

Cities of tomorrow

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Challenges, visions, dys-visions as seen by cities

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Introduction

With the emergence, in 2010, of the new European Strategy for the European Union – Europe 2020 – arises once again, should we be tempted to write it, the issue of the urban factor. One cannot hide, when analysing the EU's growth strategy for the coming decade, the fact that the urban dimension is quasi absent from the description of the three priorities and five objectives set by the proposal for cohesion policy from 2013 onwards. The Commission's initiative runs therefore, and once more, the risk of being disconnected from a blunt economic and geographic reality: European cities are the most important sources of job creation, economic growth and social and technological innovation. Cities also concentrate major social issues and environmental challenges.

It is precisely to fill the gaps between the general objectives of cohesion policy and the reality of the challenges to be tackled by the cities in the twenty coming years that the Commission has launched an initiative called "Cities of tomorrow". Three major expert meetings and background research have been organised during the second semester of 2010 to identify socially innovative, multi-scalar governance responses to the main urban challenges and the role of future cohesion policy in this respect.

This paper is a piece of work of this background research. Its aim is threefold:

- to identify foresight-type exercises involving projections or scenarios of the future carried out by cities or large agglomerations or carried out by other actors (national, European) and which have a specific focus on cities;
- to propose a description of visions and challenges as set forward by European cities or regions concerned with an urban dimension. This description will include "dys"-visions or worst-case scenarios, and normative visions or models for the future, as identified by cities;
- to construct a typology helping to map and understand these categories.

Our research relies on an existing and rather abundant literature on urban challenges, as well as on databases and websites, contacts with professional networks and city associations.

2. Methodological challenges

Empirical profusion

The first feature that emerges when looking at the various initiatives that cities undertake to plan or consider their future is the large amount and high diversity of cases. There is not a single city or urban agglomeration that does not think about its future, certainly when a threshold of 50 000 inhabitants is reached. The richness as well as the complexity of the picture increases when one also sees that regions, sub-regions or even districts or neighbourhoods within cities sometimes develop their own plan, vision or programme in parallel. The case of London, among many others, is illustrative of this reality: strategic planning in London is the shared responsibility of the Mayor of London, 32 London boroughs and the Corporation of the City of London. Whereas the first sets an objective of being, by 2031, "the best big city on earth", the

¹ Boris Johnson, Mayor of London, quoted in the draft replacement London Plan, October 2009, p.5.

latter set their own local development frameworks, presumably in accordance with the new London Plan.

There is consequently a profusion of “cases” - plans, visions, programmes, sometimes mere labels – possibly relevant to our analysis which needs to be sorted out.

This certainly calls for either a tighter definition of the scope of the research, which can be envisaged by, for instance, using foresight keywords (see below), or a larger research framework.

... but lack of empirical research...

Indeed, by contrast with this profusion, we could not identify, through our research, many articles, books or even websites commenting on or listing urban planning initiatives and forward-looking exercises or démarches from an empirical perspective, either from a European viewpoint or from a national perspective. One website does however single these out, listing territorial foresight exercises in the Walloon Region² and analysing them from a foresight perspective. We do not, however, pretend that our research was exhaustive. More time is needed to consolidate our statements and to analyse all cases.

At European level, such a tool with a focus on technological foresight exists. The Directorate-General for Research has supported the EFMN (European Foresight Monitoring Network³) that systematically describes foresight exercises, most of the time linked with technological issues, given the involvement of the Institute for Prospective and Technological Studies in the project. A limited number of territorial foresight exercises are also presented in this database. DG Research currently supports an updated project of this network, the European Foresight Platform⁴, with the same goals and limitations.

What does exist, however, is an abundant literature on some specific challenges faced by cities. This literature is strongly impacted by current thinking. Today, the green factor is abundant, whereas, some years ago, buzzwords like ICT, new technologies, connectivity, etc. were dominating. We will come back to these categories of challenges.

... and of genuine foresight thinking

Of course, this statement implies that “genuine foresight thinking” carries a robust and shared definition, which is obviously not the case. Foresight, as a research area, is subject to a variety of understandings, and various lines of thinking coexist in the European landscape.

On the other hand, territorial foresight as a tool in governance is asserting itself more and more widely in the European Union and at the global level. One can recall the outputs of the Blueprints for Foresight Actions in the Regions, initiated by DG Research which set up an expert group in 2003-04 to stimulate the use foresight in European regions.

² www.intelliterwal.net

³ www.efmn.info

⁴ www.foresight-platform.eu/

What is regional foresight?⁵

Regional foresight is a structured set of participative vision building and strategic planning activities that allow regions to think, consider, debate and shape the medium to long-term future of their regions. Many of the key process elements of foresight are widely used in strategic planning – the formation of expert panels, the use of socio-economic and environmental data consultation, brainstorming, trend and extrapolation and the setting of strategic goals. The distinctive feature of foresight is its long-term future orientation that goes beyond immediate issues and concerns, and the use of methodologies such as brainstorming, scenario development and scenario analysis using SWOT or similar techniques. Foresight, unlike most approaches to strategic planning, deals with long-term prospects and draws upon the views of multiple stakeholders. The European Commission has published the following definition:

Foresight can be defined as a systematic, participatory, future intelligence gathering and medium to long-term vision-building process aimed at present day decisions and mobilising joint actions.

The policy report of this Commission initiative emphasized five characteristics of both innovation systems and foresight processes:

- they address companies' and citizens' demands and latent needs (need-orientation);
- they set strategic objectives in a sustainability perspective (over a time period of approximately 20 years);
- they foster transparency, i.e. diffusion of knowledge of individuals and organisations – both inside and outside the regional innovation system – about the available resources, competences and services in the system, the strategy of the system and the needs of the system;
- they subscribe to a systemic approach (connectivity of players, exploitation of synergy potentials, achieving high integral quality, cross-disciplinary and cross-sectoral work);
- they seek a critical mass (dedication of sufficient resources to strategic issues).⁶

Few of the identified cases would actually fulfil these five criteria satisfactorily; one of them being transparency. Given the fact that we could not easily access background information regarding many urban initiatives, our review could be difficult and exclude many examples.

However, our point in this paper is not to propose a list of the best urban foresight démarches, but to suggest a wider overview of how cities see themselves in the future, regardless of the method used, and to identify, where relevant, interesting challenges, visions or dys-visions. We will consequently use “softer” criteria to build our typology, but we will try to distinguish genuine foresights from other types of forward looking exercises.

