuring sustainability, ProyectoCitiesmethodoloty
Source: FundacionMetropoli

The emergence of evaluation techniques

The preoccupation with climate change has brought about a plethora of evaluation techniques. At present, there exist many different

assessment methods of 'green' technologies at various scales focusing on different aspects. They include the 'Climate+ Program' launched by the 'Clinton Climate Initiative' concentrating on 'in-fill' urban projects; 'Eco2Cities' devised by the World Bank's urban and local government strategy at the global intergovernmental level; NGO initiatives, such as the 'One Planet Living' concept developed by BioRegional; outcomes of academic partnerships such as the 'Community Capital Tool' devised by the Simon Fraser University, Canada in cooperation with Tilburg University, Netherlands; commercial projects, such as the 'LEED Certification System' elaborated by the US Green Building Council; or the 'Green City Index' devised by Siemens, a technical 'rank order' tool for assessing urban sustainability based on global data from over 120 large cities including over 30 indicators; as well as the 'BREEAM Communities', an environmental assessment method and certification scheme developed by the UK Building Research Establishment ltd, transposing its local 'Environmental Rating System' to masterplanning for neighbourhoods or designs at district level for new, infill and regeneration projects.

Most of these schemes and many others aspire to be recognised at the global intergovernmental level. The Bellagio Report is analysing a number of them.

11. Bellagio Report 2012 Tomorrow's City Today Eco-City Indicators, Standards & Frameworks
Source: Westminster University

Two are discussed here as possible tools towards project design for the sites proposed for the EUSS13 summer school: the BREEAM Communities and the One Planet Communities of BioRegional. The former concentrates on technical considerations regarding a sustainable built environment, the latter focuses on wider ecological considerations and conditions of sustainable living.

BREEAM Communities

BREEAM Communities is an instrument designed to assess the sustainability of urban projects. It "…is a standard that helps developers, local authorities and design teams to improve, measure and certify the sustainability of developments at the neighbourhood scape and beyond. It covers economic, social and environmental sustainability - assessing issues like housing provision, transport networks, community facilities and economic impact…"

BREEAM Communities is applied in various forms in over 50 countries. It links masterplanning to the assessment process presented in a technical Manual.

BREEAM uses a 'balanced scoreboard' approach with a mixture of mandatory and tradable assessment criteria, suitable for adaptation to local conditions of use to developers, while avoiding a prescriptive approach to design solutions.

Categories and steps for BREEAM Communities

The BREEAM Communities process comprises five impact categories, together with an innovation criterion.

These categories are assessed in three iterative steps. For details see Table 1 Annex 1

The Steps as well as the Categories are linked to statutory requirements which vary from country to country. They include, for

12. BREEAM Communities Technical Manual 2012
Source: BRE

1	governance (GO)	community participation at all stages, design, construction, operation and long term stewardship of the development	(9.3%)
2	social and economic wellbeing (SE)	health and wellbeing expressed in inclusive design in terms of social cohesion, adequate housing and access to employment	
		local economy	14.8%
		social wellbeing	17.1%
		environmental conditions	10.8%
3	resources and energy (RE)	sustainable use of natural resources and reduction of carbon emissions	(21.6%)
4	land use and ecology (LE)	sustainable land use and ecological enhancement	(12.6%)
5	transport and movement (TM)	transport and movement infrastructure design to encourage use of sustainable modes of transport	(13.8%)
	innovation (Inn)	aims at the promotion and adoption of innovative solutions with likely results in environmental, social or economic benefits over and above the scheme's content	

13. 5 Impact criteria (with their weightings percentages)

1	establishing the principles of development; the suitability of the development regarding local requirements; a strategic plan for a wider area showing housing, services and employment opportunities to improve sustainability, e.g. community scale energy generation, transport and amenity requirements
2	masterplanning process determining layout, detailed mobility plans and location of amenities
3	detailed design with landscaping, drainage, transportation facilities and the built environment (the latter includes whole building assessment methods)

14. 3 iterative steps

example, EU requirements for Environmental Impact Assessments which would be counted as evidence. Nothing prevents the users of BREEAM to go beyond standards laid down by law. It has to be kept in mind though that any such assessment is a forecast and not an empirically verified state of the art. For this reason, BREEAM and others are keen on accreditation, which means that once built, these developments are periodically measured and their degree of sustainability evaluated.

Consultation and engagement

BREEAM Communities recognise the importance of consultation and community engagement. While step 1 includes a 'Consultation Plan' engaging the community is taken up in practice only during the second step (consultation and engagement) and the third step (community management of facilities) of development. Arguably, the strategic decision making issues considered when initiating a project are just as important and should engage the local population from the outset on whom such developments are imposed. The best way of doing this depends on each project specifically. The design team is expected to devise a consultation plan itself, adapted to local conditions. Table 3 of the Manual is giving detailed relationships between BREEAM Communities and building level assessments. Table 2 provides assessment issues with a link to consultation. (Annex 2).

Relation between BREEAM Communities and building level assessments

Linking specific aspects which contribute to the sustainability of a scheme at the level of buildings and that of the scheme as a whole is important as there are significant interdependencies. The community level requirements can reinforce the statutory requirements of building regulations or codes for 'Sustainable Homes' (in the UK). Conversely, formal links with building technology requirements may hamper innovation at masterplan level. Therefore, BREEAM stresses the importance to keep the assessment procedure flexible at both building and community levels.

BREEAM Communities and long term viability of schemes

The purpose of BREEAM Communities is not to set guidelines for development economics. Nevertheless, when assessing long term viability of BREEAM Communities the focus is on

three priorities: economic viability, demographic needs and priorities, and labour and skills.

economic viability (SE01)	increasing demand on resources, services and land
demographic needs and priorities (SE02)	direct and indirect costs associated with impacts on climate change
labour and skills (SE17)	

15. Long term viability criteria
Source: BRE

A full assessment of site constraints and opportunities is considering the economic impact of other factors (ecology, resources, transport, social wellbeing) reaching beyond the development. Strategies are derived from this evaluation to guide masterplanning. They take account of increasing demand on resources, services and land in the future, together with direct and indirect costs related to impacts on climate change. The BREEAM Communities process is underpinned by a BREEAM Communities Scheme Document.

1	introduction
2	Scope of BREEAM Communities
3	Scoring and rating proposals
4	Step 1 establishing the principle of development
5	Step 2 determining the layout of the development
6	Step 3 designing the details
7	Innovation
8	Appendices

16. BREEAM Communities Scheme Document Checklist in eight parts
Source: BRE UK

Independent assessor and mandatory standards

The evaluation of the performance of a scheme is carried out by an independent assessor on the basis of which a BREEAM Certificate is issued to reflect the performance against the BREEAM standard. Criteria for the type of schemes which are suitable for BREEAM Communities assessment are specified. Overall, they have to have a significant impact on their surroundings and their existing capacity.

Besides consultation and engagement (GO 02) for Step 2, only Step 1 'establishing the principles of the development', includes mandatory BREEAM Community standards for each of its categories of assessment. These categories and their mandatory standards can be used as a checklist to ensure the sustainability of the initial project design.

17. Step 1: Criteria for establishing principles of the development
Source: BRE UK

1	consultation plan (GO 01)
2	economic impact (SE 01)
3	demographic needs and priorities (SE 02)
4	flood risk assessment (SE 03)
5	noise pollution (SE 04)
6	energy strategy (RE 01)
7	existing buildings and infrastructure (RE 02)
8	water strategy (RE 03)
9	ecology strategy (LE 01)
10	land use (LE 02)
11	transport assessment (TM 01)

1	biodiversity and habitat protection and enhancement	(SE 08 microclimate, known urban morphology, minimising adverse conditions…) (SE 10 adapting to climate change, known impacts, risks deduced by design…) (SE 13 flood risk management, allowing for climate change…) (LE 03 water pollution, drainage plan, prevention measures…) (LE 04 enhancement of ecological value, creating new habitats, protection…)
2	pedestrian, cyclist and vehicular movement	(SE 12 local parking, distances between parking and residences, use on site…) (TM 03 cycling network, safe, appealing, connected to residences…)
3	public transport	(TM 04 access to public transport, minimum distance to stops, diverse modes…)
4	street and building layout, use and orientation	(SE 05 mixed tenure, good space standards, affordable housing…)
5	housing type, provision and location	(SE 06 delivery of services, facilities, amenities at appropriate, walking distance…)
6	utilities and other infrastructure provision	(SE 09 utilities, single point of access, coordinated installation, ducting…) (SE 07 activities, multiple uses, connectivity…)
7	public realm and green infrastructure	(SE 11 green infrastructure plan, green spaces within walking distance…) (LE 05 landscape compliant with ecological strategy, native species…)

18. Step 2: Site specific categories for 'determining the layout of the development
Source: BRE UK

The lists presented for Step 1 may seem prolific. However, Step 2 and Step 3 encompass a lot more criteria and factors to be taken into account when determining the layout of the development and detailed designs, reviewing them and adjusting project solutions.

Besides stating the aims and identifying assessment criteria - some given, some left to the designers - for each category, the supplied proforma require the designers also to fill in compliance notices and schedules of evidence, besides additional project specific information.

A serious limitation of such lists is that they cannot assess the interdependencies and mutual influences of individual aspects. Following checklists very closely may also hamper innovative solutions outside these frameworks or criteria and their prescribed way of weighting them against each other.

The criteria of the design review (GO 03) may constitute a useful and simpler checklist of aspects which sustainable design has to take into account.

19. Design review criteria

1	the character and identity of the place
2	how security is considered and addressed through design
3	the design of the public realm
4	how the design addresses movement and legibility
5	the layout of the development
6	the diversity and compatibility of uses in the development
7	how the place is designed to be flexible and adaptable over time
8	the design of the landscape
9	the density, scale and appearance of the development.

The way BREEAM Communities describes itself is as being flexible while driving forward real and measurable improvements in a non-prescriptive way, while avoiding mandatory planning standards. In its view, the benefits of engaging with BREEAM Communities are to achieve integration between the BREEAM methodology, the procurement process and programme timeframes, all this without unduly hampering the design process and leaving room for potential alternative solutions.

It could be argued though, that the BREEAM Communities approach emanates from BRE's (Building Research Establishment) past as a governmental agency in charge of preparing regulations, devising controls, testing materials and issuing certificates.

In sum, a checklist of individual technical performance standards may be appropriate at the level of a (free standing) building. However, they may not be able to capture the combined effects of the many criteria on each other and the wider environment. Most crucially, checklists may hamper innovation, something that transpires in BREEAM's succinct treatment of as yet unknown technologies or sustainable design principles. No checklist will ever replace creativity and experience of designers.

One Planet Communities

BioRegional has conceived 'One Planet Communities' as a social entrepreneurial charity. It emanates from the concern of the planet's overall ecological capacity and focuses on practical solutions for sustainable developments, besides assisting the development of sustainable communities. It aims to lead the way to sustainable living through practical demonstration of sustainable consumption and production. These concerns are reflected in the 10 principles of One Planet Living.

1. health and happiness
2. equity, local economy and fair trade
3. culture, heritage and community
4. land use and wildlife
5. sustainable water

6. local and sustainable food
7. local and sustainable materials
8. sustainable transport
9. zero waste
10. zero carbon.

Combined into a framework, these principles are linked to 10 considerations when they are consolidated into an outline 'Sustainability Action Plan' as a guiding principle for each concrete project:

1. global and local context (current energy and waste situation with opportunities for change),
2. ecological footprint and other targets to achieve One Planet Living ,
3. local/international benchmarks (e.g. Fair Trade, LEED, BREEAM),
4. performance indicators and timelines to meet One Planet Living ,
5. key strategies applied throughout the whole development process,
6. communication and PR strategy related to the principle,
7. regulation and policy issues related to the principle of sustainable living,
8. mechanisms to achieve wider community and municipal engagements, e.g. Local Agenda 21,
9. key partners to enlist (e.g. renewable energy companies, governance, NGOs),
10. key cross cutting issues with other One Planet principles to achieve synergies.

Evaluating the BedZED experiment

The One Planet Living principles have been developed for, and were applied to the BedZED estate in South London and are continuously monitored. BioRegional cooperated with Bill Dunster, known for his ecological designs, Arup who are global experts on ecological building and design technology, and Ellis & Moore for green infrastructure. They also benefited from Peabody, an enlightened client who encouraged experimentation.

20. The BedZED low energy low carbon development in South London
Photo: Judith Ryser

21. BedZED technical section showing building physics
Source: Arup

Many components of these ten principles related to energy efficiency and zero carbon energy through building physics, as well as sustainable materials locally sourced when possible. The designers applied all available green technologies, such as south facing sun conservatories, heat recovery with wind cowls, super insulation, air tightness and green roofs, good day-lighting and visible energy meters. The latter helped inhabitants to optimise the effects of this low tech passive design by adapting their behaviour.

The design team found that some ecological design principles, such as only south facing and glazed sun terraces did not necessarily produce value for money while unduly constraining the use of the buildings. Nevertheless, living on this experimental estate generated a strong sense of community, a better understanding of ecological living and thereby a reduced ecological footprint.

On the communal level, BedZED had provided a woodchip fired combined heat and power plant; the UKs first membrane bioreactor to recycle grey and black water effluents; sustainable transport in the form of a car club and few parking bays encouraging cycling and walking and use of public transport. Lessons

learnt from continuous monitoring were that pragmatic and more conventional solutions were more sustainable in some cases in value for money terms. For example, poor public transportation infrastructure hampered BedZED's sustainable transportation strategy. Although the communal ecological installations brought useful research results, it became clear that complete self-reliance was less appropriate than using the existing networks of sewage, curb side waste collection of recycled waste and space heating instead of complete on-site disposal and energy generation. Locally sourced food supplies remain popular while green terraces and roofs are contributing to bio-diversity.

Perhaps BedZED's most significant effect was its wider repercussions. It contributed to new green legislation in the UK, benchmarking London's emissions, other sustainable living communities based on improved 'Sustainable Action Plans'. Its ten principles are being applied throughout the world thanks to the One Planet Living initiative with WWF which promotes sustainable development and ecological footprinting based on sustainable buildings, infrastructure and lifestyles.

Sustainability Action Plan

The New England Quarter (NEQ) in Brighton, UK is used to illustrate how a Sustainability Action Plan (SAP) is devised. This mixed use development was designed in 2006 by BioRegionalQuintain for Crest Nicholson, a developer known for his community focused approach. The design was for a difficult 8 ha brown field site near the railway station. The project shows what targets have been adopted for the 10 One Planet Living Principles, and how they have been translated into an operational programme by means of a SAP (Sustainable Action Plan) which is based on 9 key sustainability objectives. These objectives are also measured against the Eco Homes assessment for housing and the BREEAM assessment credits for the non domestic part:

1. natural environment
2. pollution
3. community safety
4. economy and work
5. energy generation and use
6. land use
7. transport
8. waste
9. housing.

BREEAM credit sections to assess the non domestic development of NEQ:

1. management
2. health and wellbeing
3. energy
4. transport
5. water
6. materials
7. land use and ecology
8. pollution.

EcoHomes assessment criteria used for sustainability rating of NEQ housing:

1. energy
2. transport
3. pollution
4. materials
5. water
6. land use and ecology
7. health and wellbeing

NEQ SAP Components and Sectoral Plans:

1. Zero Carbon Plan, reducing energy use and optimising renewable energy supply
2. Sustainable Water Plan
3. Local Sustainable Food Plan, with on-and off-site growing and fresh food support
4. Culture and Heritage Plan, with community centre, consultation, extranet,
5. Equity and Fair Trade, through community trust association
6. Health and Happiness, through building

design and infrastructure, community trust, on-going management performance.

All these various principles, assessment criteria and targets are consolidated in the Sustainability Action Plan and its component sectoral plan, and the project is vetted according to One Planet Living Common International Targets. The summary targets, commitments and mechanisms show in which form these objectives have been produced.

The One Planet Living list of sustainability criteria differs from many other sets of sustainability indicators inasmuch as it comprises a wider range of quality of life aspects: health and happiness, access to basic elements of life, culture and recreation, tourism and leisure education and training, as well as fair trade and locally produced food, besides all the usual material ecological components. Great emphasis is laid on management, continuous monitoring and feedback processes.

During BioRegional's involvement in concrete projects, its influence was unexpectedly wide. The UK had introduced new legislation for greener new build housing, among them the EcoHomes standards for which BRE has devised a credit system. In response to BedZED, the local municipality adopted a Sustainability Strategy, corresponding Action Plans and a Sustainability Checklist. These tools were also used explicitly to set sustainability targets for the New England Quarter site in Brighton and BioRegional has used the BRE credit system to assess its 12 key objectives for the sustainable community planned for this site.

SUSTAINABILITY INDICATORS, STANDARDS AND FRAMEWORKS: THEIR LIMITATIONS AND APPLICABILITY IN PRACTICE

The question remains open of who should select sustainability standards: the client, the planning authority, the designer or the users of the development, or a combination of them all. By proposing a sustainable solution for the 'Delicias Axis' in Madrid site selected for the EUSS13 design approach to "Old Territories as New Opportunities for Urban Regeneration: Urban Acupuncture", the students could devise their own sustainability criteria, while seeking inspiration from the BREEAM Communities, the One Planet Principles or any of the other methodologies briefly discussed above.

Principle	Further information
Zero Carbon	• **Sustainability Action Plan** (Section 7.1)
Zero Waste	• **Design Statement** (Sustainable Waste section)
Sustainable Transport	• **Accessibility Statement** and **Travel Plan**
Local and Sustainable Materials	• **Design Statement** (Materials section)
Local and Sustainable Food	• **Sustainability Action Plan** (Section 7.3)
Sustainable Water	• **Sustainability Action Plan** (section 7.2)
Natural Habitats and Wildlife	• **Design Statement** (Landscape & Ecology section)
Culture and Heritage	• **Sustainability Action Plan** (Section 7.4)
Equity and Fair Trade	• **Sustainability Action Plan** (Section 7.5)
Health and Happiness	• **Sustainability Action Plan** (Section 7.6)

23. NEQ Brighton scheme Sustainability Action Plan with its components
Source: BioRegional

Any indicators, standards and frameworks to assess and evaluate sustainability can be useful for designers in pursuit of sustainable development. Nevertheless, they are mere tools and many other criteria are influencing design decisions.

Designers have to go beyond such measurement tools when conceiving solutions for sustainable urban change. They need to encompass the question of how sustainability, regeneration and gentrification processes are hanging together. Their relationship cannot be explained by simply measuring and assessing them or their component parts. These urban change processes depend on different value systems which may not be shared between the state, the private sector, designers and communities using the city. Designers may well find themselves in a position of needing to develop their own tools for positively influencing these processes.

Although designers on the whole carry out designs for clients, it does not mean that they should endorse only the clients' criteria for

their developments, especially of those who do not attribute much importance to sustainability. Private, development-led, profit seeking urban regeneration tends to create 'sameness' and, at worst, poor quality of space and low sustainability. Conversely, from a design point of view, it could be argued that spatial diversity, reflected in mixed development, for example, with different uses alongside each other makes a better contribution to sustainable 'quality of space'. However this is often resisted by the development industry, not least because it implies complex property management. Nor is it necessarily in the interest of developers to secure a long lifespan for their developments, as demolition and replacement may be more lucrative for them with increasing land prices. Conversely, development negotiated between a variety of stakeholders tends to generate a feeling of ownership which tends to contribute to the longevity of such schemes, thus to their sustainability. Finally, the state may have different objectives from both the development industry and the design profession, embedded in the regulatory process with which all the other protagonists are expected to comply.

These contradictions between the state, the development industry and the design profession may contribute to making the physical fabric transient without lasting identity. This may exacerbate uncertainty and alienation of the urban dwellers, besides reducing their public realm, an important part of a sustainable environment. The design professionals are implicated in this process, as they are increasingly working for the private sector and prone to subjecting themselves to its value systems, often in contradiction with the meaning, if not the letter of public planning principles. Tools to assess and evaluate sustainable development may therefore constitute a useful means to reaching a modus vivendi for the cooperation between diverse protagonists with conflicting interests in producing a more sustainable urban environment.

Step 1	Step 2	Step 3
Governance		
GO01 – Consultation plan	GO02 – Consultation and engagement GO03 – Design review	GO04 – Community management of facilities
Social and economic wellbeing		
SE01 – Economic impact SE02 – Demographic needs and priorities SE03 – Flood Risk Assessment SE04 – Noise pollution	SE05 – Housing provision SE06 – Delivery of services, facilities and amenities SE07 – Public realm SE08 – Microclimate SE09 – Utilities SE10 – Adapting to climate change SE11 – Green infrastructure SE12 – Local parking SE13 – Flood risk management	SE14 – Local vernacular SE15 – Inclusive Design SE16 – Light pollution SE17 – Labour and skills
Resources and energy		
RE01 – Energy strategy RE02 – Existing buildings and infrastructure RE03 – Water strategy		RE04 – Sustainable buildings RE05 – Low-impact materials RE06 – Resource efficiency RE07 – Transport carbon emissions
Land use and ecology		
LE01 – Ecology strategy LE02 – Land use	LE03 – Water pollution LE04 – Enhancement of ecological value LE05 – Landscape	LE06 – Rainwater harvesting
Transport and movement		
TM01 – Transport assessment	TM02 – Safe and appealing streets TM03 – Cycling network TM04 – Access to public transport	TM05 – Cycling facilities TM06 – Public transport facilities

Annex 1. Table 1: BREEAM Communities 2012 steps, categories and assessment issues for the three steps.

Step	Issue
Step 1	GO01 - Consultation plan SE02 - Demographic needs and priorities SE03 - Flood risk assessment RE02 - Existing buildings and infrastructure LE01 - Ecology strategy
Step 2	GO02 - Consultation and engagement GO03 - Design review SE06 - Delivery of services, facilities and amenities SE07 - Public realm SE11 - Green infrastructure SE12 - Local parking LE05 - Landscape
Step 3	GO04 - Community management of facilities SE14 - Local vernacular TM05 - Cycling facilities TM06 - Public transport facilities

Annex 2. BREEAM Technical Manual Table 2: assessment and consultation

Annex 3. Regional 10 One Planet Community Principles

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1. Judith Ryser. 2013. Strategies for the post-speculative city, redressing the balance in favour of sustainable development, presented at EUSS 2013 and included in this publication.
2. For a discussion of 'sustainability, see companion paper: Judith Ryser. 2013. Strategies for the Post Speculative City, Redressing the Balance in Favour of Sustainable Development. EUSS13
3. French planners and academics invented the term 'le projeturbain' to describe sustainable urban regeneration.
4. David Mangin& Philippe Panerai. 1999. ProjetUrbain. Parantheses.
5. Simon Joss (ed). 2012. International Eco-Cities Initiative. Tomorrow's city today, eco-city indicators, standards & Frameworks. Bellagio Conference Report. University of Westminster.
6. See numerous UN agreements: e.g. Kyoto Protocol 11/12/1997 and Doha Amendment 08/12/2012; Rio Earth Summit 1992; Copenhagen Accord 18/12/2009 Rio+20 Convention 21/06/2012
7. For Spain and the UK see paper given at the Isocarp Congress on Low Carbon Cities in Porto Portugal. Teresa Franchini& Judith Ryser. 2009. Toward Low Carbon Cities: Madrid and London. table p 6 for CO2 reduction targets. For a detailed account of levels of responsibility of CO2 reduction targets and implementation in the UK, see Comparative Study of National Responses to the Challenge Posed by Climate Change and Energy Resource Constraints, UK Response by Judith Ryser. Isocarp
8. For Madrid and London see paper by Teresa Franchini& Judith Ryser, 2009, op.cit. Tables pp 4, 7, 12.
9. For Madrid and London they are discussed in Teresa Franchini& Judith Ryser, 2009. op cit.
10. http://www.london.gov.uk/priorities/planning/london-plan
11. Table by Teresa Franchini and Judith Ryser. Toward Low Carbon Cities: Madrid and London. Paper for Isocarp congress 2009 in Porto, Portugal.
12. This point is being made by BioRegional, evidence based by their 'sustainable living' projects, e.g. in Brighton
13. http://www.oneplanetcommunities.org/about-2/process/endorsement/annual-review/
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19. Pooran Desai. 2010. One Planet Community, a rel-life guide to sustainable living. Wiley; and annual reviews http://www.oneplanetcommunities.org/about-2/process/endorsement/annual-review/
20. For details, see intereactive table in OneBrighton.co.uk. for details:
21. http://www.onebrighton.co.uk/carbon_footprint.aspx
22. What makes an Eco-Town? A report from BioRegional and CABE inspired by the eco-towns challenge panel. 2008. CABE
23. Simon Joss. 2010. "Eco-cities: a global survey 2009." WIT Transactions on Ecology and the Environment, vol 129: 239-250. Joss, S., Cowley, R. &Tomozeiu, D. 2013. "'Towards the 'ubiquitous eco-city': an analysis of the internationalisation of eco-city policy and practice." Journal of Urban Research & Practice, DOI:10.1080/17535069.2012.762216.
24. e.g. The City of Copenhagen has adopted Eco-Metropolis 2015, ten indicator categories, six environmental and four social; the City of Linz has designed SolarCity Linz, a replicable indicator framework for 'eco' masterplanning comprising six categories with six indicators each; the Tanshan municipality has adopted CaofeidianEciCity, a framework comprising 141 indicators for planning and management of cities, neighbourhoods and buildings.
25. e.g. Eco2Cities from 2010 as part of the World Bank's Urban and Local Government Strategy aimed at the developing world; SlimCity, an annual assessment of 'eco-efficiency' measures by the World Economic Forum using World Bank eco-city indicators and metrics; the Climate+ Program from 2009 by the Clinton Climate Initiative for carbon neutral developments; the Green Cities Programme by the OECD collecting and disseminating 'green growth' best practices; the Reference Framework for Sustainable Cities (RFSC) with its on-line toolkit by the European Union.
26. E.g. the Green City Index by Siemens, a technical tool to assess urban sustainability based on global data from 20 large cities; standardized 'smart city measurement indicators' by Hitachi for urban management and infrastructure; 'Smarter City Assessment by IBM, a tool for customised 'key performance indicator measurements and city benchmarking; the International Ecocity Framework and Standards (IEFS) as a certification platform by Ecocity Builders.
27. e.g. the ICLEI Star Community Index, US national standards for sustainable communities developed by ICLEI with the US Green Building Council; BREEAM Communities, a multi-stage assessment and certification scheme designed by the British Research Establishment for urban masterplanning, from which 'Leadership in Energy and Environmental Design (LEED) was derived in the USA, a multi-stage rating and certification scheme operating at neighbourhood as well as building levels; Eco-city Development Index System by the Chinese Society for Urban Studies, including indicators for innovation.
28. e.g. One Planet Communities has been developed by BioRegional which focuses on ecological footprint analysis based in ten principles including health and happiness; Global City Indicators Facility is a membership based standardised method for comparing city performance, including 'quality of life' categories besides city services designed by the government of Ontario with the University of Toronto; the Community Capital Tool devised by the universities of Simon Fraser in Canada and Tilburg university in the Netherlands consisting of a scan of six mutually reinforcing community capitals as a social learning tool.
29. http://data.london.gov.uk/ interactive maps see for example http://data.london.gov.uk/visualisations/atlas/lsoa-atlas-2012/atlas.html
30. Londonhttp://data.london.gov.uk/datastore/applications/interactive-map-indices-deprivation
31. ProyectoCities methodology to establish the 'DNA' of an urban area evolved by the FundacionMetropoli, Madrid. In: Judith Ryser (ed). 2010. Landscape Intelligence, visions and projects of the FundacionMetropoli. FundacionMetropoli
32. For a review of such indicators, standards and frameworks, see:
33. 'International Eco-Cities Initiative, Tomorrow's city today, eco-city indicators, standards and frameworks, Bellago Conference Report, December 2012. Simon Joss (ed), University of Westminster, and
34. Joss, S, Tomozeiu, D. &Cowley, R. 2011. Eco-Cities. A Global Survey 2011. (Eco-City Profiles). London. University of Westminster.
35. BREEAM: Building Research Establishment Environmental Assessment Method.
36. BREEAM Communities, An Introduction for Local Authorities. www.bream.org . BREEAM Communities as been adopted by the City of Bristol making use of nationally recognised standards in line with the National Planning Policy Framework, for its major developments. BREEAM aims to ensure that its standards provide social and economic benefits whilst mitigating the impacts of the built environment. In doing so… it stimulates demand for sustainable developments.
37. BREEAM Communities Manual 2012. Code for a Sustainable Built Environment. Technical Manual SD202 – 01.2012. bre. Available on www.bream.org
38. BREEAM Communities Manual op.cit. Table 6 p 20. For detailed criteria see Tables 7 – 11, pp 21-24.
39. BREEAM Communities Manual, op.cit, pp 7-9.
40. www.bream.org
41. BREEAM Communities Manual, op.cit, Step 1, establishing the principle of the development, schedules with for each category its aim, assessment criteria, compliance notes, schedule of evidence and additional information pp 26-68.
42. BREEAM Communities Manual op.cit. Step 2 categories and criteria, pp 70-123
43. Pooran Desai. 2010. One Planet Communities, a real-life guide to sustainable living, p 143.
44. http://www.bioregional.com/files/publications/BedZEDBrochure2010.pdf
45. It is possible to download the companies toolkit to apply SAP at
46. http://www.oneplanetliving.net/take-action/companies-toolkit/download-companies-toolkit/
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50. see companion paper: Judith Ryser. 2013. Strategies for the Post Speculative City, Redressing the Balance in Favour of Sustainable Development. EUSS13
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TOOL

KITS

Teresa Franchini

URBAN DESIGN AND QUALITY OF LIFE. LESSONS TO BE LEARNT FROM MADRID´S PERIPHERY

SUSTAINABLE PLANNING AND URBAN DESIGN: BETWEEN THEORY AND PRACTICE

Academics and practitioners have elaborated a number of planning and urban design tools to understand the built environment and to provide guidance for physical-spatial interventions. Both tools are aimed to contribute to the improvement of the quality of urban space and the quality of life of those who use it.

After so many years of trying to get well designed and sustainable neighbourhoods, it is possible to assume that there exist tool kits ready to be applied to practice. However, the existence of wide avenues, large green spaces, collective housing to achieve compactness, and dynamic commercial areas, does not ensure by itself the creation of urban spaces which provide quality of life. Practice shows that, in fact, there is a wide gap between theory and practice.

Facing this situation, planners and urban designers face several questions when trying to realise their potential professional powers. 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 or the links between them?

As professionals involved in physical-spatial interventions our responsibility is to provide spaces in which the right balance is achieved between architecture, urban design and planning to give the user of these spaces the best possible options to ensure their liveability. The aim of this paper is to explore the connections between urban design and quality of urban life by analysing the contents of the available tool kits and their application in two of the largest new developments built on Madrid´s periphery

during the first decade of this century: Vallecas and Sanchinarro neighbourhoods.

Both neighbourhoods were built during the period of expansion that characterised the Spanish economy from the 1990s which came to a sudden halt in 2008, when the housing bubble burst. During those years, the city of Madrid added a huge number of new homes, with abundant and well equipped spaces, meeting all the requirements of planning legislation, but it still has not managed to build neighbourhoods with quality of life. What lessons can be learnt from these large scale actions? The aim of this paper is to contrast the current theoretical framework against the existing quality of life in those urban developments to learn some lessons from reality.

Planners and Urban Designers Tool Kits

Planning and urban design tools constitute a vast resource and their suitability depends on each specific situation. Besides relating to human scale, the appropriateness of specific design tools is defined by a wide range of contextual aspects, such as the fine grain of the specific built environment and its relation to the wider context.

Planning criteria

Planning criteria have been evolving alongside organic changes in the built environment and in society. At present, planning principles for the transformation and adaptation of the urban fabric and the provision of a good quality, sustainable urban environment are comprising at least the following seven characteristics: compactness, high density, mixed development, sustainable transportation network, diverse housing supply and tenure, environmental conditions, and good urban design.

In more detail, neighbourhoods constitute the basic units of civic life and social integration; urban form requires compactness of built up areas; and open space networks are composed of natural and artificial elements to satisfy different uses at various scales. A viable urban fabric consists of high densities to attract the necessary urban amenities and economic activities; it resorts to regeneration and recovery of abandoned, underused or degraded urban areas, while protecting urban heritage. Urban activities are best accommodated in well-balanced mixed uses comprising residential, production and services. Optimum use of urban infrastructure is achieved by concentrating productive and service activities in centres and sub-centres located around transportation nodes.

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. Housing constitutes the major part of urban environments and diverse, mixed housing types and tenure promote social integration. 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. Favourable environmental conditions include energy efficiency in buildings, infrastructure and services, with emphasis on renewable energy, resource recycling and new green technologies.

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.

Design criteria

Similarly to the current criteria of good planning lay out, urban design criteria encompass at least another seven characteristics: continuity and enclosure, ease of movement, quality

of the public realm, diversity, legibility and adaptability.

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 and 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.

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.

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 provides 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 through detectable 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 to 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 to ceiling heights and depths with adaptable ground floors.

Vocational professions like planning, urban design and architecture contain a considerable hands-on dimension. 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.

Social use of urban realm

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

Three types of activities occur in urban space: compulsory, optional and occasional. Together they constitute the basic demands of

the urban realm which has to provide accessibility and security to facilitate an 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 are part of a social system of movement.

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.

Summing up, current urban design is deeply interested in fostering quality of life through sustainability, that is, taking into consideration not only physical aspects, but also economic, social and environmental ones. The key aspect for designers is the handling of a holistic vision of the built environment, understanding it as a coherent whole and not as a sum of parts.

FROM CRITERIA TO REALITY: SANCHINARRO AND VALLECAS NEIGHBOURHOODS

A brief view on the changing Madrilenian planning contexts or how these large neighbourhoods have come into existence

By exploring the short history of the contemporary Madrilenian planning by analysing the master plans drawn up for the city during the last 30 years, it is possible to visualise the interplay between the overall economic context, the dominant vision in planning, and the planning instruments produced to cope with those particular conjunctures.

Conversely to the rest of Europe, the effects of the 1973 oil crisis had a late impact in Spain, affecting its economy only at the end of the 1970´s. As regards planning, this period coincides with the approval of the first master plan for the city produced under the democratic period. The critical economic situation at that time led to the adoption of a shrinking vision in planning, according to which Madrid was facing a process of stagnation. Following the no growth principle, the focus of interest was placed on the need to complete the city edges and to attribute special care to the existing urban tissues, particularly its central area, characterised by a strong urban decay.

Soon after the launching of the 1985 master plan, the Spanish productive structure started to show the first signs of expected recovery, changing progressively the previous shrinking vision towards a new one, based on the expectation of an unprecedented dynamism that later put the country among the leading European economies.

This expectation gave place to a new vision in planning, based on an expansive image of the city open to profitable opportunities. The mandatory review of the 1985 master plan gave rise to a completely new planning instrument for the city. The principles of the Master Plan, approved in 1997 were quite the opposite of the previous ones. The need to offer enough land to capture investment implied a renewed interest in focussing the planning action on huge peripheral growth proposals. As a result, 18 new areas (PAU) for new activities were planned, two for economic industries and 16 for residential use.

1. The planned expansion of Madrid, 1997 master plan proposals.
Source: Area of Urbanism and Housing, Madrid Town Hall

At the beginning of the 1990s the building activities, transformed into the leading productive sector of the country, found the proper conditions for its expansion. Demanding the greatest possible flexibility of the existing urban regulations was favouring the beginning of an important process of planning deregulation. Accordingly, the master plan for Madrid adopted in 1997 followed the general tendency concentrating its attention on the urban expansion.

The PAUs (Programas de Actuación Urbanística - Urban Development Programmes), defined the urban model that characterises the current Madrilenian neighbourhoods: large developments located in the periphery, connected to the city centre and other urban areas by major transport routes, with internal communications systems based on large avenues and roundabouts. Except for two developments aimed for industries, the main use is residential, with little shopping and leisure activities concentrated in a few sub-centres.

PAUs	total dwellings	built dwellings
Valdecarros	48000	4566
Sanchinarro	14000	13742
El Cañaveral	14000	2669
Carabanchel	12700	12631
Valdebebas	12500	12500
Las Tablas	12272	11608
Montecarmelo	8547	7442
Butarque	1570	1211
Barajas	1500	1450
partial	**93.901**	**92.177**
Los Berrocales	22235	0
Castellana	17320	0
Los Ahijones	15400	0
Los Cerros	15000	0
Campamento	10700	0
Arroyo del Fresno	2754	0
partial	**83.409**	0
total dwellings	**177.310**	**52% built**

T1. State of the PAUs development at 31 October 2013.
Source: Area of Urbanism and Housing, Madrid Town Hall

The global economic recession initiated in 2007 pushed the Spanish economy to the worst possible scenario due to, among others, its strong dependency on real estate investments promoted by the previous economic model and favoured by planning practice. The burst of the real estate market bubble stopped the optimistic evolution of the building industry. The new reality wiped out the previous vision aimed to satisfy the speculative real estate market, and a period of abrupt stagnation took over the evolution of the PAUs. As a result, only 53% of the programmed housing was built, leaving the remaining percentage stagnant.

A closer look at Sanchinarro and Vallecas according to sustainability criteria

With 736 hectares and 387 hectares respectively, Vallecas and Sanchinarro were the largest planned neighbourhoods ever built in Madrid. Both were designed at the time when sustainable urbanism was a priority worldwide. For this reason, they offer the best scenario to test the relation between theory and practice regarding sustainability.

Confronting the urban conditions of these neighbourhoods with the above criteria has resulted in the following reflections.

Planning criteria

In terms of urban form, the existence of excessively large open spaces does not lead to the required urban compactness. The resulting low gross density - about 40 dwelling units/hectare - is not accompanied by an inner network of open spaces, except in Vallecas, where an existing stream of water has been the object of an ambitious environmentally sustainable special plan which the economic crises prevented from completion. In both cases, there are narrow green belts that operate as buffers

from the surrounding highways (Sanchinarro) or adjacent neighbourhoods (Vallecas). On the other hand, the predominance of residential activities to the detriment of other uses reduces the capacity of the neighbourhoods to act as the basic unit for civic life and social integration.

PAUs	Total Area *m2*	Residential *m2*	Industrial *m2*	Commerce *m2*	Facilites *m2*
Sanchinarro	3869274,57	643.719	58.152	153.196	3.014.208
%		17	2	4	78
Vallecas	7173051,77	1.026.652	62.724	275.676	5.808.000
%		14	1	4	81

T2. Land use distribution.
Source: Area of Urbanism and Housing, Madrid Town Hall

The problem derived from the lack of balance between residential, productive and service activities is made worse by the inexistence of mixed use centres and sub-centres. The scarce commercial activities are confined to a very few streets or some large commercial malls. In spite of the existence of underground and light train stations, these public transport connections were not seen as opportunities to gather around sub-centres to invigorate the urban fabric.

3. Active façades, Sanchinarro

In terms of transport, the dominant mode is the private car, although the area is fully connected by buses, underground and train services, at an adequate distance within the pedestrian catchment area. There are some bicycle lanes that run along some streets, but they do not constitute complete circuits for users. In any case, the streets dimensions result in an oversized road system.

Focusing on the diversity of housing supply, according to the regional planning legislation 50% of the stock produced must be social housing to facilitate social diversification. This is not the case of the building typology adopted, because both projects adopted collective housing in perimeter blocks as the dominant type.

3. Urban landcape. Vallecas.

4. Urban landscape. Sanchinarro

The inclusion of environmental innovations in the planning layout as well as in the building process was adopted only in one of the sectors of the Vallecas neighbourhood: the Eco Valle District, product of a tender for European Funds for sustainable projects in 2002. Through its Land and Housing Municipal Company, the Town Hall, promoted this special pilot project as an example to be followed by private enterprises. The same public company

launched several architectural competitions for the design of prototype buildings aimed at saving energy. In spite of those public efforts, the remaining 50% of the housing stock do not respond to these requirements, as they were built according to the traditional practice.

5. Sustainable social housing prototypes, Vallecas

6. Sustainable social housing prototypes, Vallecas

The use of the same building model in vast areas – blocks of similar height and layout of the plot – results in a landscape monotony, which are raising recurrent residents´ complaints. This fact is very important because it limits the capacity of both neighbourhoods to encourage and foster a sense of belonging among their inhabitants.

Design criteria

It is assumed that in terms of urban design a neighbourhood must have character, that is, it should constitute a place with its own identity, including physical elements as part of its layout. In both case studies, except for the presence of the already mentioned stream of water in Vallecas, there are no natural features and/or existing elements or buildings of interest to integrate in the project. Neither do these neighbourhoods include local forms; conversely, they are isolated from the surrounding urban fabrics. The lack of connection between the new urban developments is remarkable. In the case of Vallecas the new development opted for a neat separation with the old village nearby, using a ring of urban facilities for this purpose, while Sanchinarro is ring fenced by highways.

In terms of continuity and enclosure there is a clear delimitation between public and private spaces, because almost all buildings - except for a few detached units - are aligned to the street. Although this criterion defines a positive situation for urban design, the lack of active façades, i.e. including commercial and services activities located in ground floors, generates a lack of dynamism on the sidewalks and in other public spaces, except in the few and reduced areas of mix uses which are considered as neighbourhood centres. In addition, because the majority of the buildings are exclusively assigned to residential uses, the limited number of access points along the streets to these buildings generates almost secluded blocks. The reduced activities in the streets generate, in turn, a clear disadvantage regarding natural security and social control. Similarly, the use of fences to separate interior courtyards and communal spaces and the lack of setback buildings and rear facades, do not help in adding value to the public space, preventing direct interactions or any other kind of formal relationships with passers-by.

7. Public/private interface, Sanchinarro

8. Eco Boulevard, Vallecas

Looking at the quality of the public realm, there are very few urban public spaces assimilated to the plaza concept, in contrast with an impressive number of large parks with simple landscape. From the microclimate point of view, the designs do not follow bioclimatic principles in terms of building distribution to get the maximum benefits from the solar exposure, except for the Eco Vallecas project which adopted a special orientation to save energy, following the prerequisites of the European Funds. In the remaining urban fabric, the regular distribution of buildings of similar composition does not contribute to generate variety and choice. This is the result of the application of simple urban regulations favouring mass housing production, instead of taking care of the formal design aspects, including some recommendations about the quality of the urban realm.

Conversely, in terms of adaptability, the formal simplicity of buildings and public spaces could favour their conversion into other uses in the future, while in term of legibility, the resulting urban structures are easy to read for residents and visitors. The local administration had to break down the planning norms to reduce the monotony due to lack of diversity,and to build special social housing projects in both PAUs to act as urban landmarks. In this regard, the Eco Vallecas district has become a symbol of identity of the place.

9. Urban landmarks: Mirador Building, Sanchinarro

Both neighbourhoods are surrounded by highways, which limits ease of movement regarding the connectivity with the rest of the urban structure. The existence of linear parks on the edge of these neighbourhoods, designed to separate them from the noise and pollution of the surrounding roads it making connectivity even worse. Although green fringes have positive effects, they are nevertheless acting as barriers which limit the future continuity of the urban tissue. Conversely, the adopted grid layout favours a good inner accessibility and permeability with ample streets and sidewalks, although some of them may be excessive in size. The whole traffic system is regulated by traffic lights, without other alternative measures to calm local traffic.

Social use of urban realm

The use in reality of the ample avenues, the wide sidewalks, the inner plazas and the parks, shows that the lack of interesting destinations and intermediate spaces with optional activities limits the use of these public spaces. This circumstance is concomitant to the few possibilities the projects offer in terms of appropriate physical and environmental elements, opportunities for social interaction and discovery by breaking the daily routine with different kinds of events.

10. Meeting place at Vallecas

LESSONS TO BE LEARN FROM THE CASE STUDIES REGARDING URBAN DESIGN AND QUALITY OF LIFE

Several lessons can be drawn from these large urban projects which were conceived during a period of expansive economy in Spain. Some lessons are related to the way the local administration pushed up the growth of the capital city; some to the physical products which had resulted from this process, and others to important but not foreseen social outcomes.

Pros

The planning legislation launched in 2009 by the Autonomous Community of Madrid - the regional administrative level with competence in planning - adopted a radical stance when it established that 50% of the units built in any new housing development had to be social dwellings. This compulsory mandate suits the principle of social mix set up by the sustainable paradigm.