⁵ Blueprints for Foresight Actions in the Regions, European Commission, DG Research, Final reports, October 2004.

⁶ European Commission – DG Research, Blueprints for Foresight Actions in the Regions, Foresight and the Transition to Regional Knowledge-Based Economies, Policy Orientation report, October 2004, pp. 3 & 4.

3. Sorting out the evidence

3.1. According to the nature of the processes

Frédérique Parrad and Fabienne Goux-Baudiment have produced one of the few reports listing and analysing foresight exercises in 18 European cities⁷. Their survey dates back to 1999-2000. Even if it dates a little, it is interesting to note that the authors classify their sample of cities according to four types of approaches: urban development exercises, exercise inspired by sustainable development, competitive strategy exercises and territorial projects.

The first category is twinned with the concept of strategic planning, and included, at the time of the survey, classical types of urban exercise, mainly trying to widen classical urban planning top-down reflection to more transversal and integrated programming documents.

The second category was, at the time of the survey, an emerging one, growing together with the implementation of Agendas 21. These exercises were seen as more embedded in the long term and tended to resort to backcasting as a useful means to set ambitious objectives to achieve. In practice, they were seen, at this time, as mainly concerned with environmental challenges, lacking the systemic thinking needed when dealing with sustainable development.

The third category comprised the abundant set of cities and urban regions which positioned themselves as competitors in a demanding and globalised economic and technological environment. They implemented strategy and management methods inspired from the private sector and tended to set relatively short-term timeframes: ten years most of the time, but with some exceptions (Gipúzkoa 2020, for instance). As the authors pointed out, *“these frameworks are modest in size; their focus is narrow and rather elitist, involving as a priority local decision-makers from the economic and political spheres”*⁸.

The last category, seen as the most promising at the time of writing, was presented under the heading “territorial projects”, a name very much influenced by the French practice of *Projets de territoire*⁹ and observed in the Spanish territorial dynamism. These projects were then seen as more ambitious, more systemic, and more involving, notably in terms of actors mobilised by the process. The notion of vision is often instrumental in these exercises, notwithstanding the method used which is not always foresight either. The territorial scale is variable and goes most of the time beyond the city level.

The following table gives a more precise idea of this classification and its use in 1999-2000, focusing on cases outside the French context.

⁷ PARRAD (Frédérique), GOUX-BAUDIMENT (Fabienne): dir., Quand les villes pensent leurs futurs. Une enquête sur les démarches prospectives dans 18 villes européennes, 2001 plus, n°64, octobre 2004, 96p.

⁸ PARRAD (Frédérique), *op. cit.*, p.8.

⁹ A practice very much encouraged by the territorial reforms implemented in France.

Table 1: case studies from Parrad – classification reviewed

Strategic planning	Sustainable development	Strategic competition	Territorial project
Urban Development Plan of Vienna (Austria)	Agenda 21 of Berlin (Germany)	Gipuzkoa 2020 (Spain)	Metropolitan Strategic Plan of Barcelona (Spain)
Vision 2025 – Helsinki (Finland)	Goteborg 2050 (Sweden)	Vision Dublin 2010	Bilbao Future Vision (Spain)
Strategic Plan Budapest (Hungary)		Belfast Capital City	Strategic Plan of Malaga II (Spain)
Venice, Metropolitan Strategy (Italy)		Scenarios for the urban region of Edinburgh (UK)	Strategic Plan Turin (Italy)
Utrecht (the Netherlands)		Vision for Leeds II (UK)	
Birmingham City strategic partnership (UK)			
Strategic Plan for the city of Brno (Czech Republic)			

This table did not pretend to be exhaustive. Interestingly, it shows the dominance of two rather focused and short-term frameworks, driven by strategic motives rather than by long-term purposes.

3.2. According to the territorial context

One can rely on the urban audit¹⁰ and on the ESPON reports¹¹ to think of an analysis that would apply territorial or institutional criteria to sort out the cases of urban forward-thinking exercises.

The conclusion can, however, be quickly drawn: geography, politics and economy matter. In other words, it is more likely to find interesting cases for this study – in countries with an energetic territorial agenda – either a federal country, or a system where cities play an important part, such as in the United Kingdom:

- in big cities, which see themselves in a competitive regional, national or international environment;
- and in an economic or political context favourable to the implementation of resources devoted to such exercises: presence of universities and / or international companies, economic or institutional positioning, a newly elected mayor, strong participative culture...

Moritz Lennert has also shown, in his presentation¹², that history matters as well, showing the heritage that can be tracked from localisation of commercial and university

¹⁰ http://www.espon.eu/main/Menu_Publications. In 2007, ESPON produced “Spatial scenarios for Europe”, which contemplated three alternative European scenarios for the 2030 horizon.

¹¹ <http://www.urbanaudit.org/>

¹² Moritz LENNERT, Presentation of typology developed by FOCl and results regarding city foresight, Brussels, 28 June 2010.

centres during the 15th century and the current agglomeration economies located in a sort of European pentagon of urban development which is still highly influential, as shown in the ESPON works.

This does not mean that smaller, peripheral or even 'poorer' cities do not think of their future in a structured way. Those discriminating factors can also be the spark that will launch a structured reflection, sometimes in a more original way.

This implicit grid of 'factors that matter' is not, however, without consequences on the list of issues that cities tend to put forward in order to define their strategy. One has therefore to integrate the actual bias linked to the predisposition of certain types of cities to launch forward-looking exercises in certain contexts by contrast with less detectable examples in less remarkable contexts.