Another remarkable matter is the use of these new neighbourhoods – mainly Vallecas - as urban laboratories. They represented an opportunity for the local administration to prove to what extent the innovations applied in sustainable buildings could be transferred to the traditional practices of the real state industry. This proactive position was carried out by the Land and Housing Municipal Company, aimed at putting into practice sustainable buildings as examples for private investors to be followed. What these examples show as well is that when there is enough political will to push forward this kind of experiments, it is possible to make room for the proposals of specific public bodies. At the same time, it was proven that when it is necessary to boost the construction industry to increase local prosperity, it is possible to curb the administrative processes as a way of easing the implementation of such development proposals.

Cons

The analysis of the current situation in both PAUs demonstrated that from the physical point of view size really matters, because it is almost impossible to create properly designed urban sectors in such very large areas. The final image of these areas cannot be foreseen in detail due to the scales at which designers and planners have to work. What becomes clear as well is that over-dimensioning the grid and the low gross densities of these neighbourhoods do not fulfil the demands of the sustainable principle. Finally, the target to encourage private developers to take advantage of the examples of sustainable public buildings has failed in its purpose.

Concerning planning what is remarkable is the absence of design principles in the planning process, which subsequently required introducing special ordinances to avoid the resulting monotonous landscape.

Socially speaking what is significant is the absence of demographic variety. The financing conditions of obtaining mortgages for dwellings at that time led to a fragmentation between public and private real estate markets. This had led to a predominance of young couples in these neighbourhoods, which, in turn, had affected negatively the idea of getting a balanced population in terms of age.

Finally, it is worth mentioning the high dependence of the administrative structure on political decisions and their negative impact on urban innovations. The best example is the dismantlement of one of the most advanced technical public agencies in 2013. Due to the weakness of the municipal economy, the Land and Housing Municipal Company was dismantled, thus wiping out one of the most dynamic public actor, willing to put into practice new visions on sustainable urban design aimed at promoting quality of life in contemporary developments.

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Júlia M. Lourenço

ASSESSING QUALITY OF LIFE THROUGH PHYSICAL PARAMETERS

INTRODUCTION

As cities keep growing in size, it becomes more and more important that urban expansion takes place a planned way, so that cities can satisfy the needs of its population. Unplanned growth or planned growth with scarce implementation lead to environmental degradation, traffic jams, urban sprawl, pollution, low access to basic services and equipments, loss of identity, communities' disintegration, pockets of poverty, etc.

Urban planning is the set of tools through which interventions attempt to create urban spaces that contribute to the quality of life of citizens in the context of urban design. This can be defined as the relationship of inhabitants with the different elements that constitute urban space. Urban design determines, directly, the physical component of urban space, and indirectly, its socio-economic, political and cultural elements, influencing the relationship between the urban environment and its components.

LITERATURE REVIEW

The urban quality of life theory originated from a sustainable development framework. This concept is defined as individuals' perceptions, feelings and experiences within the space in which they live. In addition to the traditional triple bottom line of social, economic, environmental, other cultural and personal factors have an effect on the quality of life. Wish (1986) proposed some such 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 for forming a sustainable environment, security and privacy. Several scholars had developed this concept further during the 1990s (Brown et al., 1993; Felce and Perry, 1995; Cummings, 1998; Parfect and Power, 1998). Several other authors are adding 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. He pointed to seven important characteristics, namely, welfare, health, productivity, privacy, security, population, and emotional welfare. Kampt et al. (2003) proposed a graphical framework that stands out, as it encompasses the public and the private spheres of quality of life, in relation to the physical environment, natural resources, goods, services, community development, personal development, and security and health.

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 in the B2003 Survey of Quality of Life in South East Queensland,as well as 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 relationship between these objective indicators and subjective indicators can be weak, and suggests that care should be taken when making inferences about improvements in subjective urban quality of life, as more in-depth researchis needed to link those indicators.

GUIDELINES FOR ANALYSIS

Some important points can be drawn from previous studies undertaken for Portuguese cities which are: (i) quality of life in cities can be described by characteristics; (ii) characteristics are associated with particular aspects of living in an urban context; (iii) quality of life characteristics can be described by indicators, which can be objective or subjective; (iv) characteristics and indicators can be combined by attributing them different levels of importance (weights) based on a subjective judgment.

This theoretical and applied framework allows for different combinations of characteristics and associated weightings 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 an individual citizen. While this evaluation model developed at the University of Minho for the scoring of the indicators describes nine characteristics, 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) omits important characteristics, such as built heritage, air and noise pollution. Apart from this, there is not a single set of weightings as all the indicators are given the same weight and added arithmetically.

GIS MAPPING

To complete this model, a GIS approach was used to compile and analyse both the quality of life scoring and urban pollution. This GIS Mapping enables the performance of a spatial analysis.

The GIS approaches have already been developed by several researchers, such as Gomes and Lins (2002), who studied quality of urban life in Rio de Janeiro using the Geographical Information Systems (GIS) integrated with Multi-Criteria Decision Analysis (MCDA) to assist spatial decisions. One of the main advantages is the ability of GISmethods to clarify the decision making process and provide structure to a non-structured decision making process; even so, further research is required.

Apparicio et al. (2007) reported that using

several spatial databases in GIS helped their 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.

INDICATORS FOR URBAN SUSTAINABILITY

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.

Classic indicators of Quality of Life or more precisely Quality of Urban Life, increased 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 their community and manage to successfully interact with its members is as important as attracting new people to foster its growth and to influence other communities, with possible far reaching consequences.

Low-Carbon Cities and Sustainable Cities indicators can be diverse. The first deal 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 2 shows some of the most recent indicators in use by various groups, emanating from a small sample of Sustainable Cities' Indicators in use in January 2012 grouped according to different categories.

Although the goal of reducing carbon emissions in cities is relatively straightforward to understand, the techniques and methodologies developed to measure them have producedever more complex indexes, which take into account the carbon balance, proper planning, the continuous improvement of any given city toward the carbon neutrality goal. They have all become important factors to compare the performance of different urban centres. As an example, Table 3shows a small excerpt of indicators developed for use in Chinese cities (Prince et al., 2011)for a project supported by the China Sustainable Energy Programme of the Energy Foundation (through the U. S. Department of Energy).

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 thecountry 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 different 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[1],the potential of internet communication to become the new globalising empowering force of the

twenty first century was already there. This was supported by recent political and social events in 2011 when social 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 number of indicators based on key competitive factors in what isknown as the "broadband economy". These indicators are broadband connectivity, knowledge workforce, innovation, digital inclusion, marketing and advocacy. The indicators reward municipal support for high-tech start-up companies, high tech job creation, and appropriate implementation of technologically sustainable solutions which create jobs or save taxpayers' money.

Nevertheless, the classic doubt remains to which extent these new indicatorsare charting new paths to quality of life and lasting prosperity for the citizens.There is a clearly visible trend towards increasingly organic patterns, following technological advances but without ignoring societal or human needs.

INDICATORS FOR URBAN DESIGN

Turning technocratic city development models round to serve more human centric priorities has long been defended by many urban planners. A classic model by Jacobs and Appleyardis shown here which uses different theoretical hangers as the basis of planning models for urban development.

Jacobs and Appleyard opposed the cost effective, grey skyscraper block tendencies which pervaded the decades of the 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 can 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 equipment and open spaces, or the diversity of land uses, for example.

Urban space may have an open or closed structure. Open space can be axial or organic in turn. Grid structures can be regular or irregular. The grid is often used on flat land while organic grids are the more sustainable choice for steep sloping sites. However, most often cities show a mix of them. Only cities planned from scratch, 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.

The urban structure may determine car dependency and therefore pollution; conversely, it can make urban spaces more liveable, support public transit, facilitate access to services and leisure, make cities safer, promote more efficient cities, etc.

Urban space is also characterised by its street pattern, which is a major determinant of urban structure. It structures the city, serves as a support to infrastructure and conditions accessibility. It can be non-linear, discontinuous, diagonal, organic, orthogonal. Cul de sac which is common in suburban developments is

an example of a street pattern that limits accessibility. As opposed to arterial streets which may integrate or divide, traffic may be distributed more evenly by avoiding concentration in downtown, promoting alternative uses of certain neighbourhoods, or by upgrading unsafe residential neighbourhoods or enhancing historical areas.

Additionally, urban space is valued through the existence and location of public infrastructure and services, public spaces, green areas and focal points. Numerous studies defend the positive contribution of these public amenities to the overall comfort of the inhabitants of such neighbourhoods, as well as to their higher real estate values.

Finally, another set of indicators helpscharacterise the design of urban space. Urban space may be framed or non-framed, articulated or non-articulated, cohesive or without cohesion, varied or monotonous, and may or may not have self-identity.

Urban design may be assessed via quantitative analysis or, via qualitative analysis, by assigning a value to different qualitative indicators of the urban space.

The land occupancy index can also be collected using approved detailed plans, thereby providing a general overview of the types of buildings present in the selected area. For example, for a possible matrix to identify the distribution of land use.

After computing these areas as well as vacant land, simple compact city indexes can be graphically designed to make urban diagnosis more explicit.

CONCLUSIONS

At a time of economic changes and crisis, urban planners have to reconsider their models of thinking and envisage new avenues forurban living.

They need to re-discuss and re-think the urban regeneration and urban expansion operations of the last twenty years with very open minds. This is a preliminary crucial step to prepare future creative paths for urban planning and action. Time has come to open up, and to really listen to the inhabitants and others who use a specific city, to understand the city´s DNA, feel its vibe, but also to make the inhabitants understand planning paradigms, their rational and and technical bias, to allow them to set their own trends according to their own values, however without giving up a 100 year history of technical knowledge. The indicators presented in this paper can portray a first assessment of an urban area. The next step after applying themis to engage in real communication and to get involved in the realities they showcase to understand and design improvements of urban areas which are really needed.

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ABOUT THE WORKSHOPS

Aiming to bring young professionals together to discuss and work on planning issues, the Association of European Schools of Planning (AESOP) launched the European Urban Summer School (EUSS) in 2010. From a great variety of backgrounds and countries, encompassing North and South America as well as Europe, a total of 15 young professionals started their work in Madrid, Spain, on 8 September 2013. This was not a random day; it was a Sunday, which showed how motivated and interested the group was on this course. Getting to know about the programme and its purpose the students had to register themselves, following the instructions, which were clearly stated on the official AESOP website.

The event consisted of field work, lectures and team work, which after 7 days was transformed into a presentation of clearly identified problems and solutions. After one site visit and the theoretical part, at which local problems were critically presented, together with some background requests, the professionals were divided into 3 groups of 5 students, which the organisers divided according to the professionals' formation to create diverse as well as balanced teams.

During the week, it was not just the comprehension about the topic that got clearer, but also its complexity and the necessity to link the sustainable triad: social, economic and environmental. The groups were expected to articulate their life experiences with each other. It required time and an open mind when seeking to fill the gap that existed between individuals and their approaches. (Extracted from Delicias Group final report)

The selected working areas encompassed three different urban circumstances: the Delicias Axis, a void of 23 hectares located in the inner city, requiring new ideas for its proper inclusion in the existing urban fabric; the Vallecas neighbourhood, a large development built during the last decade, when the sustainable principles specified at the end of the past century were mandatory; and the areas encompassed in the Southeast Strategies, the largest urban expansion ever planned for the city of Madrid which were facing a new meaning in the present period of stagnation.

After a week working on their respective sites and hours discussing the situation they were involved in, the three groups produced fresh, stimulating and innovative proposalswhich are presented in the following pages.

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STRATEGIES FOR THE POST-SPECULATIVE CITY: AN EXAMPLE IN **DELICIAS AXIS**, MADRID

1. ABSTRACT

Measuring approximately 23 hectares, the Delicias Axis is an area of Madrid with great potential. It is connected by metro and train stations, and is not far from the central museum district. Furthermore, several businesses, such as Repsol, Spain's major oil company, are moving into the neighbourhood, and there are several attractions such as the Planetarium and the Train Museum on the site. People from Madrid use the park for flea markets and social activities like dance. However, the Delicias axis does not currently garner the attention it deserves.

The Delicias working group of the 4th European Urban Summer School made several proposals to improve access and connectivity of the area into the larger fabric of Madrid. Improved urban design features were envisaged to revitalise the area and make it a real destination for locals and tourists. Through field work and discussions, the group produced a development plan focusing on the goals of attracting tertiary activities and linking the area with the adjacent Tierno Galván Park, the largest green open space in south Madrid.

2. INTRODUCTION

Aiming to bring young professionals together to discuss planning issues, the Association of European Schools of Planning (AESOP) launched the European Urban Summer School (EUSS)in 2010. A total of 15 young professionals with a wide range of backgrounds and from a broad range of countries, encompassing North and South America as well as Europe started their work in Madrid, Spain, on 8 September 2013. The excitement and motivation of students in the room was palpable.

The course was made up of field work, lectures and three group projects, which after seven days would be turned into presentations, highlighting the main challenges and solutions

proposed by the students. After an initialsite-visit and the theoretical part which explained local issues, the young professionals were divided into three groups of five. The groups were well balanced comprising professionals with different types of planning backgrounds.

Throughout the coursework, the need to link the three pillars of sustainability - social, economical and environmental- was a guiding principle. The diversity of students attending the summer school was a real asset because students had to keep an open mind while exchanging views witheach other and ultimately deciding on a consensus.

3. CONTEXT

3.1. The group and its cooperative principles

The working process was highly collaborative throughout the summer school. On the Delicias team, named after the place of work, the profile of the team members varied from architects to environmental manager; they had distinct work experiences and nationalities. Their way of teamwork building was beneficial because it fostered taking a holistic approach to the identified problems from different points of view. During the work process the group fully felt thebenefit from collaborative work, because it did not focus just on external form, but it also thought about the deeper sense of how students progressed and manifested their contributions at every step. However, this advantage was also problematic, since it was hard to reach consensus among a plethora of opinions on every detail.

With regard to local complexity, it was not only a place with lots of problems, it was a challenge for the group as a whole, which tried hard to find the best and most realistic solutions for the area. After many useful lectures made by professionals in architecture and city management, the first step in the project was for the group to carry out field work. It returned to the site to observe the area and collect information. The members of the group lookedalso at contemporary solutions for the planning issues they had identified by referring to their own countries or seeking out famous examplesworldwide. By examining the neighbourhood and physically inhabited spaces, and by observing people's behaviour and noticing a number of everyday gaps, the group was able to consider possible planning problems both from a personal and a professional standpoint to understand the real scenery of the area. The way of approaching what was happening on the site 'as a local' was very profitable for the group and helped it to delve deeply into the issues and discuss challenges and opportunities for the proposed area.

After working together and presenting their project outcome all of the participants of the group, as well as the summer school as a whole got feedback and guidelines for their own future work and research. This short but saturated week gave young professionals a strong impulse and a new starting point to solve the problemsin particular of empty or neglected areas in their own countries. After concentrated work and research on their project the group discussed with locals the possibilities they had envisaged ofchanging something in the real world. In the group's view this part of the city of Madrid could be a nice location for a government-led architectural and urban design competition in the near future.

3.2. The study area

As a starting point the area presented itself as an extended underused territory situated between the entrance to the Tierno Galvan Park through railway land and endinginthe area around the railway museum. It is composedof four districts

of the Arganzuela neighbourhood: Atocha, Palos de Moguer, Delicias and Legazpi. There is a lot of free unused space almost in the city centre, very close to one of the important transport nodes of Madrid –the Atocha station. This is the biggest railway station in the capital, the main railway station for commuter trains for the city and the focal point for intercity trains from all over Spain. This means that it is a portal to the city for both tourists and locals who work in Madrid but live in the outskirts. The Prado-Recoletos axis with the main famous museums of the city starts from there and leads people to the historical city centre. Close to this location is another important transport node –the Mendez Álvaro coach station, which also brings people to the city from all over the country.

The study area is surrounded bya very dense urban fabric, partly occupied by residential buildings but containing also some retail structures in it. Each residential building has its own infrastructure for inhabitants which is closed to strangers. There are no common open spaces to spend time in them and no connecting points to other parts of the area.

It is very unprofitable from a social, economic and environmental point of view to have suchan area with no use almost in the city centre; instead it could be a place where people could spend time during the day, and enjoy nature, engage in chats and benefit from fresh air. Additionally, the local economy could greatly benefit from a enlivened neighbourhood that would attract activities and investment.

The present point of attraction in this area is the railway museum (Museo del Ferrocarril) which still uses one of its redundant rail tracks once a year during a holiday. As there are no convenient internal pedestrian connections between these structures and the surrounding working area, the railway could be revitalised for more uses. It could for example lead tourists to the beginning of the Tierno Galvan Park where Planetarium, Auditorium and Imax Cinema are situated. Overall, this could be a profitable starting point to develop the unique features of the area.

There is therefore a potential to revitalise the train museum by putting the railroad into better use. This would create a greater attraction for the area for locals and tourists alike.

4. METHODOLOGICAL PROCEDURES

Firstly, before doing some brainstorming about the problems of the site, the group carried out some research on the location. After this step, a discussion started to detect the negative points of the site that needed to be improved and how to achieve these objectives. The team then went on to consider some real possibilities of how to implement these changes in reality and which solutions wouldbe possible to do it quickly.

The group agreed that it was not sufficient to solve only a single aspect foreach of these problems, but that it was necessary to address the triad of sustainability, and thus to deal simultaneously with environmental, social and economical dimensions. The approach the group chose toachieve this integrative target was to look at a number of layers to perceive and understand the reality of the site better.

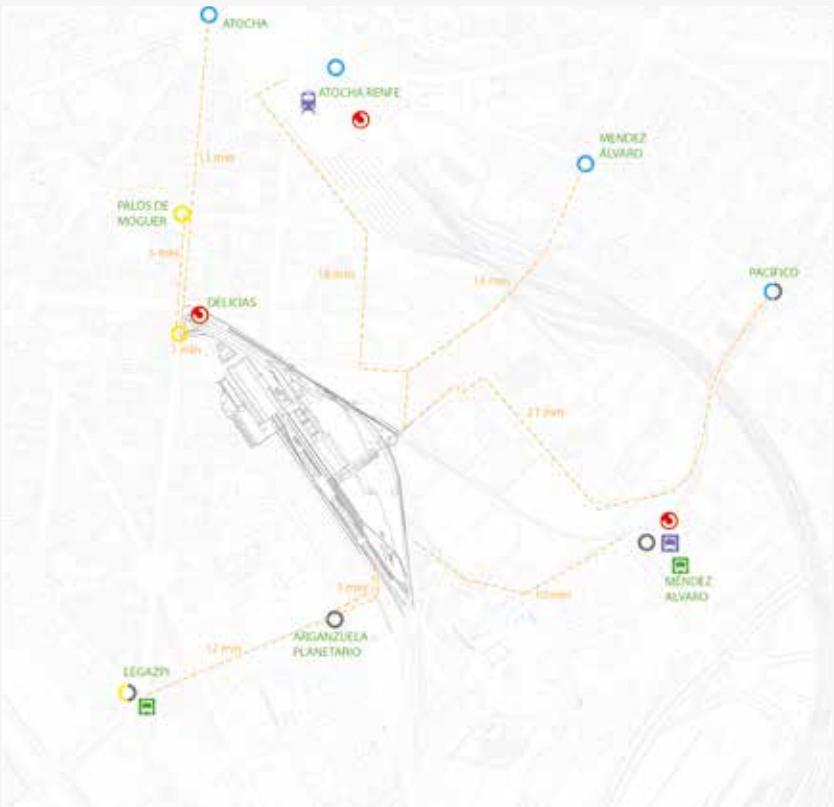
They were:

Connection layer

The empty part of the Delicias axis has good communication links with the rest of the city thanks to the metro of Madrid, as the site is situated between three metro lines (1-blue, 3-yellow and 6-grey) (Figure 1). Reaching the farthest metro station takes twenty-one minutes walking, and the two nearer stations take less than a minute. In this respect the Delicias site is one of the better connected ones in the south of the city of Madrid. Moreover, it is connected with the rest of the Madrid region by

three stations near the site, the Delicias Station on the edge of the empty site, and the Atocha Station and the Mendez Álvaro Station in the north and in the east respectively. The regional train network connects these stations to the Region of Madrid. The immediate surrounding of thesite is also connected with the Region of Madrid by regional coach, which can be taken at the Mendez Alvaro coach Station or in Legazpi square.

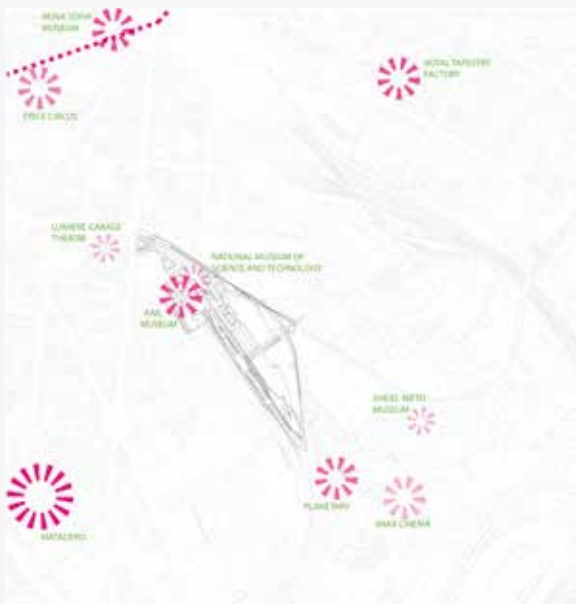
The Atocha Station connects Madrid with other Spanish cities, and the AVE (the Spanish High Speed Train) is also serving this national train station. The national coach lines departing from the Mendez Álvaro station are also offering national transport connections to this area.



1. Connection Layer

Cultural layer

The area is situated half way between the Matadero, one of the most important modern cultural centres of Madrid, and the Prado axis, where the most important national museums are located, among them the Reina Sofia Museum besides the Prado, as well as other cultural establishments, such as Price cirque (Figure 2). In the south-east there is another important cultural cluster, located in the Tierno Galvan park, which includes the Planetarium of the city of Madrid, and an IMAX cinema (the first cinema of Madrid with 3D technology). Nearby is also the Angel Nieto museum, although it is not of national importance. Cultural attractions in the vicinity of the site are compounded with the cultural establishments on the site, such as the Old Delicias Station, built at the end of the 19th century, which has become a Rail Museum, with parts of the building housing the National Museum of Science and Technology.



2. Cultural Layer

Green layer

The empty part of the Delicias axis forms the gateway to the Tierno Galván Park, a very large park in the south of the city, with 45 hectares comprising trees, fourteen grassedareas and sports fields. Nearby, is the green axis Madrid Rio, a new park which was created to uncover and revitalise the Manzanares river. Its construction was completed in 2007, and this very long green area along the river connects the south of the city with the west, and joins the green areas of the north with those in the south of the R Madrid region (Figure 3). These generous open spaces are prolonged into the city by wide avenues, lined with several rows of trees which form green corridors and are linking up all the major parks.

3. Green layer

Use layer

The area surrounding the empty site of the Delicias axis is predominantly residential. It was built between the 18th and the 19th centuries. Thenearby Mendez Álvaro axis is transforming itself at present to become the most important business district in the south of the city. The establishment of the new headquarter of Repsol on this axis is an example of this transformation, and other corporate headquarters are expected to follow on the fringe of the Delicias axis. The residential areas tend to be located around the south of the empty site of Delicias, while the business district is developing on the west of the site.

By dividing the location under study into these"layers" the group discovered that selected places could be perceived as 'spatial hinges'–which deserved special attention for the development of this area by planning solutions. In these acupuncture points, various layers converged with a strong connection between them. This meant that the design proposals for the various parts of the site had to be developed alongside each other, taking into account the connections between these 'spatial hinges'. The group decided to turn the Delicias axis into an extended park full of activities for both locals and tourists. This included places for leisure activities, such as a rope climbing wall andplaygrounds, as well asplaces for quiet moments and rest.

After the group had specified the various functions of the selected acupuncture points further, it presented the results of its spatial strategies and design principles to the whole summer school, just over a week after the beginning of this event.

5. ACHIEVED RESULTS

With the aim to find concrete solutions for different problems in the Delicias Axis, the group considered that field workwas necessary, first of all to identify punctual issues of the site, together with the best places where

interventions could bring about positive change. After this, the group started a series of working sessions, during which they focused on raising questions about the area and exploringpossible tools that could be used to solve them. This process let the group to identify 11 problematic points of intervention.

4. delicias accupuncture

Point 1 (40°24'00,07"N / 3°41'37,85"O)

Achieving a successful transformation of the Delicias Axis was not easy for young professionals who did not come from Madrid. As outsiders, what the group found was that the periphery of the Delicias site presented a facade which was unappealing. Because of that, people were passing by without noticing the existing attractive activities on the site, let alone its potential for the future. A solution for this problem would be a more attractive facade, with a larger entrance and better views into the site. A large signboard above a wider entrance would help, as well as movinga little train statue closer to the entrance to inform people about the museum building and its contents inside the gates. (Figure 5)

5. POINT 1

Point 2 (40°24'00,06"N / 3°41'33,78"O)

The Delicias Axis is a place with multiple uses, among others a shortcut for people to use to reach the subway. However, knowing more about the area, its inhabitants started to establish another path which provided a faster passage through a green field (between "Calle Párroco Eusebio Cuenca" and "Calle Cristo del Camino"). This also included climbing up a steep slope and compacting the soil along this informal path, which would have an impact on the vegetation all along. One possible solution could be to open the existing fence formally and instate a flight of stairs to join the two levels. This would provide a better and safer access for the local commuters and could also become an advertisement for Delicias for a wider public.

6. POINT 3

Point 3 (40°24'00,68"N / 3°41'33,59"O)

Another solution to connect the main streets "Calle Ramirez de Prado" and "Calle Cristo del Camino" was to instate an underground path with a low slope to make it attractive and bring light into it. (Figure 6)

Point 4 (40°23'57,37"N / 3°41'33,72"O)

One way of bringing more attractiveness into the area was to build and open a cafe in this

spot, which would offer finger food and seating from where to enjoy the area.

Point 5 (40°23'56,04"N / 3°41'33,66"O)

At this point the path is really narrow. For that reason the adjacent buildings should be made more pleasant and in harmony with the surroundings, so that people would enjoy this passage more. Landscaping and detailed design proposals were needed to refurbish the existing passage and make it more attractive.

Point 6 (40°23'53,64"N / 3°41'30,53"O)

At this point there is a corner space without a use. The group wanted to make use of this empty space and proposed to turn it into a place where people could exercise on some free equipment. Besides creating a space with new visible activities, the change could also improve the connection between this stretch of the path with the inside of the old train station. Such an area for physical exercise would accommodate complementary activities to the well used children's playground located close to it.

Point 7 (40°23'52,12"N / 3°41'26,82"O)

Upon the closing of the train station, some of the wagons fell into disuse. Trying to recover them, the main idea was to turn them into thematic restaurants. This would create a new local culture which would always be alive.

Point 8 (40°23'46,62"N / 3°41'21,73"O)

Looking for the use of the old railroad, some special carriages are proposed to be used by the population. (Figure 7)

7. POINT 8

Point 9 (40°23'46,38"N / 3°41'23,02"O)

A great thematic 3D painting could be created on the wall to attract attention to this place by people living around it.

Point 10 (40°23'37,88"N / 3°41'12,35"O)

Reutilising the existing structure, the group proposed an open air movies or theatre, as well as some kind of rope play area close to it, to put the whole place back into use. Moreover, a new high level passage should be created to connect the top of the bridge with the other side of the railroad.

Point 11 (40°23'51,05"N / 3°41'13,53"O)

At this point the main idea was to create a building with different uses. It would include stores and shops, restaurants on the lower levels and residential premises to houseinhabitants from all status levels above. During the daytime, the lower levels would be used intensely, especially by people who work in the surroundings as well as local inhabitants. At night, the upper storeys could be used as dwellings for the population. The roof would be open for public use to provide a better connection from this area to the entrance of the museum.

6. FINAL CONSIDERATIONS

In conclusion, the group who studied the Delicias Axis decided to introduce different interventions along the axis. They ranged from the renovation of the portal to Train Museum at the entrance to the Delicias site, to making the passage through existing empty spaces more attractive. To that effect the group decided to fill these spaces with small scale activities, such

as fast-food points in keeping with the style of area. The group also dealt with larger structures on the site and proposed their renovation according to green and ecological methods.This amounted to a twofold approach to the site: adding real small things that could be produced immediately and longer term interventions that required more time and resources. The rapid interventions used what already existed on the site. For example, revitalising the redundant rail track and turning it into a fun railway would not take much time to create. Such a change would attract locals and tourists to this area on a permanent basis. The longer term regeneration of the site would start with the improvement of existing activities identified in the 11 points, thechildren play spaces, connections of the site with its surroundings links between them on site, by introducing new activities such as comfortable fast food spots etc.

However, promoting the development of the whole area is not easy at all and would require the participation of the whole community in the decisionsabout the future of the site.

The transformation and introduction of new uses to the Delicias axis would entail long time changes which would have an impact on the whole city centre structure. More immediately they would influence the nearby street structure and dwellings and thus the daily life of the local inhabitants. All these aspects (social, economic and environmental) would have to be incorporated into the design process.

Collaboration between all the members of the team was essential for the preparation of this paper on the work of the Delicias axis group. By dividing the development aims into subjects and attributing the elaboration of specific solutions to particular team members who provided feedback to the whole team, made the collective process of thinking very systematic led the team to a very considered conclusion.

7. ACKNOWLEDGEMENTS

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STRATEGIES FOR THE POST-SPECULATIVE CITY: THE CASE OF **VALLEC/KAS**, MADRID

ABSTRACT

In times when the economic crisis and different administrative problems are leaving behind ghost cities and abandoned extra-large urban projects, it is urgent to start reflecting to react. Provoking discussion among young urban planners and other related professionals is very important to open up more up-to-date and innovative solutions, by thinking about short and long term solutions for our cities and their future. The burst of the housing bubble in Spain has triggered a deep crisis for the city as a project. One of the most important casualties of the economic crisis, P.A.U de Vallecas - one among the main six large areas which were previously planned to accommodate overestimated urbanisation for the city of Madrid – was chosen as the focus of discussion and study during the 4th European Urban Summer School. By analysing and diagnosing the present situation, the main challenge of this project was to find urban design solutions for this area by assessing quality of life through physical parameters.

1. INTRODUCTION

The one-week workshop of the 4th European Urban Summer School (EUSS) 2013 aimed to guide the participants to find a balance between the already existing situation of P.A.U de Vallecas, and the challenges that it presents for its future. The task set by the EUSS organisers consisted of finding possible solutions to improve the quality of life in the area, by assessing it through physical parameters and how they affect quality of life in this neighbourhood and its wider context.

The work carried out was related to an understanding of the planning system of Madrid, and in particular in the P.A.U de Vallecas, followed by a SWOT analysis of the area. This formed the basis for ideas towards making the Vallecas area more attractive, by

resorting to sound and minimalist proposals for the area, as opposed to the over-dimensioned grand designs conceived before the crisis. These proposals were targeting especially the improvement of public space and the reduction of vacant land, and thereby upgrading the rather poor urban image of Vallecas.

The next section describes the team´s working methods and how team members shared their multi-cultural and rather different academic backgrounds to apply their creative knowledge jointly in devising proposals for the improvement and upgrading of this urban area. The third section gives a general description of the PAU de Vallecas area. The next two sections portray the urban situation of Vallecas at the present time in terms of the team's analysis, followed by a diagnosis and a strategic approach for change proposed by the team based on their analyses and observations. The final section consists of a description of the team's Vision for Vallecas in the future and several proposals for district's improvements, followed by the Conclusions. Both the old Villa de Vallecas and the new Vallecas - PAU de Vallecas - are incorporated in the vision for the area.

2. SETTING UP THE TEAM-WORK PROCESS

Once given the assignment, the team of five members was free to choose its own working method and approach. The team was very dynamic and the members complemented each other with their different backgrounds. Two site-visits took place, using different means of transport as part of their observation. During the site visits team members undertook quick interviews with district's inhabitants. Using different ways of transportation, walking as well as the public transportation system (buses + metro), provided the team with valuable insights into people´s feelings. Conducting several surveys of people living, working or strolling within the project area proved to be a very rich experience that led the team to a more accurate diagnosis.

While completing the urban inventory and preparing the photographic documentation, the team decided to work on a series of analyses, eventually incorporated in a SWOT (Strength- Weakness- Opportunities- Threats) analysis. After the analysis and diagnosis sessions, the team proceeded with drawing up a strategy and formulating a vision, which was also translated into a series of proposals for improving the future of the P.A.U de Vallecas. The real teamwork started with a choice of the work method and the general plan for a week-long activity. The team members decided to divise a general plan for their engagement into six phases (see Figure 3). The completion of one phase was the condition for the beginning of the next one. Such an approach enabled team members to manage the complex task during such a short period of time.

"Site visit & data research" was the first phase of the preparation of their strategy. Special care was placed into gathering more data than the one provided by the tutor team. The team was challenged to find and use additional data that came from other official documentation of the municipality of Madrid, from scientific papers and from social pages on the Internet- e.g. a Facebook and a neighbourhood forum which gave a wider perspective of the social problems of the Vallecas district.

The second stage of teamwork, the "analysis" was managed by applying the world-wide known technique of the SWOT analysis, used to support strategic decisions for

1. Vallecas site visit

2. Vallecas site surveys

3. A Diagram of the teamwork's six phases

4. Data research for Vallecas site

the long-term development of cities or regions. The four SWOT components were adapted to the Vallecas district of the city of Madrid:

S-strengths
internal factors, which positively affect the district,

W-weaknesses
internal factors, which negatively affect the district,

O-opportunities
external factors, which positively contribute to the district,

T-threats
external factors, which negatively contribute to the district.

Thanks to the conclusions from the "analysis" phase, the team members were able to diagnose and choose a model for a strategy which they would adopt for their further proposals. The two phases - "diagnosis" and "strategy" - opened the discussion on the general vision. The aim was to closely link the model of their strategy to a vision. The reason of this approach was obvious: these decisions had a strong effect on the final proposals for the Vallecas district and on their usefulness.

3. P.A.U DE VALLECAS, THE ORIGIN AND THE CHALLENGES OF THE PROJECT

P.A.U de Vallecas is one of the main six large areas planned during the 1997 Master Plan, expected to fulfil the needs of urbanising the city of Madrid. According to this masterplan, the city would go through a very fast process of urbanisation and development. In order to accommodate and welcome these changes, there was an immediate need to prepare a significant amount of land for housing purposes, and to reactivate the real estate sector, which seemed to be somewhat slow at the time.

A series of wide and high capacity roads linked up all these areas planned to host these new developments, and a great amount of land was allocated to each of them. For the southeast sector about 10,000 hectares were scheduled to develop, and P.A.U de Vallecas was one of the biggest areas of implementation, with a surface of 736 ha to accommodate 28,058 dwellings. The area was developed as an expansion of the old district of Villa de Vallecas, which used to be an independent village, and was only designated in 1950 as one of the districts of the city of Madrid.

The partial plan, which defined the content for the development of the district of Vallecas was approved in 1999, while the other six units which form part of the plan for its implementation were approved only in 2002. The building process of the new development came to a halt in 2010, but at present, the district of Vallecas is completely urbanised and about 90% of the planned buildings are already built.

The urban structure for the new implementation was planned as a separated district, not preserving and promoting the connection and cooperation between the old and the new Vallecas. Quite the reverse, the plan foresaw a strip of services and public facilities between these two districts, thus deepening the division between them even more. The new urban district is mainly residential, composed of collective housing arranged into perimeter block of six floors, as the dominant building typology. Only the southern corner is providing two rows of detached houses, which seem to offer more qualitative open space, but it is for private use and planned in a very rigid and strict way.

The district is continuously divided (in a northeast-southwest direction) by the road system composed of three main types of streets: boulevards, streets for distribution (vial) and streets of coexistence (vial + pedestrian), which are also surrounded by green belts along their

5. Example of built-up areas in Vallecas site

6. Strict urban design and implementation of buildings in Vallecas

7. Example of the wide street pattern in Vallecas

8. Examples of Vallecas´ open and green public spaces

9. Examples of Vallecas´ open and green public spaces

longitude. Two main greenways that follow the tracks of old livestock paths, planned as landscape infrastructure, also border the area on the southern part and try to be incorporated into the district as well. Despite the qualitative service it offers, this system of streets, greenways and big open spaces, increases the division between the different parts even more within the district, makes the area loose its human-scale and discourages the pedestrians to use the space.

The layout of the district includes also a large shopping mall, a social and commercial local centre, three new underground stations, public facilities and green areas. As for the public facilities and green areas, the application of the standards legally required (81 and 74 hectares, respectively) reduces the residential density to 40 inhabitants per hectare, a considerably low figure in relation to the number of housing units planned.

From the design perspective, as more than half of the dwellings are under official protection, the City Council saw this as an opportunity to experience and present new construction techniques, materials and typological configurations, with the aim to "provide new sustainable solutions" for the planned district.

10. Examples of Vallecas´ modern architecture buildings

11. Examples of Vallecas´ modern architecture buildings

In addition, in order to gain more financial support from the LIFE Program of the European Union, the EMSV (Municipal Housing Company) developed a proposal called "Eco-Valle Strategy", which contained three sustainable projects located within the district: a residential one ("Sunrise building"); a pedestrian area of 550m x 50m for the neighbourhood called the "Eco Boulevard"; and La Gavia Park, a 38 ha open space designed for the whole new expansion.

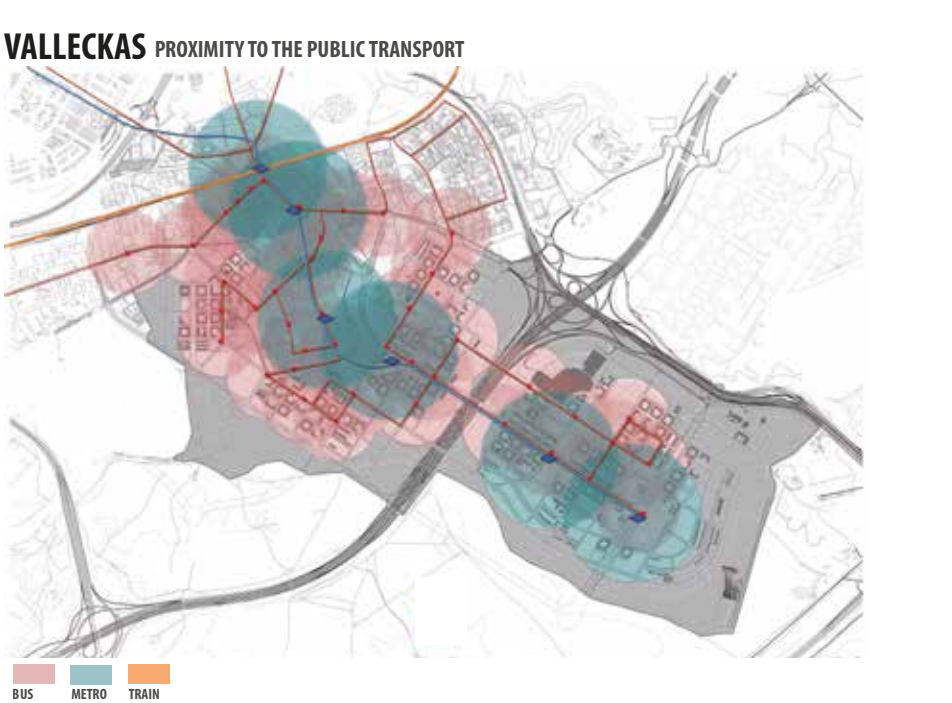
12. Views of Vallecas´ Eco-Boullevard

13. Views of Vallecas´ Eco-Boullevard

4. VALLECAS' PRESENT TIME. RESULTS OF THE ANALYSIS

The SWOT analysis consists of four components, i.e. strengths, weaknesses, opportunities and threats. In use of these components different subjects were raised by team members while using these components. This enabled them to look broadly at Vallecas and its surrounding area. The following paragraphs present in detail all the parts of the four SWOT components, which are also shown in Figure 3.

First of all, team members focused on the strengths of the Vallecas district. During the interviews made among its inhabitants they noticed that the local community of Vallecas appreciates its neighbourhood and is quite

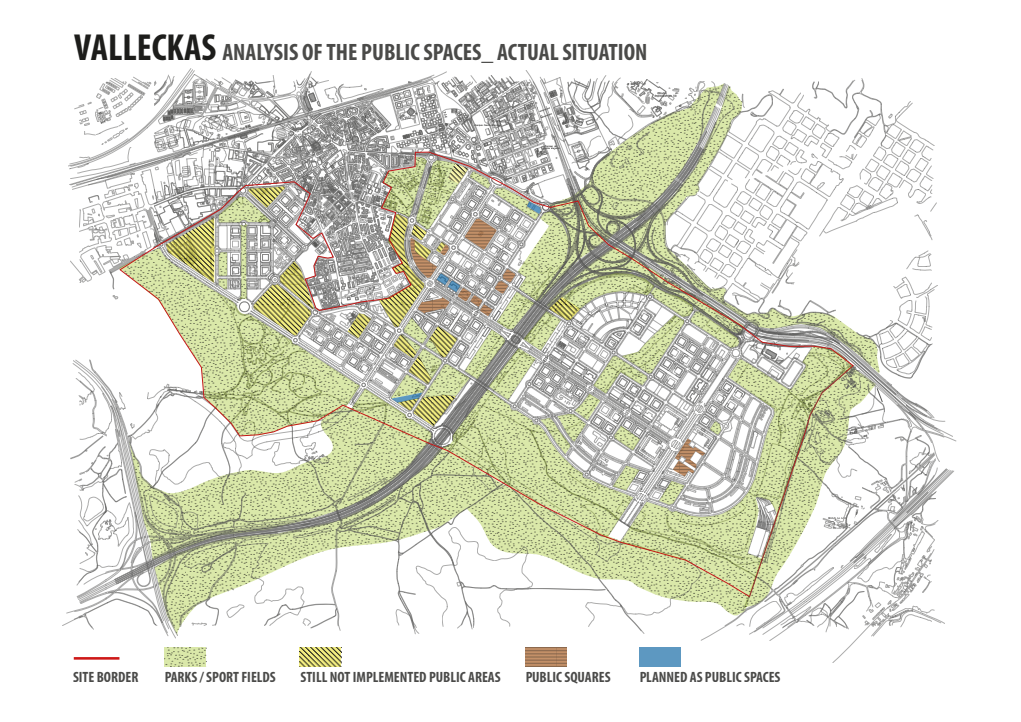


Map A. Public Transportation Accessibility in Valleckas

proud of living there. One of its reasons could be the good quality of dwellings and their rather large size in comparison with other parts of the city. What is worth mentioning is that the local community in Vallecas is active and its members organise many public events with the help of a dedicated association. Proximity to public transportation appeared to be poor as a first impression of the team members. However, more detailed analysis showed well designed distances to bus and metro stops with good connections to the centre of Madrid, and thus public transport was classified as a strength.

Finally, the team noticed many open spaces, which could be used for individual sport activities.

The weaknesses were pointed out as the second component. The huge commercial centre called "La Gavia" was recognised as a big difficulty for the Vallecas development. The concentration of shops and cafes under one roof in the north part of the Vallecas blocked the ground level activities in the core of the district. This situation resulted in a lack of rapidly accessible services located more closely to the dwellings and in a lack of public life on the streets. The existence of the shopping mall intensifies car dependency. It was clear for the team that the district was designed for moving by car and not for pedestrians. The best sign of the Vallecas car dependency are the oversized streets and the motorway, which divides the district into two independent parts. One of the most important weaknesses in the eyes of the team members was the bad urban design of the new part of Vallecas. This was due to many



Map B. Public Squares and Greens in Valleckas

aspects. The poor urban composition resulted in a very monotonous urban fabric without any landmarks or significant buildings, nor a main square, which are required by contemporary theory of urban design. The oversized public spaces formed part of poor urban design as they could not be filled up with people, because of the low population density there. Moreover, the existing public spaces were not in good condition. They were dehumanized and deprived of shades and water elements which are so essential for thermal comfort. The rigid segregation of functions into living, working, leisure and transport sectors reminded the team members of the beginning of the modernism era and the obsolete ideas of the Athens Charter from 1933. These aspects were probably conceived as a better working environment by the urban designers of the Vallecas. But the incomplete development of the area (including missing facilities for education, sport and public services) resulted in many urban voids and they intensified these weaknesses. The last thing to notice is the segregation between the urban fabric of the new PAU Vallecas and the older one in Villa de Vallecas which is much more alive. This resulted in tenuous links between both areas.