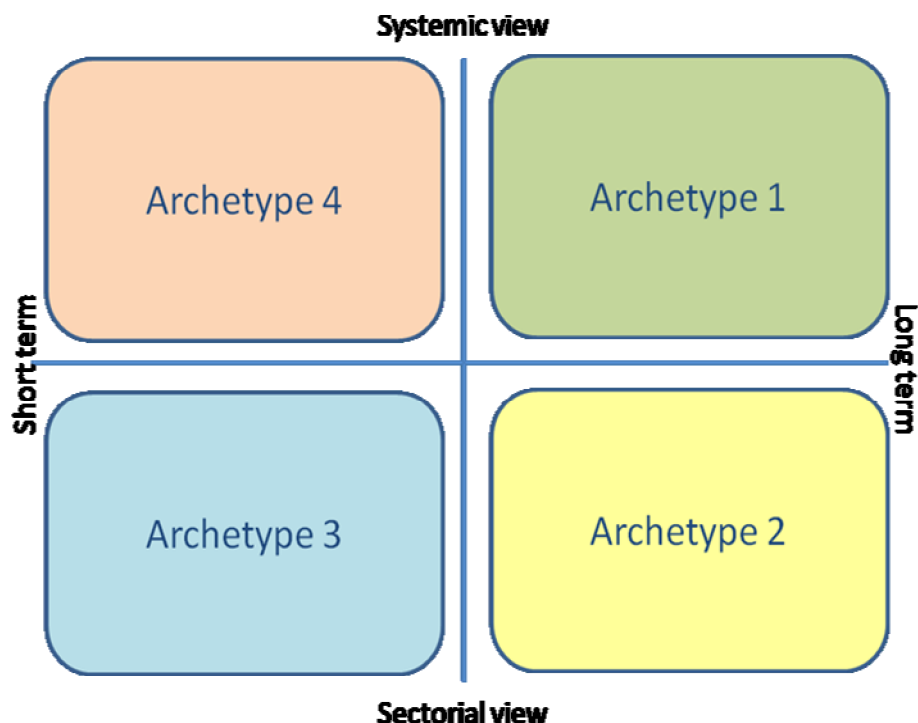
3.3. According to other types of criteria

Several other criteria could be relevant to sort out and classify the urban exercises. They differ indeed according to their strategic horizon (short-term, mid-term, long-term):

- according to the scope of the exercise, from modest to very large, in terms of participation and involvement of actors;
- according to the nature of the project leader: elected urban body, university or research centre, consortium of enterprises, local association, citizens themselves;
- according to their holistic or vertical focus.

In all, nevertheless, we would opt in this first part of the paper, for a rather simple grid of categorisation which could take the shape of four quadrants divided by two axes:

Figure 1: two axes to categorise foresight exercises



The horizontal axis shows the time horizon – from short to long term, with all possible variations in the understanding of these notions – and the vertical axis goes from sector

or issue-focused exercises to more encompassing démarches. Of course, the border between each of the categories is sometimes blurred.

The following indicative examples could be associated with the four archetypes and according to the territorial scale of the project.

	Small or medium-sized urban context	Large size or global urban context
Archetype 1	Prospective des quartiers ¹³ (Avignon, Rennes, Besançon, and many other examples in France; Seraing, Belgium) Ottignies-Louvain-la-Neuve 2050 (Belgium)	Randstad 2040 Grand Paris, Lyon, Rennes Brussels 2040 Göteborg 2050 Gipuzkoa +20 (Spain) Basque Country (France) Normandy 2020 (France)
Archetype 2	Digital Thermi (Central Macedonia, Greece) Martinique 2025 (France)	Built Environment Foresight 2030 (UK) BMW 2025 (Ireland) Cyberterritoires et territoires en 2030 (France) Lille 3000 (France) TransBaltic Foresight Debate
Archetype 3	Linz 21 (Austria) and many Agendas 21 led in small urban contexts	Istanbul Digital City Programme (Turkey) Manchester as a Knowledge Region (UK) Agenda 21 of Berlin
Archetype 4	Hammarby Sjöstad (Stockholm) Chambery 2020 (France) Castellon 2020 (Spain) Many urban planning exercises	Piano Strategico Turin (Italy) Andalucia 2020 (Spain) Bilbao 2010

Interestingly, one can also point out that national foresight exercises, where they are led, do not put the urban dimension as a major single issue. The recent France 2025 exercise directed by the Centre d'Analyse Stratégique¹⁴ has selected eight themes, none of them specifically focused on the urban issue. Similarly, UK Foresight leads many research projects, but again with few links.

Eventually, we also came across examples of foresights which focus on, among other issues, the relations between the centre and the periphery, highlighting a phenomenon of periurban extension which worries many cities. The last issue of Territoires 2040, the territorial publication of the DATAR, is devoted to this issue¹⁵.

The case of Dijon in 2030 (France) is, for instance, interesting to analyse in this context: in a first scenario, developing the model of the extended city – the city in the countryside – the experts anticipate a strong shift in the share of population between the centre (from 250 000 to 190 000 inhabitants) and the periphery (from 90 000 to 140 000 inhabitants). The urban area of Dijon saw a 33% increase between 1996 and 2010. In a second scenario, the demographic growth is controlled and the share between the centre and the periphery does not change as compared to its current

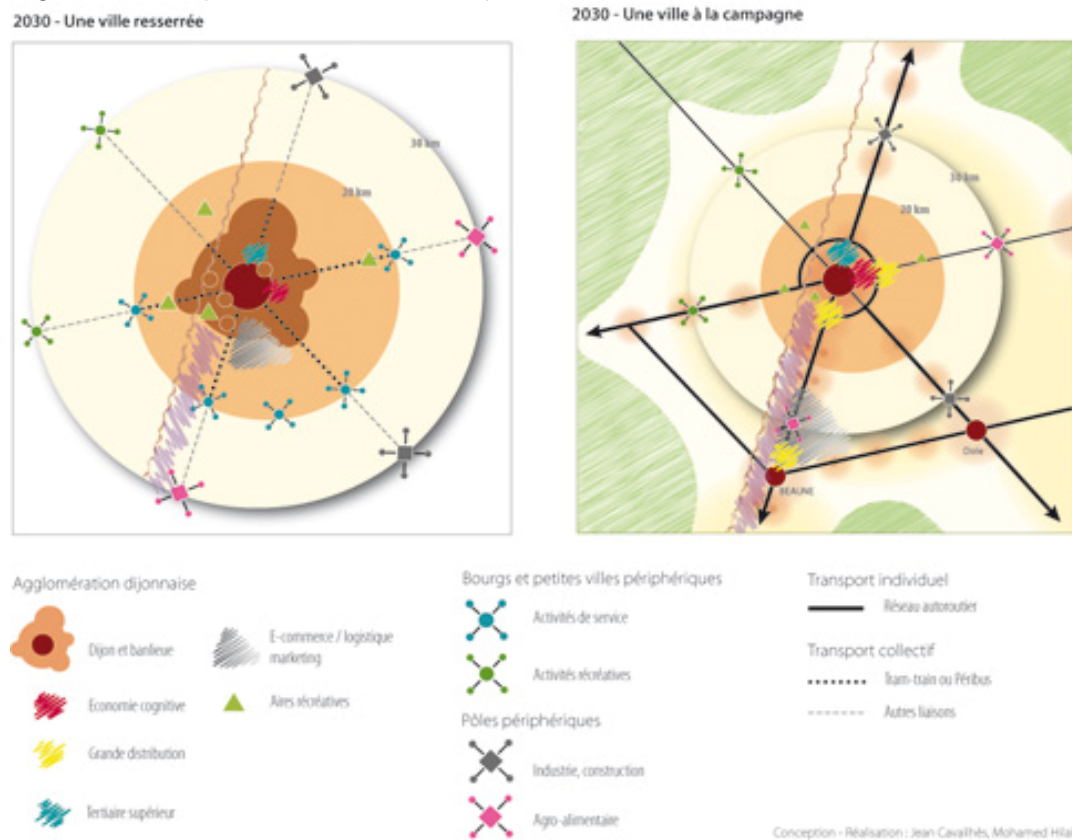
¹³ Literally, "neighbourhood foresight"