Opportunities are positive factors, which could help the further development of Vallecas, but the district does not have an ability to directly shape them, because they come from the outside (city-, nation- and world-wide factors, e.g. international economic trends). The international interest on Vallecas was noticed in architectural magazines (e.g. Dezeen) and Internet websites (e.g. ArchDaily). This attention focuses especially on the award-winning part of the Vallecas - i.e. Eco Boulevard. This situation was judged as an opportunity to gather worldwide specialists to improve the district in the future. Another interesting approach was the recognition of the post-speculative reality as an opportunity, not as a threat as usual. The decision of this action was made in the belief that the end of the over-optimistic era of development could change the way of designing and managing the cities from the quantitative approach into the qualitative one. The sustainable aspects of Madrid's reality, like the 21 Agenda's activities and the contemporary alternative mobility solutions became the opportunities for further improvement of Vallecas in the eyes of the team members. Also the economic instruments - such as entrepreneurship elicitation and PR activities - could be better used as well.

The last part of the SWOT analysis - threats - are also factors coming from the outside, but they have a negative impact on the development

activities of the district. Three citywide trends had been featured here. Firstly, the planned development of another south-east area in Madrid. The team guessed that the further expansion of Madrid's urban area, as written in the city's plans, constitutes an extremely negative situation, because it will not help completing the existing districts, including Vallecas. The second citywide trend is the long-term debt of the municipality's budget which means that there will be a shortage of money to spend on further improvements. The last of Madrid's trends listed as a threat was the demographic forecast, which confirmed the impossibility of filling up the urban voids with new buildings. Another point is the surrounding area of the Vallecas district. It is situated quite close to the municipal waste of Madrid which generates air pollution, and close to probably the biggest slum area of Spain's capital called Cañada Real. These factors could make living in Vallecas less attractive. The continuation of the star-architecture way of development on the site instead of thinking about the quality of the inhabitants' life was also marked as the threat.

Strengths	Weaknesses
Appreciation of the place by inhabitants	No ground level activities
Public transport connections to city centre and inside of PAU Vallecas	Commercial centre: mall „La Gavia"
Social activities of inhabitants: association of inhabitants in PAU Vallecas	Not-diversified society
Enough space for individual sport activities	Bad urban design
Good quality of dwellings	Bad architectural solutions
	Fragmented area (urban voids)
	Slow development of facilities for education, sports and public services
	Undeveloped working areas
	Car dependency and car-oriented design
Opportunities	Threats
International interest on this site (award-winning Eco Boulevard)	Technological Park Madrid and its growing impacts
Post-speculative reality	Demographic change
Alternative mobility solutions: carpooling, carsharing, P&R	Bad reputation
Madrid Agenda 21 activities	Area isolated by highways: „island" Vallecas
Identity of the old Ville de Vallecas	Debt of the municipality and the private sector
Municipality stimulation program for opening new enterpreneurships	Urban decay
PR activities to promote the Vallecas	Star-oriented architectural trends
	Increase of the slum area in the neighbourhood
	Development of another South-East areas

5. DIAGNOSIS AND STRATEGIC APPROACH

After the SWOT analysis the diagnosis for the PAU de Vallecas was undertaking and a strategic approach was chosen. As risks and weaknesses clearly outweighed the strengths and opportunities identified in the Vallecas area, the team members investigated the fields of social challenges and well-being of the inhabitants, economic conditions, mobility as well as security. Therefore the diagnosis is focused on these factors with special attention to social challenges to achieve a socially and economically viable as well as a desirable and ecologically sustainable development of Vallecas for the future.

This approach implies that the team tried to focus on strengths and opportunities to fix weaknesses and reduce potential risks derived from threats.

One strength which is a very important factor of attracting people to live in Vallecas is the fairly high quality of dwellings. People there seemed to be satisfied with their living situation such as having their own parking space within the building, a pool inside the block and enough privacy. Also accessibility to Vallecas is ensured bearing in mind the good connection to the city centre by public transportation and the direct

link to the highway. However, Vallecas within its borders shows weaknesses due to mobility. Especially bicyclists and pedestrians seem to be at a disadvantage. Nonetheless, this weakness should be taken into account when pushing alternative solutions for private transportation, such as car-pooling or car sharing.

Another strength which outweighs the presence of diverse weaknesses and risks, seems to be the connection to the old Vallecas. Whilst an identity is already existing there, just around the corner, the PAU of Vallecas seems to struggle with defining and clarifying its identity. Both parts, the old Villa de Vallecas and the PAU of 'Vallecas' may benefit from each other.

For that a creative global identity of 'Vallec/kas' must be created.

To achieve the Vallec/kas goal, four different strategic approaches were discussed. An overview on these strategic approaches will be given in the next paragraph.

Aggressive strategy: applies to huge and well managed areas where strengths can be aggressively used to take advantage of the opportunities;

Competitive strategy: uses opportunities and tries to eliminate weaknesses; can be implemented when the area has a fairly high amount of strengths to encourage its competiveness;

Defensive strategy: tries to eliminate weaknesses and threats; typical for less strong areas, it is characterised as quite populist with good social acceptance;

Traditional strategy: is based on strengths and tries to avoid threats; it is used for maintaining existing values.

After comparing the SWOT outcomes and the characteristics of the various strategies', the 'traditional strategy' was chosen.

This selection is derived from the fact that the PAU de Vallecas has many weaknesses of different nature, such as social, architectural, spatial, economical, mobility and safety. Nevertheless, strengths have also been identified. Using the 'traditional strategy', the strengths and opportunities which have been identified were used to conceive the vision of 'Vallec/kas' by eliminating weaknesses and reducing future risks. The post speculative reality which enables to sustain and improve the current situation in the PAU de Vallecas requires a low-cost proposal which is highly linked with the activities of inhabitants and different social groups.

Measures that need to be taken are definitely the improvement of public spaces and the reduction of vacant premises, inter alia, to create new bars, local services, or even bicycle parking.

The strategy should target concentric diversification, which implies further businesses with synergetic possibilities but also unrelated businesses that represent promising investment opportunities, such as ground floor activities or the creation of a start-up cluster in Vallecas. Furthermore, both communities, the old 'Vallekas' and the PAU de Vallecas may use more joint ventures and build strategic alliances also by resorting to the agenda 21 procedures. It is very important to combine the new part with the far longer existing old part, to avoid isolated structures.

6. VISION OF VALLECAS IN THE FUTURE. PROPOSALS FOR DISTRICT'S IMPROVEMENTS

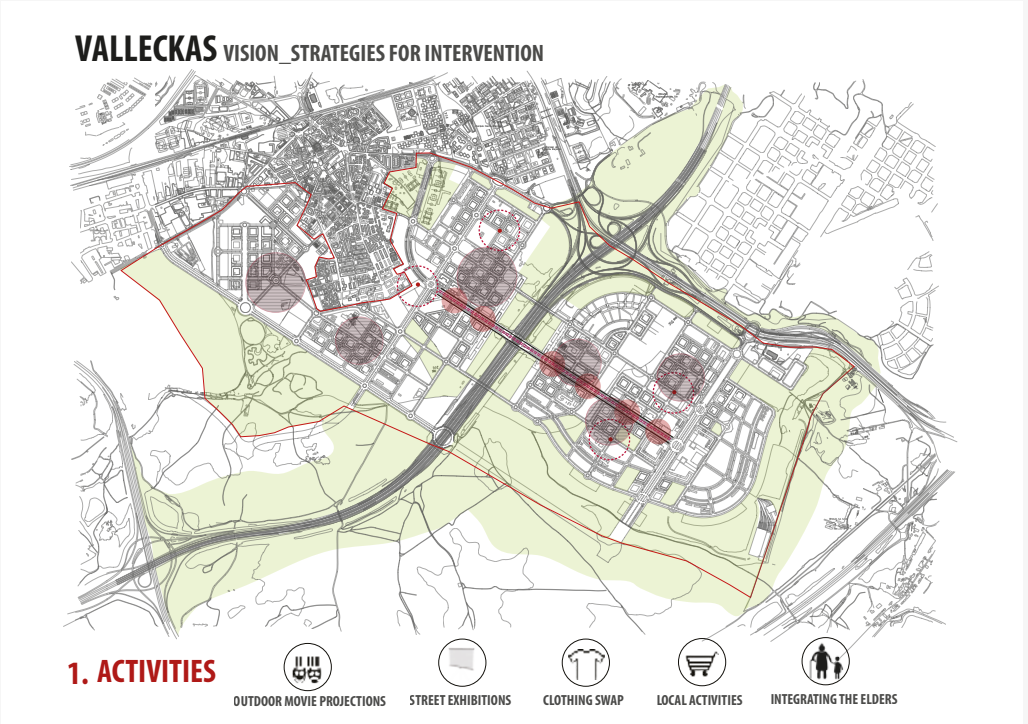
Our ambition for Vallecas is the addition of a programme that increases the liveliness of the area and that accentuates the local identity using vacant plinths and land. For that reason the team proposes neighbourhood activities on the central square and the main avenue of the site. Local organisations and entrepreneurs

will be invited to host events. It is important to involve associations from Vallecas and central Madrid. The former because of their relation with the area and the latter to create a connection between the site and Madrid. The latter is important to generate positive exposure for the area, which could be reinforced by neighbourhood branding. Given the limited budget, the proposed number of physical interventions is limited.

Accordingly, the proposals were set to fit the needs to cover main aspects, such as:

- Central Square and Main Avenue vibrant with activities,
- Sport activities in green zones,
- Local economy,
- Neighbourhood branding,
- Physical interventions,
- Transportation.

In the following section our concept will be further elaborated.

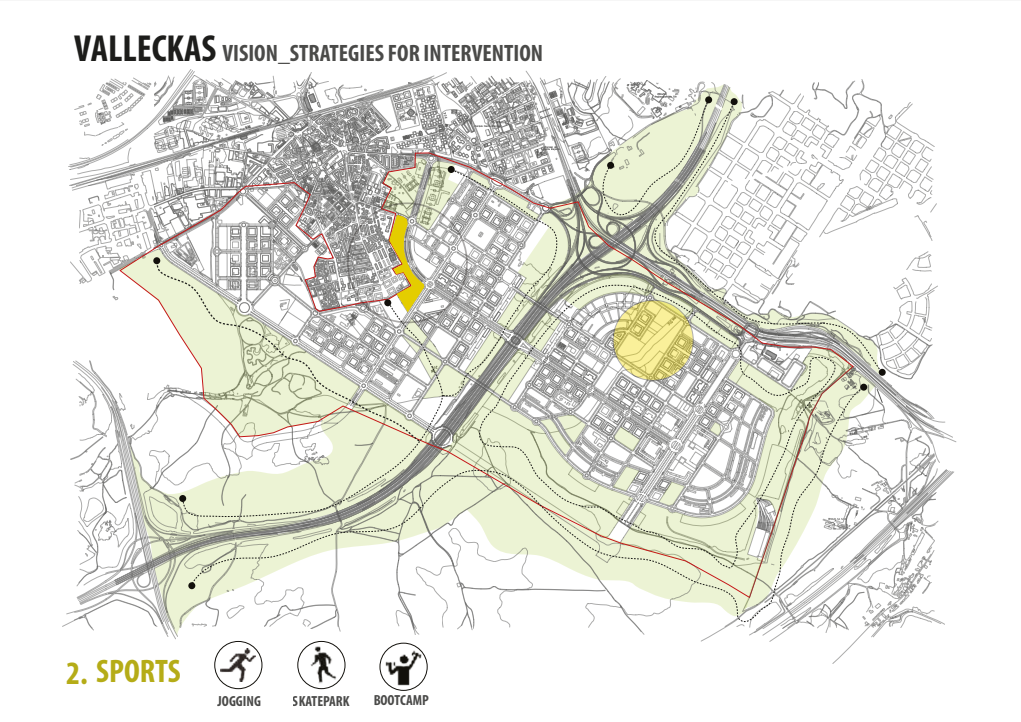


Central Square and Main Avenue vibrant with activities

The Central Square and Main Avenue lack the liveliness the big city avenue structure would presuppose. Dead walls and empty plinths are giving a feeling of abandonment. Therefore, the first proposal is to invite entrepreneurs and local organisations to showcase cultural and commercial activities on the vacant plots and empty retail spaces. The involvement of the existing organisations in the neighbourhood and the ones from Madrid in this joint cultural organisation is very important. The first because of their local knowledge and support. If they organise an activity it will be more likely that it appeals to the local tenants and that a group of visitors can be mobilised. The Madrilenian organisations are invited as well to generate a bridge with the city. These organisations should be able to create events that are attractive to the inhabitants of the city. Likewise, central city inhabitants can discover this neighbourhood in a more positive way. We think this leads to a more positive image of the area. Possible activities are art workshops, outdoor movie projections, clothing swap, other local activities integrating the elderly in all of them, and play zones for children and teenagers. These activities would take place in the sites that give sensation of emptiness to the area. As an immediate consequence, the main objective would be reached: to make the district a much more attractive place.

Sports in green zones

Increasing attention is attributed to a healthy and sportive lifestyle. The rough void areas in



Vallecas could be suitable for sport activities like jogging, skateboarding, boot camp, hiking and mountain biking. Sport clubs should be informed about these possibilities so that they can use the space. To facilitate this we propose the municipality to help them with permits to generate a smooth start for these activities. Considering that playing sports is beneficial for health and social contacts in the district there will be the extra added value of generating a more lively environment in the evening hours when many people are active outdoors.

Supporting the local economy

The vacant retail spaces in the plinths show that it is difficult to set up a business in Vallecas. The large commercial centre in the district is a strong competitor for shops and bars on the main avenue. We think that it is possible to fill in the void retail spaces by broadening the scope to any kind of business. Examples of other business are creative companies, solicitors or practices for physiotherapy and accountancy. Not all of these initiatives will be able to pay high shop rents, especially start-ups. Therefore the owners of the spaces will have to be convinced that it is wiser to (temporarily) house cheaper tenants to make their plots used and therefore more attractive. Given the fact that it is difficult to open up an economic activity in Vallecas, it is advised to collaborate with marketing and business experts. More specifically, start-ups from the Regional Council of Madrid and the Faculties of Economy and Business should be involved. These institutions can point out the market opportunities and can give legal and financial advice regarding the setup of a business. A tool to generate attention is the organisation of a communal event on the main avenue. Visitors can taste from bars and restaurants and can get a massage or basic legal advice during the event. This will raise exposure for the start-ups.

Neighbourhood branding

To improve the image of the neighbourhood we propose neighbourhood branding for the area. The branding can consist of a slogan, colour and logo, designed by local artists and inhabitants. This logo should be introduced to street furniture. PR materials, both from the neighbourhood and from the local entrepreneurs can thereby show their pride of Vallecas. Furthermore, it is important to promote the cultural, sportive and commercial activities in Vallecas on a local and national level. To raise international attention we want to set up a Vallecas Blog in which experts can give their view on the district. The best proposal is to participate in an annual international competition

for improvements of post speculative cities. Like this Vallecas can become the experimental site for post post-speculative interventions.

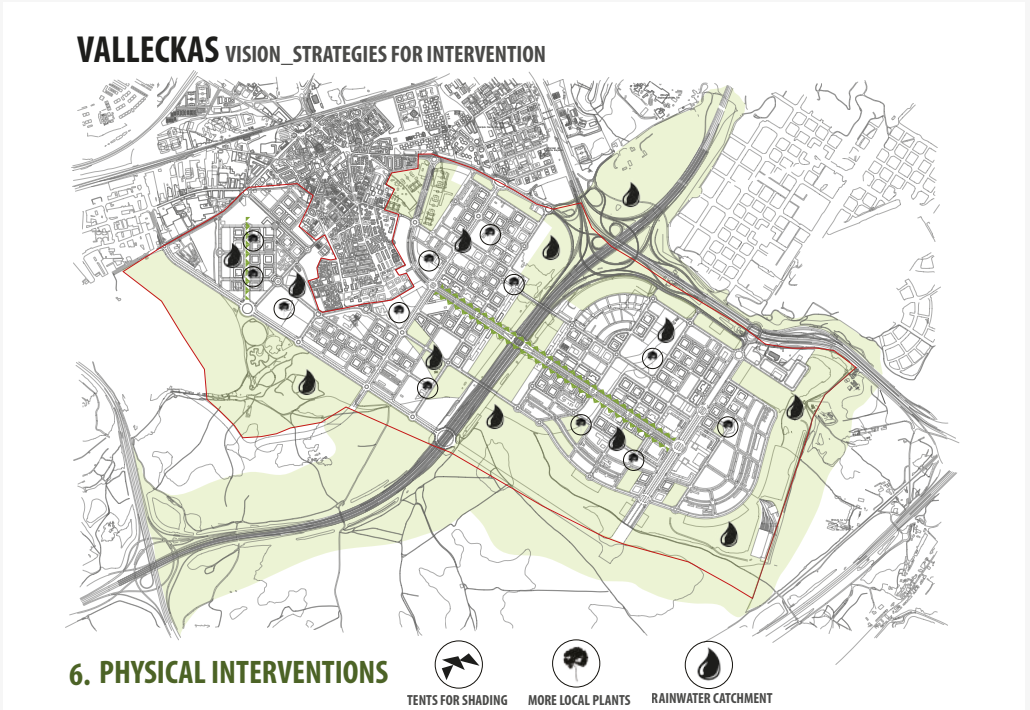
Physical interventions

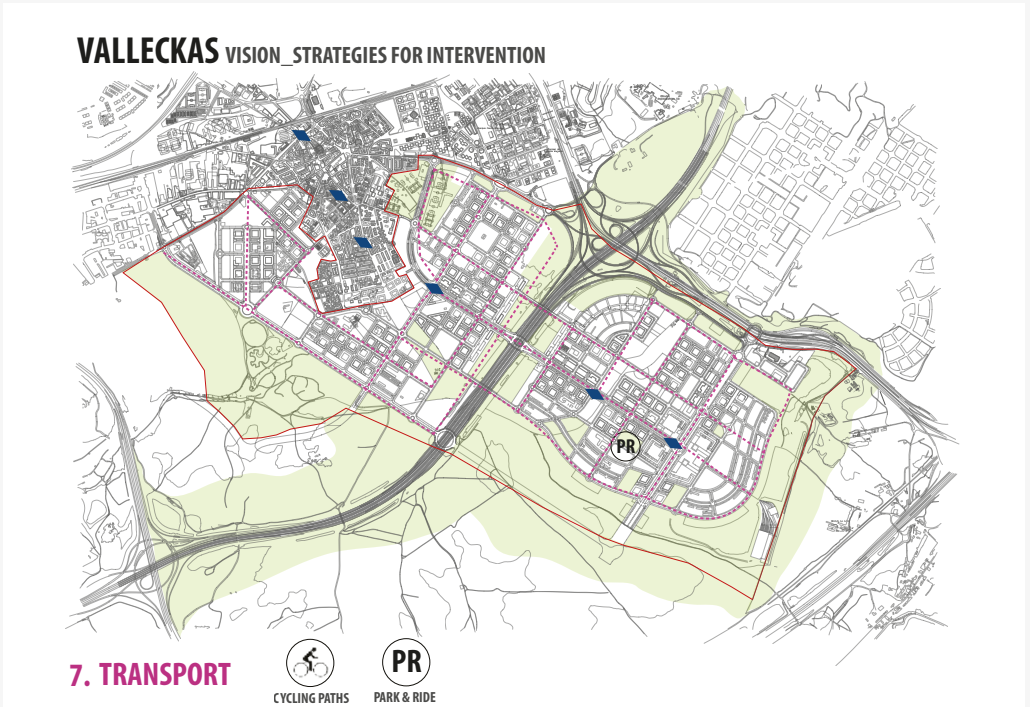
Given the financial crisis we propose limited physical interventions. However we think it is important to make at least some interventions. First, we want to improve the spaces for vegetation. The existing local plants are contributing to the identity of the districts and they also contribute to the drainage of water and the capturing heat. The current plants are in bad shape and we want to improve their quality. To make maintenance cheaper, tenants can be invited to participate. We think about the adoption of borders. To make sure local vegetation is used we propose to organise a workshop on local vegetation. Our second proposal is on the positioning of shading panels that are also used in the Madrid city centre. They would make public spaces more attractive during the hot noon hours. Our third proposal is to introduce a water reservoir in one of the void spaces. This can help to cool down a part of the area during summer periods. Engineering knowledge has to be brought in and further research is needed by hydrological and thermal experts.

Transportation

The current metro stations can be made more attractive by concentrating activities there. Also, we aim to create a car-pooling site close to the Valdecarros metro station. That would enhance its function as intermodal traffic change to get to downtown Madrid. To stimulate healthy activities we further suggest to implement cycle paths in the area as well.

With all these proposals implemented, the vision of Vallec/kas may well change in the future, as the area of the "PAU de Vallecas" gets more popular and attractive. This way





the consequences of the housing bubble make space to a city for citizens, that it is enjoyed and socially active.

7. CONCLUSIONS

We want to make Vallecas a more attractive neighbourhood, for current and new inhabitants, with minimal physical interventions and the stimulation of activities. The redefined Vallecas should also be promoted to attract people to the area. The activities itself have a promotional character, aiming at a vibrant neighbourhood full of movement. If they are promoted more their success could be amplified.

Our strategy aims at gradually introducing new activities to the area. First an organisational structure should be set up consisting of the municipality, local entrepreneurs and social movements. This structure aims to attract other organisations to act in the area. It also operates as a facilitator, giving advice and assistance with the application for permits. The responsibility for neighbourhood branding also lies with the organisational structure.

With the implementation of our interventions Vallecas can become a more lively city neighbourhood that is attractive for the city inhabitant of the 21st century. It is not our aim to implement a copy of central Madrid, and we acknowledge the fact that the needs of the Vallecas tenants are different from the ones who live in the central city. Therefore we think it is important to work with local organisations. They know the people who live in the area and it is more likely that they can instil a communal feeling in this area for it to become a more attractive part of the city.