¹⁴ http://www.strategie.gouv.fr/IMG/pdf/EB_10defisFrance2025_jan09.pdf

¹⁵ <http://territoires2040.datar.gouv.fr/spip.php?rubrique27&revue=1>

situation. Both scenarios activate contrasted public policies in several domains which will favour one path or the other.

Figure 2: two spatial scenarios for Dijon



Source: <http://territoires2040.datar.gouv.fr/spip.php?article68&revue=1>

4. Emerging and structural challenges

4.1. Emerging issues

The overview of forward-looking exercises in European cities leads to a selection of three sets of 'emerging' and transversal issues faced by European cities. More examples could of course be pointed out in a more exhaustive investigation, but these three examples illustrate interrelated challenges which form, altogether, robust policy concerns impacting many urban reflections.

The Green factor

If there was only one to point out, it would be the sustainability challenge! What was, in 1999-2000, in the survey of Parrad and Goux-Baudiment, a rising tendency consequent to the Kyoto Protocol of 1997 and earlier initiatives already inscribed in the Rio Declaration on Environment and Development of 1992, is almost twenty years later a common concern of a vast majority of cities and urban regions in Europe, from East to West and from South to North: how to make the territorial development model more sustainable.

It is known that the movement was initiated both in Scandinavia by cities like Stockholm, Malmö and Copenhagen, and in specific locally favourable urban contexts such as in Bekerich (Luxembourg), Freiburg (Germany) or Hackbridge (London – UK) or Utrecht (Netherlands). These first examples of eco-neighbourhoods or eco-cities are now being duplicated, improved and expanded to cities or regions with the tough issue of how to get larger with initiatives working at manageable scales.

The following list shows striking examples of existing eco-neighbourhoods and upcoming projects.

Project	City
BEDZED	Sutton – UK
Eco-Viikki	Helsinki – Finland
Eva-Lanxmeer	Culemborg – Netherlands
Pic-au-Vent	Tournai – Belgium
Vauban, Rieselfeld, Weingarten	Freiburg – Germany
Kronsberg	Hanover – Germany
Hammarby Sjöstad	Stockholm – Sweden
Vesterbro	Copenhagen – Denmark
GWL Terrein	Amsterdam – Netherlands
Scharnhauser Park	Ostfildern – Germany
Mata de Sesimbra	Mata – Portugal (in project)
Danube	Strasbourg – France (in project)

The list is non-exhaustive and would need frequent updates given the dynamism of the concept. The energy-cities network unites a thousand local authorities from 30 European countries and publishes a valuable set of information on the energy future of cities.

The green factor is virtually present in the whole of Europe (and the rest of the world). Behind this concept, one finds far-reaching objectives such as the diminution of the impact of human activity on climate, the reduction of CO₂ emissions, and the general improvement of the energy efficiency of the housing and building sector. One also finds many translations of this dimension into national strategies and more concrete action

plans. The most striking indicator of this rising prominence is probably the French process initiated under the name “*Grenelle de l’environnement*”, an open multi-party debate which brought together, in 2007, representatives of national and local government and organisations (industry, labour, professional associations, NGOs) in order to define the key points of public policy on ecological and sustainable development issues for the coming five years. This process is now being implemented in several territories (and at various scales), including, for instance, the realisation of “territorial climate and energy plans”, SCOT’s or Agendas 21.

Through the French example, one can see that the sustainable debate still faces the need to link green topics with other issues in the economic, social or cultural fields. The themes which are usually clustered through the Grenelle process in France relate to climate, energy, transportation, land planning, housing, environmental risks and natural resource protection. Several important networks are now active in these fields, under labels such as post-carbon, sustainability or more precise policy-oriented headlines.

Finally, in order to open up the debate, one must insist on the fact that the links between foresight and sustainable development are not being analysed in an entirely satisfactory way. As Philippe Destatte points out: *“Truthfully, some twenty years after these questions were asked and despite the enormous movement towards the concept of sustainable development becoming widely used, one wonders whether futurists truly did invest in this field. Suspicious of traditions as well as anti-conformist, in a world of disciplinary research in which their interdisciplinarity did not help them to find their place, futurists are, by nature, reticent to adopt fashionable concepts. In fact, a sort of paradox emerges here. On the one hand, there is no doubt that sustainable development lies at the heart of futurists’ writings: a simple glance at the table of contents in the main foresight journals attest to this. Moreover, the questions posed by sustainable development, as we have seen from what futurists believe is at stake, mean that it is quite likely that those same questions have been investigated for a long time. On the other hand, one thing remains striking: in a decision-making world, such as research or consultancy, foresight does not appear naturally as the method for sustainable development.”*¹⁶

The migration flows and the demographic challenge

The enlargement of the European Union, over the last decade, to 27 Member States, has somehow ‘dramatised’ the migration issue. Behind this issue, one finds in several urban projections, two interrelated challenges: the ageing of the population and its demographic consequences on the one hand; the constant flows of immigrants, and the necessity to develop integration mechanisms on the other hand. Described like this, however, the debate is very much seen in Western European terms. In some parts of Europe, population is shrinking or, on the contrary, demography is rising. In most European capitals, the attractiveness of the city remains high for international immigrants, but also for young people (students, notably), for some elderly groups, or for low to middle-income households. As a consequence, the population increases, whereas the net revenues of the cities decrease. The challenge becomes therefore one of finding social responses and means to finance them. In other cities, Berlin being one emblematic example, the city faces a stabilisation of its population and fears losses over the coming decade. As Heinrich Mälding has shown in his June presentation¹⁷, demographic challenges can have ambiguous consequences according to the context and are embedded into other challenges, with social and spatial segregation being among the most obvious.

¹⁶ DESTATTE Philippe, “Foresight, a major tool in tackling sustainable development” in *Forecasting and Social Change – An International Journal*, 77, 2010, p.1583.

¹⁷ MALDING Heinrich, “Demographic Challenges for European cities, Brussels, 28-29 June 2010.

There is not, consequently, a dominant view that can describe the reality of European cities in this field. In some cases, ageing is not an issue or a reality, and trends are very mixed. What is striking, however, is the apparent contradiction between the two sides of the equation: ageing is often being presented as a challenge (and an opportunity) whereas – and this is not often written like this in the urban documents – immigration is not an expected or proposed strategy, but is, nevertheless, from a prospective view, the most natural response to demographic challenges. Taking a longer historical perspective, European cities see a growing ethnic diversity as a shared phenomenon creating different uses of the territory and of the public space. This has an impact on the expectations of what a city should propose in order to remain attractive and inclusive for all types of social groups.

The commuting cities

In most European cities, the increase of the total traffic volumes has been significant, often accompanied by an increase in car traffic, but also in public transport. This of course relates to the green factor and the demographic challenge already mentioned before, but it also consists of a challenge as such. It reflects the afore-mentioned perceived increasing attractiveness of many cities in an often uneven instrumental view: cities are nice to work in, not to live in.

One of the consequences of this instrumental development is the high pressure put on public transport systems, which demand high financial investments, contrasting with the decrease of fiscal or economic revenues. A city-region such as Brussels devotes up to 25% of its own budget to transport and infrastructure, which benefit the 350 000 daily commuters using the city transport system but paying their taxes in Wallonia or Flanders. There are as many jobs held by commuters as by Brussels inhabitants.

Most urban foresights see traffic congestion as a major risk and anticipate a further rise in the total amount of traffic, including motorised traffic, and set objectives aiming at changing the modal split in favour of more collective, more sustainable or more efficient means of transport.

On the positive side, one witnesses the revival of public transport in different shapes and speeds (Tram, Train-Tram, light train) in cities such as Valenciennes, Montpellier, Helsinki and Malaga. Germany has pioneered the utilisation of combining heavy rail and street running fixed link systems, for instance in Karlsruhe, creating an upsurge of interest elsewhere: several schemes are in the construction phase in France and a trial is underway in the UK (Yorkshire). The emergence of cycling infrastructures in congested cities such as London (Sutton), Seville, Paris, Geneva, and the widespread dissemination of the public bicycle rental programme is another indicator of the vivacity of this issue. Social and technological innovations find, in cities, great fields for application or experimentation.

4.2. Structural issues

The following list refers to more structural challenges that can be found with some historical regularity in many urban contexts and are still valid.

Managing the international or national competition

Alongside London and Paris which sell themselves proactively on the global cities market, many European metropolitan cities adopt a strong international or national posture. Even if this positioning is very much driven by marketing motivations, it shows that cities see their environment as very competitive, attracting not only foreign

investors or media attention, but also students, researchers or even wealthy inhabitants. In other words, cities compete with each other to reinforce their image, quality of life and attractiveness. This is the case of the Western European polycentric system where cities are interconnected, close to each other, and somehow trying to attract the same types of material and immaterial investments. This is also the case of centralised states where, next to the capital, there is competition to be or remain the second best city of the country. Eventually, in transborder regions, one can see coalitions between cities which join forces and exist as a Eurometropolitan reference.

Managing the economic transition

Economic development remains a strong motivation behind the forward-looking or planning exercises of European cities. Besides the above-mentioned example of competitive cities, there exist many cities thinking about their future in terms of economic transition.

Two types of economic transitions can be isolated here.

- the classical one which sees cities of the ancient Western industrial basins and of Central and Eastern Europe in the process of coping with the recent or less recent decline of their industrial capabilities. Many strategies exist in this field: cultural investments (Metz, Liège, Lens, Bilbao, and Emscher Park), industrial consolidation (Valenciennes, Turin, Barcelona), transition towards innovative tertiary systems (Linz, Belfast, Leeds), technological pathways in partnership with universities (Manchester, Lausanne), and investment in a performing transport infrastructure (Charleroi);

- the post-financial crisis reflection which is starting to assess the limitations of a strategy solely focused on financial and immaterial services, or depending on economic factors with little regional or national command. In this type of reflection, the nature of the transition needed is often presented as smart, green, sustainable, intelligent, etc. It goes along with concepts of residential economy, quality of development, open innovation, and technological facilities. These reflections are to be found in more prosperous urban contexts, but in many cases one finds a mixture of both dimensions in the way of envisaging the future.

In all cases, preservation or improvement of the levels and / or quality of the employment is THE goal to achieve, most of the time by fostering growth and innovation.

Managing the urban regeneration

This topic is, naturally, a constant concern of urban decision-makers and does not need to be developed extensively. In some cities like Venice, or Porto, to name just two, the dominant, if not single, issue is one of preservation of the quality of the historical centre and preservation of the attractiveness of the city.

In most of the cases, the issue is one of renewal or rehabilitation of the built infrastructure, whatever its destination. In such cases, there often exists a need for replacement given the age of the built infrastructures (60 or 70 years old, i.e. infrastructure that was built after the Second World War and not renewed since).

Sometimes, cities opt for a short-term, step-by-step urban renewal programme, other times, they give way to a more structured reflection which can comprise long-term issues. Urban regeneration projects are numerous and tend to be more and more associated with the issue of energy efficiency. European Structural Funds (e.g. ERDF) are a strong financial mechanism acting in support of such urban strategies. JESSICA, as a financial engineering device set up by the EIB, is another indicator of the

importance of funding *sustainable urban development projects that have a true integrated approach*.