Our approach allowed us to get an insight on the neighbourhood and the way it is connected to the city. The combination of desktop research with on-site observations and talks with local inhabitants allowed us to get a satisfying image of the district. We could set up an interesting vision for this district, by benefiting from the different qualities of the team members. There were also some lessons to be learned. Some extra time would allow us to dig further into the needs of the tenants and to get into contact with existing local teams. Likewise we would be even more certain about the proposed strategy. Furthermore we could elaborate our organisational structure by giving one of the members the role of project manager. Like this our working process would have been a bit smoother which would have freed time. However this adventure has generated a great feeling of satisfaction which may hopefully be picked up by someone in the Madrilenian city council. In this way, Vallecas can become the attractive neighbourhood it deserves to be.

Camila Maia
Veronika Kovacsova
Clenn Kustermans
Morgan Poulizac
Eleonora Sartori

Tutors: Juan Arana and Luis Perea

MADRID, **THE SOUTHEAST DEVELOPMENTS**

THE SUN ALSO RISES

What are the roots that clutch, what branches grow
out of this stony rubbish? Son of man,
You cannot say, or guess, for you know only
A heap of broken images, where the sun beats,
And the dead tree gives no shelter, the cricket no relief
And the dry stone no sound of water.

T.S. Eliot .The Waste Land 1922

1. SUMMARY OF INTENTIONS AND OBJECTIVES

The workshop aims to look at the landscape of the vacant and deserted territories on the city limits and think through what the nature of the actual situation is and venture into what the next steps forward could be.

Within the socio economic context and with the framework of the revision of the Madrid Master Plan, the south-eastern fringe of the city presents a huge question mark. It is a place where planning is paralysed and poses a number of questions. What are the real problems that need to be solved once the speculative forces have faded away? What would be the role of the planner and the designer in such a territory? Should anything be done at all?

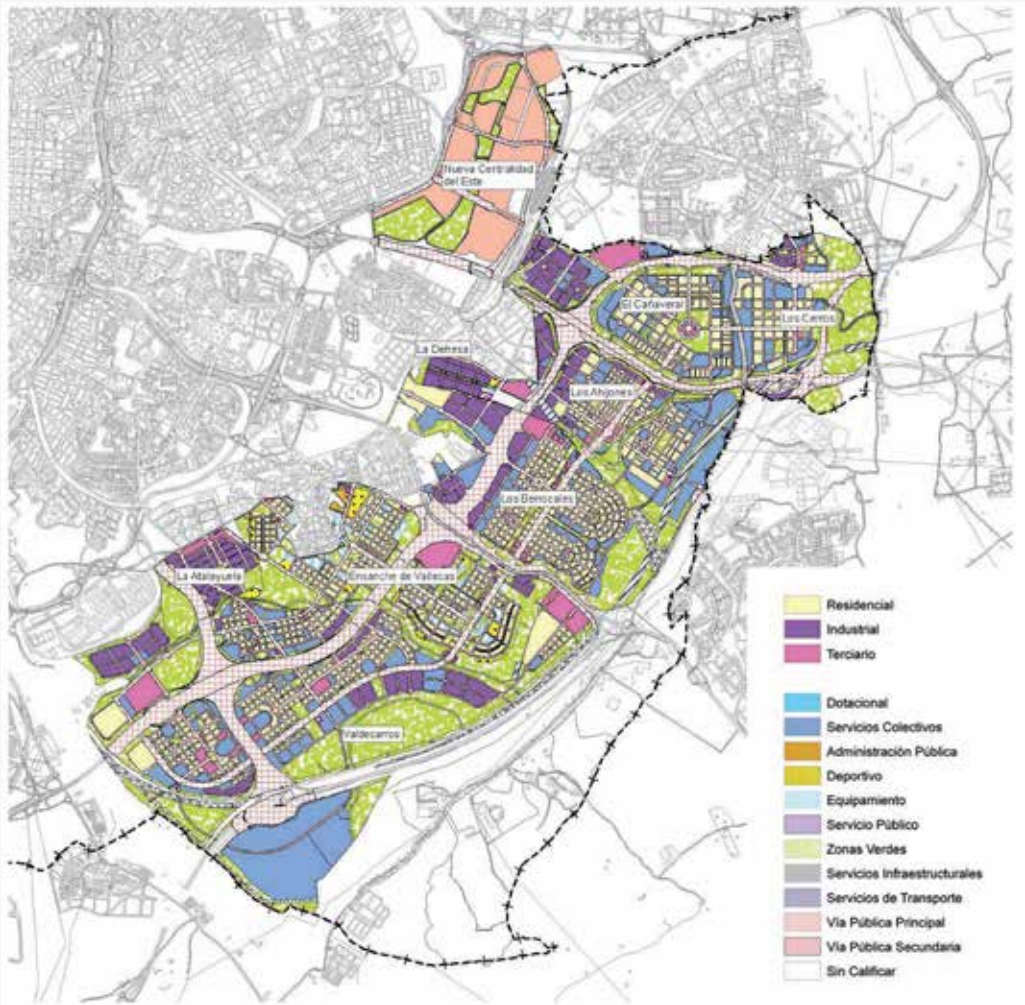
Objectives: Research and development of possible strategies for a large area located in the city limits. Devising ways to approach this territory from different viewpoints. The objective is not so much to come up with a design but to think through possible strategies after grasping the complexity of the problems.

Phases:

1. Approach to the area: Description of planning context. Approach through plans and pictures. On site visit, exploration.
1. Positioning: One specific aspect of the territory should be chosen to be observed, analysed, mapped out or even invented. They can be either environmental or social or functional aspects. Detecting problems to be solved or possibilities that open up. Exploration of continuities and discontinuities.
1. Toolkit: Production of strategies, processes, tactical approaches to the city.

2. WORKING AREA

The Southeast Development Strategy is a structuring operation in the Southeast metropolitan



1. Layout of the Southeast Developments
Source: Ayuntamiento de Madrid

rim. It spans over 5,000 hectares within the city limits and planning for the area includes around 143,000 dwellings. The operation includes six residential projects which will occupy the existing vacant land to the limits of the adjacent municipalities.

The new developments is also adjacent to the largest informal settlement in Madrid, the Cañada Real Galiana. Based on a stretch of a livestock path, it is a linear city with a total length of about 14 km and a population of about 18,000 inhabitants. The settlement began in the 1960s and combines slum areas with consolidated irregular residential areas.

The residential development is taking place supported by various large infrastructures: the motorways and regional highways M-45, M-50, R-3 and the high speed train AVE. They have severely fragmented the territory. The different sectors, isolated from one another by the infrastructures, are lacking continuity and presenting problems for any transport alternative to private vehicles.

Current state

Due to the economic crisis and a legal problem related to planning land classification, only the Ensanche de Vallecas has been built so far. Original expectations in terms of its viability and planning parameters are currently under question. These sectors were envisaged to be developed in one single development phase each, implying a large process of planning and development. This process froze up with the real estate bubble burst. An agreement was signed in 2011 by the City Council to implement and speed up the planning process. In 2012 a sentence by the High Court on demand of the ecologists considered the development of 22 new sectors in Madrid "illegal", but many of them were already fully developed or under construction. The sentence included the developments of Southeast Strategy. By now, the sectors of the Southeast area have reached different stages of urbanisation, from earth movements to road construction. However, the works seem to be paralysed in most of the area at present.

2. Development works in accesses to Cañaveral
Picture: Juan Arana

3. APPROACH

Crash-landing on the Periphery

With a certain degree of disbelief the team strolls up the bare hill of Cerro Almodovar near Vallecas on a warm September evening. The hill sits on the limits of the built city. From the top there is a compelling view of the scale of the area. On the west side the skyline of the south of Madrid is on the foreground and the towers of Castellana on the background. In the opposite direction the view opens onto the city border areas which comprise a waste of industrial sites, road infrastructures, vacant arid land and recent urban developments. The Ensanche de Vallecas stretches to the east in the middle of empty land designated for Madrid's southeast development.

Key aspects

On a first contact with the place, the following reflections come up in the team:

- **Connection of the Southeast with the city**: physically, psychological and symbolically.
- **Closer look at the territory**: to find corridors of interest; to find missing links.

3. Panorama
Picture: Clenn Kustermans

Waste Land for sale

When driving through the moon-like landscape of the southeast a billboard welcomes us enthusiastically to Los Berrocales: "Improve your quality of life! Los Berrocales". The expectations of development for the area pervade the landscape. They are present in the paralysed earth movements and the scale of the infrastructures. In the areas where the urbanisation process has stopped at an initial level the vegetation layer is still immature or has been removed, the water courses have changed and strange looking geometrical hills form a surreal archaeological landscape. In the untouched areas the land is not cultivated; some debris accumulates here and there. The territory is crossed by traffic infrastructures, alienated from its surroundings. It does neither belong to the city nor to the natural environment

- **Resources**: soil, available land, connectivity, infrastructures.
- **Economic viability**: who owns the land? What is the real situation?
- **Conflict**: existing settlers in La Cañada Real, pressure from owners waiting for their house to be built.
- **Identity**: The aim is to look for the identity of the territory. What is it now? What could

it be in the future?
- **Opportunities**: to become a productive territory; to use production, energy and waste; to become a pole of attraction; to restore the landscape.

4. SOCIOECONOMIC VIABILITY

Stakeholders

Who owns the land?
- Developers. They are organised in the form of juntas de compensación, a collective of individual land-owners.
- Financial institutions. Much of the real estate properties belong now to banks and they are currently changing value dramatically.
- Residents. People who live in Cañada Real and Vallecas.
- Existing natural ecosystems.

4. Stakeholders

Is there any need for a new housing in Madrid?

The current projects plan 150,000 new dwellings in the area. However, the population of Madrid is not growing at the moment. It is actually decreasing due to foreign population leaving Madrid since the start of the crisis.

There is a demand of housing from young people. 70% of people between 20 and 29 and 18% of people between 30 and 34 live with their parents. The unemployment rate among young people in Spain is close to 50%. The problem does not seem to be the lack of housing offer.

Office and retail. An unreal perspective

There is also a huge gap between the wishful projections in terms of office supply creation and the reality of the market. The objective in the existing project is to build one million sqm of office and retail in Valdecarros alone. This projection made by the developers is far from possible in a market that has considerably contracted in the last year and is highly concentrated in the centre of the city (CBD mostly) and in the northeast of the metropolitan region adjacent to Barajas airport.

The same could be said about the commercial perspectives of the area. Except for some new shopping malls, as the recently opened Ikea, there are clearly no opportunities for the development of the area, at least from a short term perspective. Moreover, such out of town shopping centres seem to be contrary to the objective of revitalising the inner city.
To put it simply, the project has been imagined for a time which does not exist anymore and probably will not reoccur within the next decades, even if the country recovers from the current crisis.

A new economic context for Madrid and its southeast region

The south and east of Madrid have some very specific negative features that have worsened with the crisis: poor population, high immigrant rate, high unemployment.

The housing market is now going back to reality with a dramatic decrease in value since the beginning of the year 2013. The average decrease in value is estimated at 20% in

general. This tendency is particularly true for the southeast.

Some basic conditions to find a way out of the crisis

There will be some losses for the developers (Junta de Compensación) and there might be also some "blind runs forward". This is the case of Addleson´s Eurovegas project for example.

Renewed planning at the regional level:

The last Master Plan was characterised by a laisser faire approach that made sense at the time. The new project tries to strengthen the attractiveness of Madrid as a "creative city". The southeast area could be part of the solution, especially regarding the necessary effort to rebalance the development of the city between north and south. What appears now as a burden for the city could become an opportunity to develop a new centrality on the southern border of the river and seize the opportunity offered by this available piece of land.

A necessity to reform the legal framework:

The system of juntas de compensación is a very efficient tool to build rapidly with a low transaction price. The new period, transformed by the scarcity of resources and the slack of the housing market, should force the stakeholders to reconsider the organisation of the development process through the junta de compensación by:

- including mandatory consultation with the public authorities at every step of the process
- giving an incentive to the developers who contribute through their action to improve the entire region.

Some questions and issues that should be addressed:

- Is the city capable of getting control of the land in the medium term? No!

What are the other options?

- When public interventions occur to bail out some investors, they should ensure that they obtain some planning obligations in return (as is already the case)
- To impose a stricter municipal Master Plan to ensure that future developments are participating in the overall renewal of the area.
- To reform the "planning by consensus" rule (or just get rid of it) so that general interest is taken into account by the private developers

All of this is much easier to say than to do when the city is basically going bankrupt!

5. TOOLKIT

A strategic position:

The southeast quadrant of Madrid is the last remaining large void in the municipality. It is located at the intersection of two significant axes:

Natural corridor: The area is located to the east of the important blue and green corridor composed by the Manzanares Park and on the city limits in the south by a regional park.

Productive corridor: A number of industrial activities are located at the limits of the existing city forming an east-west axis to the north of the area.

What does Madrid need that could be offered in the area?

- Affordable housing
- New creative/productive activities
- A contribution to a new identity for the city
- Some contribution to a green effort and ease of movement

Major issues to be taken into account in the area:

- Reconnect the existing zone with the rest of the city
- Prevent the risk of becoming a wasteland
- Consider the residents in the area, including informal settlements
- Overcome the huge separation created by the infrastructures.

6. SCENARIOS

The proposals are not meant to be isolated projects or final solutions. They are scenarios for a territory in transition. They can overlap in time or space.

Recycling waste system

The closeness of the working area to waste management and water management facilities would be an opportunity to implement strategies of energy production from waste management. For this scenario different flows are considered: organic waste from the main food wholesale market of Mercamadrid, the existing railway structure, the traffic infrastructures, the slow flow of Cañada Real and the proposed new recycling and energy flows.

Agriculture

This was once a rural area with different types of food production. This second scenario proposes to take advantage of the closeness to Mercamadrid, the main wholesale food market of Madrid and recover the ground to make it productive. It would include leisure vegetable plots and job creation. The distribution of organic products would take place also at local fairs. The residents would benefit from educational activities, environmental awareness and community enhancement.

Festivals

One of the strategies to revitalise the dead and forgotten land after speculation would be to use it for festivals. It is probably the financially least demanding activity to bring the area alive with activities. The idea is that creative individuals or groups who see potential in this land and want to bring in their activities, would respond to an open call of projects. There are international examples, such as the Burning Man festival in a desert in Nevada, United States, or the World is not a Fair by Raumlabor on Tempelhof, Berlin. Both are located on (previously) unused land, and have a temporary, DIY, bottom-up approach. We think that this strategy would fit very well in the first stage of revitalisation of the area. It would bring a positive buzz connected to the place and would slowly engrave it in the minds of the Madrid people. In a summer no man's land will suddenly become everyman's land. Emptiness would be transformed into activities, experiences and interactions.

7. FINAL REFLEXION

The approved projects for the southeast strategy for Madrid could easily be improved. The design could be changed into sensible and more sustainable neighbourhoods and the socioeconomic aspects could be made more rational and reasonable.

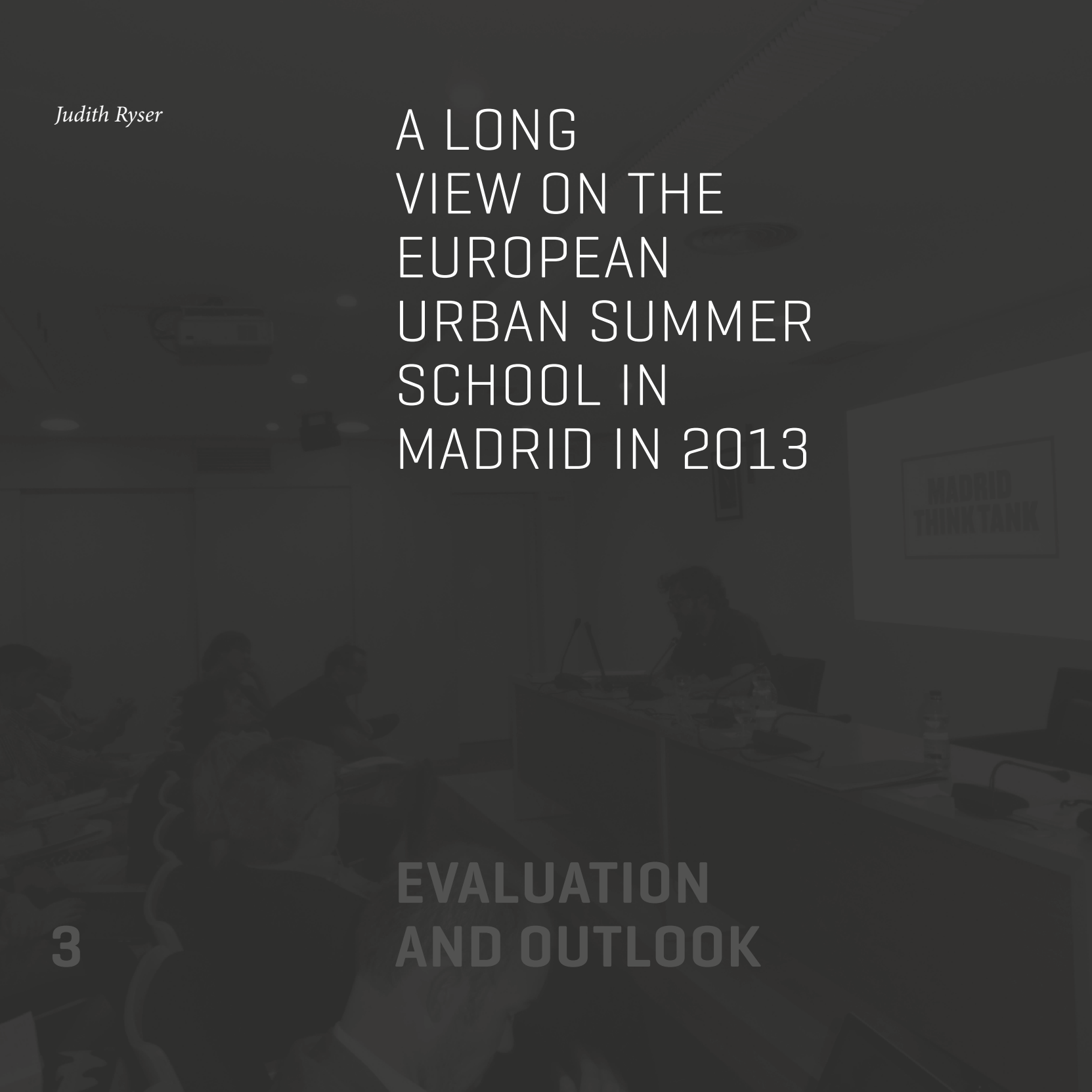
But interestingly, the results of this particular workshop do not take that direction. They focus on a time of change, on the stage in between or after something has happened. They use the potential of the vacant land as an unfinished urban space.

All of these scenarios maintain a sense of transition; they leave the future of the area open.

They have that elusive quality of the unused spaces, allowing room to think freely of the future. All of them evoke a city that is actively shaped by its inhabitants. There is a promise of space for production, for micromanagement, for gathering and building something and starting a community around an event or family farming. It is in this sense that they offer a glimpse of what planning for the post-speculative city could be.

Judith Ryser

A LONG VIEW ON THE EUROPEAN URBAN SUMMER SCHOOL IN MADRID IN 2013



3 EVALUATION AND OUTLOOK

Taking a long view from inception of the European Urban Summer Schools, EUSS in Madrid marked a natural progressionalong a steep learning curve.

Initiated through AESOP - with Izabela Mironowicz as the creative driving force - EUSS took off in 2010 with very high goals. In Wroclaw Poland, nine projects on 'Urban change' were tackling the city as a whole, conceptually transforming specific districts,and makingfine grain urban design proposals. A state-of-the-art publication supported by UN Habitat put EUSS on the global professional map. The theme of 'Urban change' ran through all the subsequent summer schools. They all focused on concrete sites while relating to time- and location-specific, often complex planning issues. They addressed 'quality of space – quality of life' in Lisbon, 'times of scarcity – reclaiming the possibility of making' in London, and 'strategies for the post-speculative city' in Madrid. Each EUSS took place in a large city, often a capital. Each had selected sites as a challengeto current planning wisdomwhich stretched the imagination of the participant young professionals. They delivered, in the very short time available, also in Madrid. A purpose of the EUSS publication series is to document these very rich and original contributions to pressing urban issues by young professionals from all over the world.

Madrid after the property market collapse was a great opportunity for young professionals to think about alternative urban futures while making concrete proposals for the given sites within realistic constraints. They came up with innovative ideas for acityunknown to most of them. The three adjacent sites, starting from the heart of Madrid and reaching the southeast fringe with progressively increasing scales confronted the participants with a large range of issues. They benefited from well balanced formal contributions from academics as well as practitioners and were tutored by academics with both practical experience and local knowledge.

Like at previous EUSS, the participants had diverse professional qualifications, came from a wide range of countries, and quickly found a modus operandi to harness their different cultural backgrounds and talents. Unlike at previous EUSS, they were not adverse to committing themselves to concrete solutions, albeit often of a transient nature, leaving more lasting options open for the future or to others. What was striking this time was their way of communicating. When workingtogether they tended to use their own digital implements, leaving face to face interaction to primal activities like sharing food during breaks.

Luck plays a part in such events. Madrid's weather was perfect for site visits and socialising in town after hours. This contributed to a convivial atmosphere despite heated discussions and differences of views. Many students appreciated the facilities they were able to use at the university and made themselves at home with pic-nicks to which they contributed homemade dishesoriginating in their various countries. This cultural richness had repercussions on the solutions the teams reached for their sites and also shaped the final presentations. All teams decided to share their presentations among all theirmembers, putting solidarity before competitiveness. This made for lively moments with laughs alongside professional competence and gave me hope that planning is not a lost cause yet. EUSS showed that young professionals can give planning a new lease of life with a more shared and inclusive role, making it again the custodian of the common good. Hopefully, what the students experienced together in Madrid will be relevant and useful to them for their future professional tasks wherever they decide to carry them out next. Perhaps they choose to stay in touch and use their EUSS moment as a starting point of a global network of exchange and sharedcreativity.

Júlia M. Lourenço

AN ADDICTED VIEW ON THE EUROPEAN URBAN SUMMER SCHOOLS

EVALUATION AND OUTLOOK

3

Taking an addicted view from a former participant in 1994 at a Young Planning Professional Workshop (YPP), to an organiser of a YPP in 2009, from a lecturer at European Urban Summer Schools (EUSS) in Wroclaw and Lisbon to a tutor at EUSS in Madrid, I can recall some memorable moments in all of these. Nevertheless, this last EUSS experience makes for one of the best.

Reasons for this may lie, at the start, in the previous knowledge all tutors of Madrid had and the long-time connections they partially shared. For most tutors it was through being lecturers at CEU, for others through ISOCARP, where they shared joint meetings or creative happenings at least since the late nineties. Therefore, the tutors were at ease under the coordination of Teresa Franchini who made things even easier by allowing choices of the site where the tutors thought they could perform best.

The same applied to the participants who chose the site they would work on, provided the right mix of specialities was guaranteed.

Further reasons derive of course from the participants who shared an enthusiastic motivation that matched the vibes of central Madrid and the excitingly modern topic of post-speculative cities. Going through their specific personal motivations, for several of them EUSS came as a break-through in their studies and a turning point to decide on further avenues of expertise in their professional careers. For that reason they may have lacked some knowledge in urban planning, but they had an extra-abundant thirst for learning and understanding when this topic was the right choice to follow in their future careers.

Madrid was the right city as it consisted in itself a real living lab of a post-speculative city for several reasons. So much so, that I - myself a tutor - went into interviewing the inhabitants and doing a bit of field research. The presenters were mostly old acquaintances from my PhD time and CEU lecturers who were really involved in presenting their views and research. The vast selection of presenters among nationals and foreigners who are easy to attract to a big metropolis, is one of the best advantages of a big city. One visible disadvantage as compared to smaller towns may lie in not having the stakeholders present at the final session. Politicians in charge and senior staff members of public administration are obvious examples.

The practical assignment proved once again that multi-cultural participants can really work well together despite their different backgrounds as consolidated knowledge on urban planning was homogenising standpoints and proposed actions. I especially enjoyed seeing the Vallecas team participants that I tutored along with Teresa Raventós, do informal interviews, compute the data and map it afterwards. This consubstantiates the subjective and objective gathering of relevant information that allows us, urban planners, to make meaningful proposals that will be validated by the citizens. Hopefully they will gather their trust and respect.

The EUSS in Madrid proved even more interesting for me as it gave me insights onto the future of our own cities. Therefore, it made me meditate on my teachings. When I came back home, to Minho University in Portugal, I changed the teaching strategies of the Urban Planning subject for the 4th year Civil Engineering course. In the following week, what would have been a normal less than one hour preparatory meeting with my long-time assistant (since 1998) turned into a vivid and very pleasant three hours discussion with two teaching assistants. Together, we shared my EUSS in Madrid experience and what we could improve not in the contents but on the way we delivered our experiences to students and what we asked from them in return.

I am sure that - more than enjoying the topic which they did - EUSS participants as well as my Minho students will find it especially relevant later on, in the hard but exciting future that lies ahead of us. Let more EUSS come!

Juan Arana

THE NON OLYMPIC MADRID

3 EVALUATION AND OUTLOOK

The day before the kick off of the EUSS, all the local media were broadcasting the election of the city that would host the Olympic games of 2020. The mediatic display of the Madrid bid had gathered thousands of people on the streets, and the mayor of the city stressed the quality of public spaces and the leisure offer in Madrid. It did not occur to me at the time that there was a relationship with the EUSS course.

The reality the participants found was very remote from that 'would-have-been' olympic Madrid. The work did not focus on a beautified Madrid central area or the urban and architectural landmarks of the last ten years, although there was some of that too. For ten days we walked and researched unresolved urban and suburban environments in Madrid. The participants explored the speculative desert of the Southeast Developments, the lame design of the new neighbourhood of Vallecas and the vacant left over areas of Delicias.

Throughout the course the team of participants remained very critical about how things are supposed to be done or the way they have been done until now. And the debate was always active.

When the result of the workshops came together on the last day very diverse reflections were shown. But there was in all of them a positive approach. The following aspects were more or less common to all:

- Political message: putting the social in the picture, reusing existing conditions, enhancing communities.
- Identity: working bottom-up on the identity for the new neighbourhoods, in spite of mediocre oversized public spaces, claiming the urban realm for people that inhabit it and not just for speculative forces.
- Time: most importantly, allowing room for the future. Instead of throwing big ideas up that are self fulfilling, most of the work strived for open solutions that would let new things happen.

In this context, the olympic project comes up as an example of the opposite: a tailored urban utopia and a branded identity for the city. It represents the old toolkit. It reminds us of all the failed futures that shape our cities. But in the end the city survives planning. And this survival becomes the driving force for new inventive strategies. There was a final reflection from one of the participants who introduced the question of what is the role of the planner now. Far from having the answer to that, the course has been successful in bringing this transition forward.

Teresa Franchini

WHAT HAS BEEN DONE AND WHAT IS NEEDED FOR FUTURE TIMES

3 EVALUATION AND OUTLOOK

ON September 20, 2013, exactly after 10 days of intense coexistence in Madrid centred on planning strategies for the post-speculative city, the participants of the EUSS presented the results of their respective workshops. Their proposals for the selected areas - Delicias, Vallecas and Southeast Developments - were the result of the visions and the methodologies that the different working groups had generated in order to articulate coherent planning outcomes in a very short time. And they did it, producing outstanding propositions followed by a fruitful final discussion. And once again I enjoyed the plasticity of those young planners to cope with a given problem all together, no matter the difference of languages, their academic profiles and backgrounds, and even the way of understanding reality.

But at the very end of the session one of the students raised a question which was unanimously supported: the need to understand their professional role in the uncertain context of today's cities, exposed to multidimensional processes in constant change. Two aspects were added that increase the lack of perception of their own role: the difficulty of apprehending these dynamics in a holistic way due to the partial vision derived from their academic degrees, as well as the lack of knowledge of the planning tools needed to address the current urban complexity.

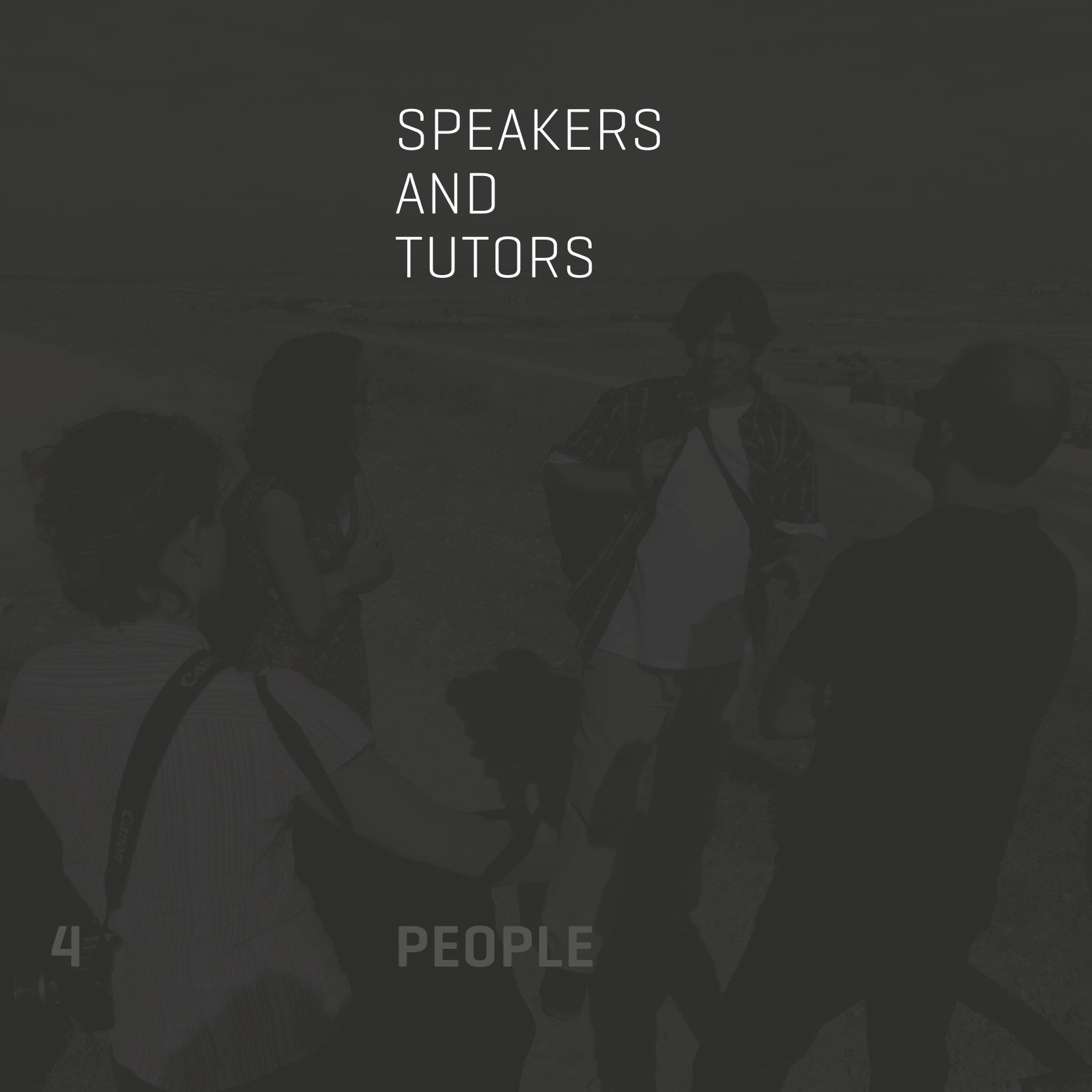
How to respond to this demand from the university, when it is unquestionable that reality moves in a perverse duality between the still dominant urbanism of the modern era, and current urban planning which operates between opportunity and possibility? This duality between past and present, this schizophrenic transition period that leads to working on uncertain foundations requires the consolidation of technical and conceptual supports of a new kind of urbanism, one that allows young professionals to strengthen their own skills and capacities.

How to teach urban planning in the postmodern context, in which economic, social and political instability does not ensure the development of urban proposals in the long term, managed by 20th century inherited administrative structures? How to deal with complex projects where creativity, new techniques and new knowledge should prevail? How to go beyond regulatory mandates on landownership to promote the participatory processes required for city governance in the sustainable era? These needs imperatively demand new answers from teachers for their students; they need to offer a wider look, more focused on action and management, closer to acquired practice, beyond the current theory and practice.

The EUSS2013 target was to update and to share knowledge with the aim to understand the post-speculative city using the city of Madrid as an example. Our goals were to open new windows of knowledge for our young planners participants, to offer local urban scenarios to think of new possibilities from their respective professional fields, and to give room for the interchange of experiences among them, and with tutors and lecturers.

As the course director, I sincerely hope we have achieved it even minimally, covering the interest of each of the EUSS2013 participants since they will be the ones who surpass this time of uncertainty and will be giving new ideas for the city of the future.

SPEAKERS AND TUTORS



JUAN ARANA

Juan Arana is an architect graduated from Universidad Politécnica de Madrid. He obtained as well his Diploma with Distinction from the Bartlett University College and he is currently a PhD candidate. After working in a number of architecture studios including Daniel Libeskind Studio in Berlin, he became founding member of the Madrid office EquipoBloqueArquitectos, specialized both in the fields of architecture and urban design. Equipo BloqueArquitectos won in 2006, together with architect Andrés Perea, the tier first price in the competition of ideas for the New Administrative City of Korea. Juan is member of the Urbanism and Planning Area of the School of Architecture at CEU San Pablo University CEU San Pablo since 2007.

PABLO CAMPOS

Pablo Campos is PhD Architect and professor at San Pablo-CEU University. Author of 11 books about Universities and of articles in different publications, Organization for Economic Co-operation and Development; SCUP, International Association of Universities (UNESCO) and Architectonics, his book "The Journey of Utopia" (Nova, NY, 2006), was granted the International Awards "PremioVitruvio" and "City of Madrid". He received 2 Research Awards "Ángel Herrera": books "Spain-Campus of International Excellence", and "Identity, Innovation and Environment at Spanish Universities" (Ministry of Education, 2010, 2012). In 2012, he was granted with the Education Leadership Award (World Education Congress, Mumbai, India). Dr. Campos has been a speaker at Stanford, UCLA, Columbia, McGill, UIC-Chicago, Cervantes Institutes Lisbon, Utrecht, TEC-Monterrey, La Sapienza, NYU, Pittsburgh, NYCCT, Athens, CULS-Prague, NJIT, and American Institute of Architects. Author of the concept of "Educational Campus". He has being a consultant to the Ministry of Education (Spain) and since 1990 he has planned University campuses: Estepona, La Rioja, Cartagena, Alcalá, La Laguna, UAM, Coruña, Girona, Málaga, Sustainable Campus (Madrid) (International Merit Award 2008); Villamayor campus (University Salamanca), Honour Award 2005 "DesignShare-International Forum for Innovative Schools". USA. www.utoplan.com

GUIDO CIMADOMO

Architect for the Politecnico di Milano (1998) Guido Cimadomo is professor at the Department of History and Theory of Architecture and Coordinator for International Mobility at the School of Architecture, University of Malaga since 2010. He is director of the online course "Writing architecture: pathways and criteria". PhD at Seville School of Architecture, with a research on how landscape and urban territories are transformed by contemporary borders (2013). He is expert member of the ICOMOS' scientific committee CIPA for the Documentation of Architectonic Heritage and of UNESCO's forum University and Heritage. He shares the practice of architecture working on the rehabilitation of cultural heritage and the building of cultural and sport facilities with researches on industrial heritage; border and transnational transformations; landscape, heritage and tourism relations; and heritage rehabilitation processes.

CYNTHIA ECHAVE

PhD Architect by the Polytechnic University of Catalonia she joined the Barcelona Urban Ecology Agency - public consortium dedicated to rethink the cities in terms of sustainability - in 2003 as responsible for the coordination of urban mobility projects, strategic planning and urban development under environmental and sustainability criteria. The most important projects undertaken by the agency are the following: Superblocks Master Plan in Vitoria-Gasteiz (2011 - 2012), Mobility Plan of Vitoria-Gasteiz (2007), Study of liveability in Barcelona (2009), Urban Plan Sector Llevant, Figueres (2010), Environmental report for urban planning review A Coruña (2008 - 2010), Study of green roofs and walls potential in Barcelona (2010), Urban green corridors in Barcelona (2006) and Implementation Superblocks proposal in Districts of Les Corts and Sarria-SantGervasi in Barcelona (in progress). Her career is also characterized by the collaboration in academic research projects and her participation as speaker at various conferences and seminars.

TERESA FRANCHINI

Born and educated in Argentina as architect, Teresa Franchini is currently living in Madrid, Spain. Qualified as an architect and urbanist her academic background comprises several degrees: PhD at the Madrid Polytechnic School, MSc at the University College London, and two Diplomas on City and Regional Planning. She has a long experience as lecturer in urban and regional planning, as Adjunct Professor at the School of Architecture and Urbanism at Northeast National University in Argentina, being at present Adjunct Professor at CEU-San Pablo Polytechnic School in Madrid. 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), being currently member of ISOCARP Scientific Committee. Alongside academic activities, she works as a freelance consultant for public and private companies.

MIRIAM GARCÍA

Educated as an architect, her academic background comprises two Master courses in urban planning and in architecture, being her PhD thesis is in progress. She worked at the Urban and Regional Planning Department of the Autonomous Community of Cantabria, becoming Director General of Urban and Territorial Planning from 2003-2007. At present she runs her own company – Land- Lab, Landscapes Laboratory – with projects in several Spanish locations, such as the Coastal Management Plans for the Autonomous Communities of Cantabria, 2004 and Galicia, 2010; the Galicia Master Plan for Coastal Aquaculture (2013); the Special Project of Regional Interest of the ComillasPontificia University (2010) and the Regional Master Plan La Arboleda, Miranda de Ebro (2009). Several of these projects have been recognized with national and international awards.

Currently she teaches at the School of Architecture and Engineering, Zaragoza University, and at the Master of Landscape Architecture at the CEU San Pablo School of Architecture and participates as lecturer at courses and workshops related to landscape urbanism and regional planning.

CARLOS LAHOZ

Architect specialised in urbanism in Madrid, Italy and USA, after several years working in international firms Carlos Lahoz became partner of Taller de Ideas office, and leads the Design L.A.A.B. of Metropolis Foundation in Madrid, running since 2006 several projects in Spain, Europe, North Africa and Middle East. In 2010 he founded Urban Networks to promote the creative transformation of cities and territories. Since 2011 he is director of Madrid Think Tank, a joint initiative carried out by the College of Architects of Madrid, the Madrid City Hall, the Autonomous Community of Madrid and the Federation of Madrilenian Municipalities, with the aim to build a collective project for the city to improve its position in the globalised world. As a member of the Official College of Architects of Madrid, he is Patron of its Foundation and member of the Board of Representatives and the Standing Committee. He has been jury in international competitions and has participated in conferences and lectures in different forums. He teaches at the Schools of Architecture of the University San Pablo CEU and the University of Salamanca.

ALBERTO LEBOREIRO

Qualified as an architect and economist, with a MSc in Town Planning, an executive master in Public Administration and a degree in International Economy, Alberto Leboreiro is Deputy Director General of Regional Planning Strategies at the Autonomous Community of Madrid and leads an interdisciplinary team in charge of drawing up diverse types of plans integrated into the Madrid Strategic Regional Plan, in coordination with other regional and national organizations, related to transport, housing, environment, facilities and economic activities. He is also President of METREX - The Network of European Metropolitan Regions and Areas - and Member of the executive of Urban Land Institute. As lecturer and international adviser, he cooperates with different organizations, such as the Shanghai Urban Planning and Research Institute and the city of Moscow. At present, he teaches at the CEU San Pablo University.

EDUARDO LEIRA

Eduardo Leira is an old rocky architect-urbanist of Spain. As a student, in the Architecture School of Madrid (there was just one at the time) he was elected, in 1964, at the Stockholm Congress, General Secretary of the International Union of Students of Architecture. Two years later, being an antifranquist student leader, he was expulsed from the Madrid School and he had to finish his career in Barcelona (1968). There, he started to become, mainly, a city planner. In 1970, even the Franco´s Supreme Court had to recognize the inappropriate expulsion. Fulbright Fellow, he coursed his Masters in City and Regional Planning in the University

of California, at Berkeley. He was admitted in MIT and Harvard as well. At the time, he chose Berkeley. Back to Spain, leading the CETA team, he won three National Awards of Urbanism, one of them consisting on the first General Plan of a city that was awarded. Two others were for the Participation Process of Urban Design Projects. He directed the General Plan of Madrid (1985) for the first democratic Municipal Council, leaded by the Mayor Tierno Galván. The Plan was a landmark. It was awarded with another National Award of Urbanism. Back to the private professional exercise, he has been working all around the world. In the Madrid Plan a new planning instrument was introduced: "50 ideas", quick projectual proposals, made by a large number of first level architects, for selected city enclaves. He repeated the experience in Buenos Aires (1986) and Santo Domingo (2002). His "Five Urban Axis" has been a lecture given in many different universities and institutions, comparing his proposals for Paris, Bilbao, Lisbon, Santiago de Chile and Sao Paolo. Lately, in 2008, a new axis extension was proposed for Buenos Aires. Bogota's Annular High way was also projected, but it was not specifically an axis. Remodelling steel industrial cities, as Bilbao or Aviles, in Spain, has been one of his major work topics. Also tourism, with the Calvia Plan , in Mallorca, or the Insular Plans of Canary Islands (Tenerife, Gran Canaria, El Hierro) Working at the water front was also approached in many different places such as the Ebro river, the Hainan Island, in China, a new water city in Saint Petersburg, Russia, or the city water front of Benguela, in Angola. He is, perhaps, the planner in Spain that has the larger experience in Territory (Regional) Planning, with the Bilbao Metropolitan Area, the Vitoria Flats Plan or the transnational Euro city Bayonne-San Sebastian, the Island Plans in the Canary Islands or the North "Sierra", in Madrid. Lately, he has been dedicated specially to design Large Urban Projects, with new centralities, in Spain (the new León AVE station complex or the urbanization of Zaragoza Station surroundings) and mainly outside: interface in Porto, new Manhattan type Center in Tianjin, China.

PIOTR LORENS

Piotr Lorens, PhD, DSc, is an urban planner and researcher, dealing with a wide spectrum of aspects associated with present urban development and regeneration processes. He is the Head of the Department of Urban Design and Regional Planning, Faculty of Architecture, Gdansk University of Technology, Poland. At thesame time He is actively involved in the works of the Society of Polish Town Planners as well plays the role of the Vice President of the International Society of City and Regional Planners.

COVADONGA LORENZO

Covadonga Lorenzo´s academic background comprises an Advanced Diploma on Cooperation for Third World Human Settlements Development, and a Master on Architectural Design. As a researcher she has collaborated with different institutions, such as Massachusetts Institute of Technology, Columbia University, Architectural Association and Politecnico di Milano. She has been

invited lecturer at several universities: Cambridge, Kaiserslautern, Montpellier II, Eindhoven University of Technology, Luisiada Porto, Politécnica Barcelona, Politécnica Madrid and LuisiadaLisboa. She is professor and Coordinator for International Relations at the CEU San Pablo School of Architecture and member of the research group Drawing & Architecture, dealing with topics related to graphic representation in Architecture, digital tools and data visualization in architectural drawing, digital fabrication and virtual prototyping. She has wide experience as member of the editorial board of Arquitectura Viva magazine for six years, being at present Editor-in-Chief of Constelaciones, the architectural journal of CEU San Pablo School of Architecture.