Managing the centre-periphery relations and the metropolisation effects

This issue is a complex one. It is complementary to the commuting challenge and to the issue of national or regional positioning. The complexity is explained by the institutional diversity in which the cities coexist. Besides the issue of regional or national leadership, one in fact very often sees urban challenges that go beyond the traditional borders of the city: environmental (dis-)continuities, social and spatial segregation, mobility, industrial and economic exchanges, and peri-urbanisation. What is interesting to point out, in this subject, is not only the content of the policies, but also the fact that the scale for optimal urban governance is raised. In several examples (France, Germany, Italy, Hungary, Poland, UK), local authorities – i.e. the city and / or the region PLUS neighbouring local actors and / or regions – tend to unite their forces to build up strategies that are valid in wider urban contexts. In Wallonia, for instance, many foresight processes are initiated at the supramunicipal level, outside any legal or institutionalised framework.

This whole issue relates to the debate of metropolitan regions, currently analysed in various contexts¹⁸, and a debate which does not deliver definitive conclusions. As a whole, the EU is becoming slightly more metropolitan when considering the population figures. In addition, only half of the EU metropolitan regions show a higher level of development than their country, most of the time, the national capitals, while in several other cases, the level of development of cities beyond 250 000 inhabitants does not meet the national average. In other words, the metropolitan issue is often raised and an attractive triggering factor for foresight initiatives, but it might be revealing questions more than delivering answers.

Managing other traditional urban challenges

We will not extensively develop other specific urban issues evidenced by the cities practicing foresight. These relate to the set of environmental – waste management, water treatment, energy efficiency – and social – urban security, social mix, public space quality, cleanliness, housing, – challenges which can be found in most cities. As we showed above, issues such as urban transport and CO₂ reduction are very much present as well. The concept of “quality of life” is also very much quoted in most documents.

In cities with a vivid economic or academic environment, one sees also, in continuity with a tendency raised by Parrad and Goux-Baudiment, a strong technological dimension to the foresight. It is often linked with the presence of a university and / or a strong economic sector to be reinforced or developed. Many foresights find, in the technological environment altogether, a foundation and several elements for scenario-building.

Eventually, in some places, cultural and identity issues accompany the foresight process. Urban projects present in such cases an objective of local mobilisation such as in the *City Pride* initiative of Birmingham or in the affirmation of Barcelona as both a Spanish and Catalanian metropolis.

¹⁸ See the ESPON publications and also Regional focus 01/2009 on Metropolitan regions in the EU by Lewis Dijkstra.

4.3. Governance and participation as transversal issues

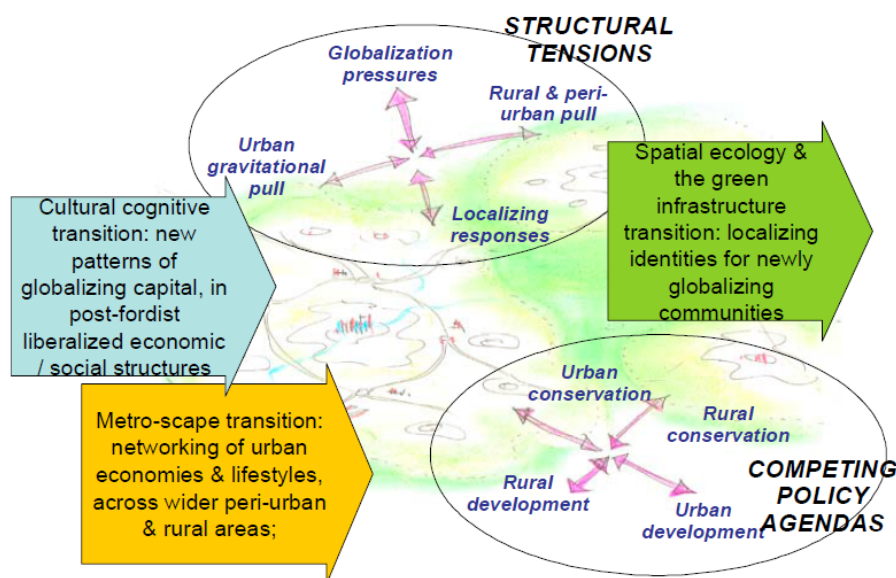
What has clearly changed over the last decade is the issue of territorial governance and, linked to it, the increasing social demand for influencing or even codeciding the urban future. Governance is, in this respect, very much connected with the perception that the urban environment is becoming increasingly more complex. And indeed, our study reveals that the issues, as such, have not dramatically changed over the last decade, but that their interrelations are growing and getting more substance in a world which is now entirely global.

Governments, scales and systems of governance, are changing and evolving rapidly, as exemplified by the successive French territorial reforms. Economic development changes and evolves when investors see in cities a market or a cost factor rather than a territorial system. And within these territorial systems, cities, urban areas and communities are also changing and evolving. Complexity means therefore growing governance challenges.

Joe Ravetz's presentation of governance challenges in Brussels was almost solely focused on the relations between actors, the relations between issues and the policy consequences in urban or peri-urban contexts. His point was to demonstrate, rightfully in our view, that boundaries are being redrawn between market and state: between different sectors and professions: and between different levels from local to global, including, as we have showed in the Belgian case, non-institutionalised levels of governance trying to exist in the fast-moving landscape.

According to Ravetz, *policy-makers are surrounded by 'wicked' problems which cannot be solved, and policy challenges which are multi-level, multi-objective and multi-stakeholder. From practical experience, success may depend not only on more or better governance, but also on new forms and systems of governance. So we can look at the challenges for urban governance in more than one way – from dealing with the problems of the present, to the challenge of how to respond, adapt and evolve in the future*¹⁹.

Peri-urban transitions / challenges



Source: RAVETZ Joe, "Challenges for urban Governance", Brussels, 29 June 2010, p. 4.

¹⁹ RAVETZ Joe, "Challenges for urban Governance", Brussels, 29 June 2010, p.2.

Taking the peri-urban situation as an illustration of his statement, Ravetz sees it as a *zone where urban meets rural*, increasingly across larger areas, and as lacking effective governance where indeed challenges meet: *This is a new and fluid kind of geographical space, where effective 'governance' is often lacking. By its nature, it crosses traditional boundaries, and is driven by forces from local to global. It is often the site of conflict between wealthy and poor: city and country: newcomers and natives: or new and old. Such conflicts arise with questions such as: Whose territory is this? Who decides what happens? Who gets the costs or benefits?*

Needless to say, most European foresight exercises have the governance issue at the heart of their reflection.

The role of foresight as a method for coping with complexity and seeking better governance

In this context, foresight, as a powerful tool for designing futures, helps individuals, communities, businesses, organisations and public authorities to react to external events but also to engage themselves more proactively in the selection of their preferred future. As a matter of fact, stakeholder engagement is at the heart of most contemporary future exercises. Typically, the initiation of futures exercises will be stimulated by the need to take decisions with long-term implications and the recognition that before decisions can be taken it is necessary to generate a widespread dialogue about future choices and preferences.

This is why we are witnessing an evolution of foresight. Coming from a practice where experts and decision-makers were thinking about the future of their territory in a kind of closed context, we now see more open and participative approaches, involving in most of the cases key stakeholders in various thematic or transversal workshops and, in some remarkable situations (Charleroi 2020, Côtes d'Armor 2mille20), a wider involvement of ordinary citizens. In this latter situation, financial and communication means are necessary to support the process. Experts' foresight still exists, however, and is still efficient in some situations, but becomes less fashionable when it comes to discussing transversal social issues.

This evolution also has some impacts on the methods used. Foresight workshops become a common way of organising the debate, especially on issues and future scenarios, whereas in the past, Delphi surveys and even scenario building were tools favoured by experts. In the participative way of creating scenarios, we see artists, writers or videographers helping to describe the images of tomorrow (see example below). The most striking feature remains, however, the culture of debate which now characterises most future studies, including highly participative methods such as world cafés, a rather simple but structured conversational process.²⁰ Needless to say, the use of information technology in line with foresight is only beginning and also brings high expectations, as it can be seen in the **urgent evoke** project sponsored by the World Bank²¹.

Finally, and this is also an interesting feature, the fact that foresight exercises involve more actors gives more democratic, or at least social, legitimacy to the results. The outputs of the exercise become a milestone in the city's or territory's history. As a milestone, it can be referred to by the citizen or the enterprise when speaking to the decision-maker. It also generates a wider sense of ownership of the exercise and of the territory. As a consequence, foresights become, in some regions such as the Basque Country or in Spain, a replicable exercise rather than a one-off. One does not see, however, an institutionalisation of territorial foresight emerging.

²⁰ <http://www.theworldcafe.com/what.htm>

²¹ <http://www.urgentevoke.com/>

5. Visions, dys-visions and values

5.1. Shared consensual visions

The visionary dimension of forward-looking exercises is, at first sight, the paradise of superlatives and marketing catchphrases²²: “the best big city in the World”, “to make our city a world city in the international competition between territories”, “the Knowledge Capital”, “Knowledge means Change”, “Cosmoregion in 2015” are some of the numerous examples. The list is long and, although very creative in terms of being the best seller of its own attractiveness, very often focused on the same arguments: economic leadership, quality of life, balanced development, and technological proactivity.

Visioning is however a dimension which allows for sorting between classical planning exercises, where one general goal or direction is set, then developed in strategic axes and actions, and more genuine foresight where the vision is built through the process of scenario exploration and / or the object of a robust participatory reflection. This vision is composed of four elements:

- 1. Aims, i.e. general goals perceived as possible to achieve, which the territory will endeavour to achieve through processes, and as you would an ideal;
- 2. Major projects that plot the future. These are the expected outcomes of the determining actions and projects that we will have successfully carried out, the concrete and major results of the path that we are going to take;
- 3. A system of shared values, i.e. stating the values (3) that are necessary and that the stakeholders are going to activate to achieve the vision;
- 4. A collective desire to achieve the objectives, a desire without which nothing is possible, and which it must be possible to express symbolically in all foresight and strategic approaches.

This latter category is more interesting to analyse but less frequent to find in the landscape of urban foresight projects.

The following table is extracted from the Linz 21 foresight led between 2002 and 2004. It shows both the richness of scenario building as a method and a nice sample of the typical, one could even say ‘consensual’, images that cities develop to dream about or, less often, fear their future.

²² Emile Hooge underlines a tendency according to which cities become themselves copyrighted labels (*Quand les villes deviennent des marques*), “La cote des villes” in *Futuribles*, n°354, July-August 2009, p. 49.

	"Concentration on the essentials"	"Disjointed knowledge society"	"Cooperation and participation"	"New values in the urban sphere"
SPG 1 detail scenarios	"Linz as a functioning metropolitan area"	"Linz as a functioning metropolitan area"	"Citizen-friendly active city"	"Citizen-friendly active city"
SPG 2 detail scenarios	"Crisis as a chance"	"Linz- a research-development and education-base with intern. significance"	"Linz- a research- development and education- base with (inter).nat significance"	"New values-new science"
SPG 3 detail scenarios	"Daring the gap"	"Open knowledge-society"	"Regionality as a concept"	"Regionality as a concept"
SPG 4 detail scenarios	"Reactive scenario"	"Two-tier society"	"Proactive scenario"	"Proactive scenario"
SPG 5 detail scenarios	"Active economy"	Active economy"	"Central region"	"Parochial thinking"
SPG 6 detail scenarios	"Suburban sprawl" syndrome, Variation 1"	"Sub-urban sprawl" syndrome, Variation 2"	"Sustainable city design"	"(Re-)Discovery of the urban space"

The fourth scenario is interesting to isolate in the sense that it explores the idea of having *new values in the urban sphere*, together with an idea of creating an inspiring and uplifting "multi-cultural climate". In this scenario, local government is expected to "*deliberately support and promote elements of urbanity – such as cultural diversity, multiple city centres, ample traffic and transit infrastructures, generous and innovative architectural and urban planning*". Keywords in this image are immigration and integration.

Such scenarios, based on several dimensions already commented on in this article are common to many cases, with some variations.

This is another example of such consensus, extracted from the Irish BMW regional foresight:



We deliberately use the word 'consensual' in order to deplore the lack of diversity and more daring character of many visioning urban exercises. Of course, these exercises are not to be disqualified or even criticised for such reasons. They have their full

legitimacy as mobilising, action-building processes and do appear as relevant for the actors involved.