JÚLIA LOURENÇO

Júlia Lourenço is deeply committed to explore the international scope in education and research providing global knowledge and experiences for students. She is currently Assistant Professor (DEC/UM, with tenure), lecturing Urban Planning and Contemporary Urbanism topics in PhD programs and in MSc of Urban Engineering in both Portuguese and English editions; Researcher of the Territory, Environment and Construction Centre, Univ. Minho; Expert of the Evaluators Team of European Community She was Visiting Scholar at UC Berkeley (2012) and has been Visiting Professor of several Universities in Europe, US, Brazil and Thailand in the last decade. She has management experience as Vice-Dean and Dean of Civil Engineering Studies (1998-2001) and member of Management Committees of several academic post-graduate programs (Urban Engineering MSc., Municipal Engineering MSc., national Programs and Erasmus Mundus EuroAsia); also, Portuguese Delegate Member of European Union COST Action C27 "Sustainable Development Policies for Minor Deprived Urban Communities" and Portuguese Bureau Member of ISOCARP (2006-2012).

DEREK MARTIN

Derek Martin was the CEO of the International Federation for Housing and Planning (IFHP) from 2008-2013. He is a geographer and planner from the Universities of Exeter and Amsterdam, having specialised in the cross-border and European dimension of spatial planning. He spent most of his career at the former Ministry of Housing, Planning and the Environment in The Hague (NL), where he was Head of International Spatial Policy, and then of Sustainable Spatial Development. He had two periods at DG Environment and DG Regio of the European Commission in Brussels, where he helped develop European spatial development in its early years.

JORGE MARTÍN

The passion about technology and its ability to improve people´s living led Jorge Martín to study Telecommunication Engineering at Valencia University, and since his graduation he has been involved in the history of the Spanish technological development. As member of the founder team of Servicom he got the chance of developing and delivering the first Internet Services in the Spanish

market. He works at Telefónica, leader company in telecommunication, since 1996 and witnessed the launching of MoviStar (the GSM leader operator) and the convergence of fix, mobile and IT services. His work has helped the adoption of the massive technological tools that are making the life of human beings more exciting and different.

CARLOS MARTÍNEZ-ARRARÁS

Carlos Martinez-Arrarás is architect-urbanist and Master in Research in Art and Creativity. Founding partner of Taller de Ideas office, his professional carrier during 25 years has been focused on urban design and architecture, getting your projects numerous awards, such as the European Prize for Urban Planning 1995 to the Guidelines for the Basque Country, Pedro Bidagor Planning Award of the College of Architects of Madrid 1998 to the Town Historic Center Project in Alcobendas, or 1st Prize to Ideas Contest for Imdea Networks Headquarters in Madrid 2007. He founded Urban Netwoks in 2010, company dedicated to promote innovation for the transformation of cities and territories. Currently he is member of Think Tank Madrid and Madrid Virtual project manager, both activities related to the College of Architects of Madrid. He teaches at the School of Architecture at the University CEU San Pablo and his research activities are related to urban design and the symbolic building of the city, as well as to the relationship between art and city.

IZABELA MIRONOWICZ

Dr. Izabela Mironowicz is Secretary General of AESOP as well as member of European Urban Research Association (EURA). She is Associate Professor at the Faculty of Architecture and Director for the Studies in Planning, Wroclaw University of Technology. She is a President of Polish Society of Town Planners in the region of Lower Silesia. She is also a member of the Commission on Architecture and Town Planning in Wroclaw, an advisory body in urban matters for the Mayor of Wroclaw. She sits in the Scientific boards of: International Planning Studies (Cardiff University), Revue Internationale d'Urbanisme (Univeristé de Lyon) and MEGARON (Yildiz Technical University, Istanbul).

LUIS PEREA

Luis Perea has a degree in economics and in architecture and at present he is carrying out his PhD research, focused on the quantitative analysis for the informal city according to the Basic Habitability vision. As a free professional he has collaborated in several planning projects (An Eco- development Strategy for Sea of Pyrenees; Territorial Guidance for Valencia, Galicia and Cantabria regions; Pasaia Bay Urban Regeneration Programme: Canraso bioclimatic neighbourhood in Tudela; Logroño Metropolitan Project), and architecture and urbanism projects, some of which were awarded, such as the Congresses and Exhibitions Palace of Avila and a multifunctional city in Korea). His experience at the public administration as a municipal architect was developed in the city of Yeles (Toledo) between 2007 and 2009. Since 1999 he works at the School of Architecture, CEU

San Pablo University and since 2010 he collaborates in Graduate Courses on Development Cooperation. He has also participated in various publications related to academic and professional matters.

CRISTINA DEL POZO

Cristina delPozo is a biologist, Master in Gardening and Landscape and Diploma of Advanced Studies in Ecology. At present she is carrying out her doctoral thesis at the Department of Urban and Regional Planning, Ashool of Architecture, Polithecnic University of Madrid. She is visiting professor at the School of Design at Harvard University and Director of the Master in Landscape Architecture at CEU San Pablo University. In her professional career, she has carried out several projects and technical assistance on environment, development, territorial planning and landscaping issues for various international organizations, World Bank, International Development Bank, European Union and Spanish Agency for International Development Cooperation. She has been Director of the Environment and International Development Department of EPTISA, an international firm and at present she is director of SUNLIGHT, an office dedicated to the study and implementation of landscape and sustainable projects.

TERESA RAVENTÓS

Teresa Raventós is an architect specialised in urban planning and lecturer in the School of Architecture at the CEU San Pablo University. At present she is carrying out her PhD final research. Specialist in building and land valuation and property management she worked as teacher in two postgraduate schools: AMD Real Estate Business School (2006-2008) and Asimag Training Consultants (2007- on). She participated in a research upon residential market and housing policies at national and European levels, entrusted by the Municipal Housing Observatory, dependant on the Municipal Housing and Land Company (2005-2006). Due to her expertise, she has worked in various consultant firms dedicated to real estate and land evaluation. Concerning other activities, she participated in the inventory; analysis and cataloguing of the graphic work of the Spanish artist Pablo Palazuelo (2007-2010) and as a free professional she deals with rehabilitation and refurbishment of buildings. She actively participates in the International Congresses of Architectural Graphic Expression.

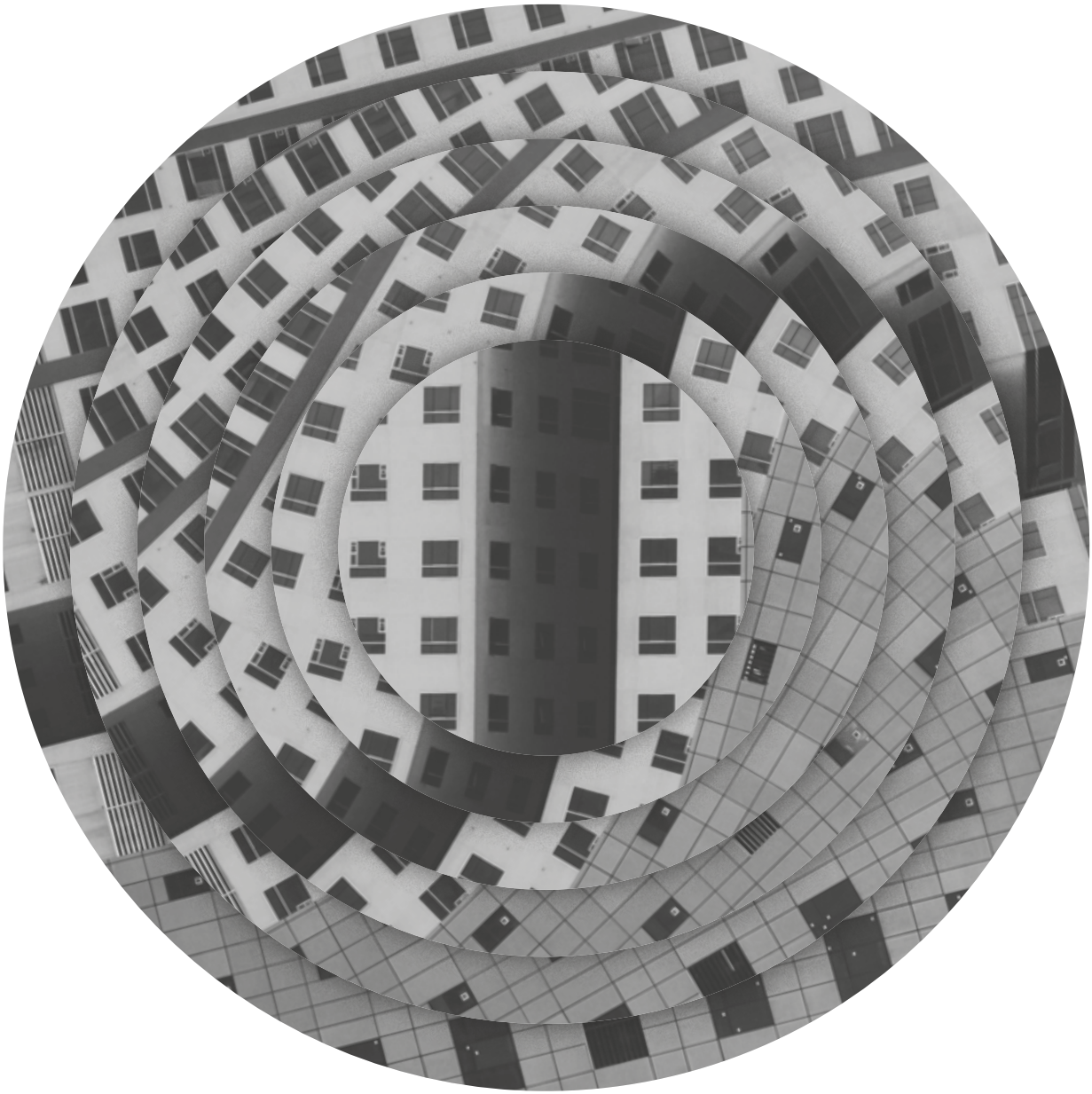
JUDITH RYSER

Qualified as an architect and urbanist with an MSc in social sciences, Judith Ryser is dedicating her cosmopolitan professional life to the built environment, its sustainability and its contribution to the knowledge society. Her research activities in Paris, Berlin, Stockholm, Geneva (United Nations), Brussels (EU), Madrid and London in public sector posts, private practice and universities focused on cities and development strategies with emphasis on Europe. Based in London, she researches, edits and writes books, articles and reviews, produces reports for international organisations, guest lectures and works with community groups. She speaks at international professional conferences and carries out consultancies.

She was invited to write an official blog towards the Open Cities project by the British Council. She is a member of the International Advisory Council of the FundacionMetropoli with which she engages in projects, is writing and editing books and plans an outreach in London. She was Vice-President of Isocarp for which she led an Urban Advisory Planning Team, served on the editorial board and an award jury, wrote and edited many books and articles, and is joint editor of the International Manual of Planning Practice. She is a member of the Chartered Institute of Journalists serving on the International Committee, a member of the Urban Design Group and its editorial board.

BERNARDO YNZENGA ACHA

Architect by the Superior Technical school of Architecture –ETSAM- Madrid (1963); Advanced to PhD Candidacy, University of California - Berkeley (1967); Doctor Architect, ETSAM (1968). Urban Planning and Design Professor (between 1964 and 1984) at: ETSAM, Madrid; UC Berkeley; COPPE, Rio de Janeiro; IEAL y ETSICCP, Madrid; School of Social Sciences, Madrid). Architectural Composition Professor (ETSAM, 1985-88). Architectural Projects Workshop Director, (ETSAM, 1989-2010). As Ad Honorem Professor leads post graduate courses at ETSAM and at the School of Architecture -FARQ- Montevideo. Professional work in Spain, Europe, Africa, the Middle East, North America and Latin America, and participated with organizations such as: The OECD; United Nations; UN-HABITAT. He has been Director of Metropolitan Planning of Madrid, General Director of Urbanism, and Vice dean of the Official School of Architects of Madrid. Large range of practice of very diverse scales, from urban planning to architectural projects. Works published in diverse professional magazines and in the Venice Biennial of Architecture, 2010. Extensive traveler and frequent lecturer.Author of books and of numerous articles and collaborations.



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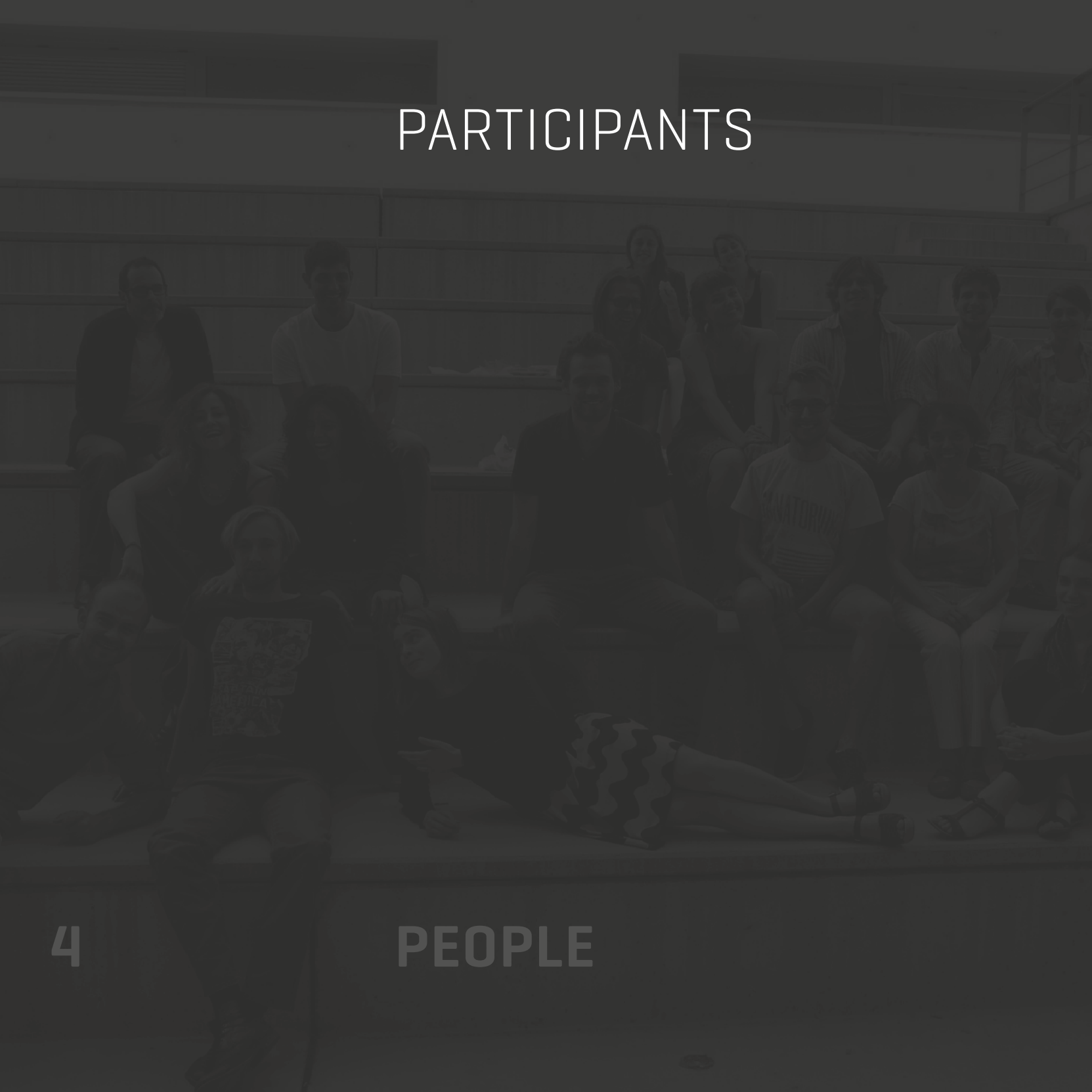

4 PEOPLE

ERANDA JANKU

Urban Planning 5th year student near Polis University, International School of Architecture and Urban Planning Policies, Tirana-Albania. Special interest on Landscape, Urban Design, and Sustainable Development. I have participated in many summer schools and special programs worldwide, mentioning the University of Oslo (Oslo, Norway); Aalto University, School of Science and Technology (Helsinki, Finland) ; Anhalt University of Applied Sciences (Dessau, Germany); KABK, Royal Academy of Art (The Hague, NL); IPC, International People's College (Helsingør, Denmark); University of Rome La Sapienza (Rome, Italy) etc. I'm also part-time staff of Co-PLAN, Institute for Habitat Development in Tirana-Albania, and a tutor (professor assistant) on the Art Design Department near Polis University. Other skills: graphic design, photography and blogging.

VERONIKA KOVACSOVA

VeronikaKovacsova is an urban design student (Master programme) at the Amsterdam Academy of Architecture, the Netherlands and holds a Master degree in Social Sciences (urban sociology, University of Amsterdam). Besides her academic education, she has four years of experience working as a jr. urban designer at renowned offices in Amsterdam and Vienna. Currently, she is working on her graduation project dealing with the topic of urban climate (finishing end of october 2013) and working as an urban designer and researcher at feld72 architecture and urban strategies in Vienna. Her works and writings can be viewed on www.stadachtig.nl.

CLENN KUSTERMANS

ClenKustermans(The Netherlands, 1986) wanders and interweaves urban planning and writing. As an urban planner, he has worked for OMGEVING planners and architects in Antwerp, Belgium since 2011. He is now primarily involved in strategic spatial planning. He worked for the Dutch municipalities Breda and Roosendaal before, which fostered his experience in land-use zoning planning. As a writer, Clenn has won some writing contests. Much of his prose and poetry is inspired by cityscapes and their people. As planner ánd writer, Clenn won the Young Planning Professionals Award in London 2012. Clenn is an active member of URBEGO, a platform for international young planners and architects. More info can be found at www.clenn.nl.

LAURI LIHTMAA

I have got my undergraduate degree in land management and MSc in land economics. Currently I am a PhD student in Estonian University of Life Sciences. The thesis is about social and financial capital of urban communities. Other research interests are impact assessment, green buildings and planning, sustainability appraisal of the built environment. Three years ago I started my own consultancy practice. The services include urban planning, impacts assessments and on the building scale. I provide energy modelling services. I'm certified PassivHaus consultant and very interested in architecture, photography and 3D modelling. web: www.ecobon.ee

MARY MATHEWS

I am from New Orleans, Louisiana. I have just completed my Master's degree in International Development at the Université Pierre Mendès France in Grenoble, France with an end of studies internship at the United Nations Economic and Social Commission for Asia and the Pacific in Bangkok, Thailand. I love traveling, running, cycling, being in the outdoors and being part of a lively city. I am really looking forward to learning about Madrid and innovative city planning strategies. I hope to take what I learn here back with me to New Orleans to make my hometown a more inclusive, liveable and sustainable city.

ANZHELA PEREPICHKA

Kharkiv, Ukraine. 23.08.1989. Architect, urbanist. Graduated from Kharkiv national university of municipal economy named after Beketov in 2012 with Master Degree in Architecture. Started career as a freelancer in interior design. Now working in Architecture and Land Bureau as a architect assistant. The major work is making masterplans for private territories. Interested in product and graphic design. Participated in several architecture and design competitions. Taking photos and hand made craft are the main hobbies up-to-day.
Interested in researching in Urban matters and studying Media Architecture and Light Design.

MIKHAELA PLETSCH

MikhaelaPletsch is a Brazilian Exchange Student condecorated with a scholarship from the Science Without Borders Program. Currently, she lives in Kaiserslautern, Germany, where her focus in the TechnischeUniversität Kaiserslautern is Spatial and Environmental Planning. Although she studied Nurse Technician and got a great amount of experience, her target in the graduation was Bachelor of Environmental Management, by University of São Paulo. During the first three years of this course, she has dedicated its activity to different areas, as biology teacher, research projects, publications, social work and internship. Attracted by interdisciplinery science, always seeking to improve her knowledge.

MORGAN POULIZAC

Morgan Poulizac, 32, is lecturer in urban planning as well as project manager for the school of urbanismat Sciences Po Paris.
Afterobtaining a master degree in musicology and sociologyat the Sorbonne, Morgan studied public affairsat Sciences Po. He beganhiscarreer as a consultant for NGO's in social policies, becoming an expert on homlessness and health issues. He worked after that for the cabinet of the prime minister. He decided then to specialise in urban and development policies. His main interest are about evaluation of greenfield development, poverty and economics of planning. He lives in Paris, France.

ELEONORA SARTORI

Eleonora Sartori took her master degree in Urban Planning and Policy Design at Politecnico di Milano last year. The final research thesis was focused on housing issue and social mobilizations in Milan. She has been doing research on grassroots

organizations and practices on housing issue from an internal perspective with participative observation. Her last professional experience was one year internship in Milan Municipality for Housing Policies Sector, where she was involved in participatory processes and management of residential and non residential empty spaces of public property.

JOSE MIGUEL VILLAMOR

I´m 24 years old, doing my Final Thesis in the Degree of Architecture and Urbanism in the University CEU San Pablo in Madrid.I am really interested in urban and territorial planning, trying to learn more aboutit always I can, by reading books as "Urban Acupunture" from the Brazilian architect Jaime Lerner, or assisting to courses like this one.

TAMARA VLK

I am 24 years old and live in Vienna, Austria. Since two years I am attending the master's programme in Spatial Planning at the Technical University of Vienna. Last year I spent one semester at the Polytechnic University of Madrid. Besides my studies I am working at the Centre of Transportation System Planning at the Vienna University of Technology. There we are working on research projects related to current and future transportation related topics in spatial and land use planning and mobility. If there is some free time left, I prefer to hang out with friends in Vienna for doing sports, cooking or just having some drinks together.

MISCHA WOUTERSEN

Mischa Woutersen is graduated as an Urban Planner and works as a freelancer in the field of participatory planning. He has organised a workshop implying office workers into the design of their neighbourhood. Currently he is setting up similar projects: events in subways, legalised guerrilla gardening and participation for women that are not native dutch speakers.
Mischa is interested in sustainability in the broad sense and he has therefore researched the promotion bicycle sharing systems and tools to make people aware of their energy consumption. He also designed a policy for a carfree Amsterdam in a "gradical" way. The goal of the policy is radical, but its implementation is gradual.

JAKUB ZASINA

Degree in Spatial Economy from the University of Lodz. Projects' coordinator in Piotrkowska Street Foundation. Former chairman of Student Research Circle of Spatial Economy at the University of Lodz SPATIUM. He lives in Lodz (Poland), what was his great dream. Fan of cities, activist, cyclist. He is interested in urban design history, contemporary architecture and early modernism. Beginner of procedural modeling of cities. He cooperates with non-governmental organizations and public institutions in a field of cultural heritage. He plans to start his Ph.D. this year

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