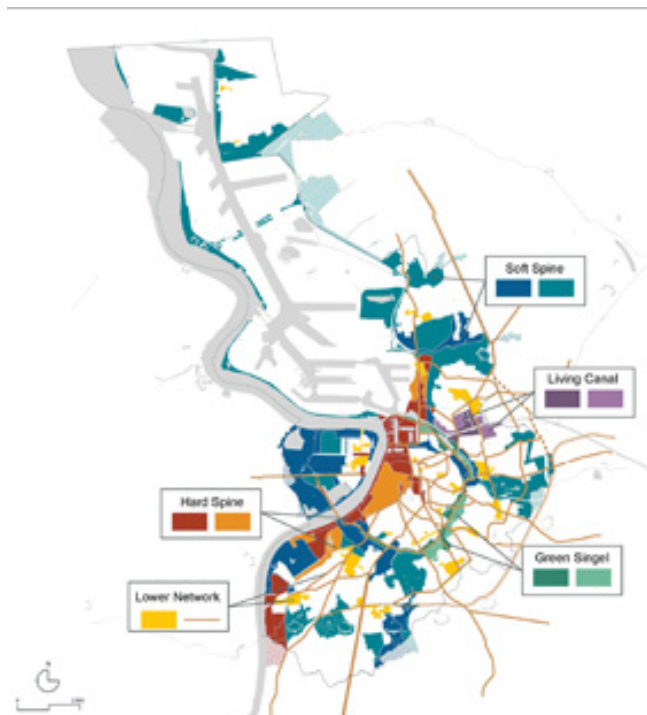
Another example can be extracted from the Wallonie Picarde 2025 exercise where the visioning phase, as a specific stage of the foresight process, asked participants to isolate several elements of a vision.

3. Construction de la vision commune



Other examples can be found, for instance in the Côtes d'Armor 2mille20 foresight démarche, which describes, in two pages, at the heart of the document, eight general goals for the territory.

Lastly, one can also point out numerous interesting works in the field of urbanism and architecture. In particular, the working method of someone like Bernardo Secchi is interesting to illustrate, for instance in the context of Antwerp – a city to live in! says the slogan – where the reflection on the future of the city starts from the physical places and areas where people live, meet or on the contrary cannot live or exchange. This video²³ is particularly interesting in this respect.



²³ http://www.cityvisionseurope.eu/en/articles/show/public_lecture_bernardo_secchi

5.2. Seeking dys-visions

Philippe Destatte has rightfully mentioned the fact that in territorial foresight, the creation of solid, shared visions of a future that is both distant and credible is rather unusual²⁴. Pessimistic or dramatically dark visions are even scarce and, where existing, based on stagnating economic perspectives, demographic decline or social disturbances. The following two sentences are, again, typical of the degree of uncertainty present in urban foresight:

In the first scenario – environment of opportunities, and depressive climate – the region is embedded in an environment of opportunities, but a depressive internal climate prevents the social agents from getting the advantage of the external opportunities. As a result, the region loses competitiveness.

The third scenario – environment of obstacles, and depressive climate – deals with a situation in which the region faces external difficulties and does not find the internal strength to maintain its model of growth. As a consequence, the region suffers degradation in the economy, in social welfare and in the environment.²⁵

Regardless of the city that has developed these scenarios, the common fear refers, in most of the cases, to an economic situation that would get worse and generate impacts on the other aspects of urban developments.

Some exceptions to this strong tendency can however be quoted, again in a non-exhaustive perspective.

Randstad Holland 2040 has seriously envisaged a scenario of flooding in line with climate change signals. With 40% of the territory already lying below sea level, the rationale behind the scenario was of course a sense of survival, but it has also generated some creativity and revived the idea of locating the airport in the middle of the sea. Other regions in Europe tend to develop flood risk assessment (UK foresight, the Pordenone Province) or link with other natural hazards.

Under Liège 2020, led by Futuribles, the most pessimistic scenario was focused on governance, seeing a danger of individual and institutional conflicts between actors, each following its own strategy. This scenario was received by local actors with so much bitterness and hostility that the process was stopped, but subsequent actions were taken to tackle some challenges presented in the scenario. The dys-vision has, in this case – and it is not an isolated example – played a role of strong warning signal regarding the need to act.

Both the French region of Bretagne and the city of Les Sables d’Olonnes, as well as a town like Gijon and several British cities, consider a dominant part of the population aged over 50 year among possible scenarios of development. This perspective opens the horizon regarding, among other issues, residential economy, attitude towards the migrants and new types of services for the elderly.

Shrinking cities and urban sprawl: Leipzig, Halle, Manchester and Newcastle have experienced a severe loss of population: Manchester and Newcastle over a long period since the middle of the twentieth century; Leipzig and Halle sharply, after reunification. Interestingly, these cities have greatly improved their city centres and present

²⁴ DESTATTE Philippe, “Contribution to the work of the DG Regional Policy, Urban Development, Territorial Cohesion: building a foresight vision for the towns of tomorrow”, Brussels, 20 December 2010, p.1.

²⁵ Collection of EFMN briefs, part 1, European Commission, DG Research, 2008, p.275.

themselves as regeneration successes which have indeed curtailed their population losses. Leipzig has developed innovative strategies aimed at “coping with shrinkage”: a new urban development plan was established and public discourses, international marketing and participation processes were initiated. Still, the use of scenario has allowed for interesting reflections, for instance on how to plan for an economically sound project together with a contraction in the population figures. They set out scenarios for future household numbers in both cities and consider the implications of a future loss of households.

Through this research, we also sought more singular alternatives or ‘underground’ types of visions, with little success outside the world of novels, art and science-fiction.



An interesting example in the field of arts is the work of Luc Schuiten and his vegetal city (<http://vegetalcity.net/luc.html>). His work led the city of Nantes to involve him in the Utopiales exhibition in 2007. The artist took the opportunity to show his work. His exhibition was publicised in the city by posters with various designs, including a 35m2 canvas sheet at the Congress Hall displaying a panoramic view of the city in 2100. The inhabitants of Nantes re-discovered their city, which had been transformed into a natural inhabited environment where the past and the technologies of the future could live side by side – a vision of totally new eco-systems placing humanity and nature at the centre of urban life. By taking the Utopiales outside the Congress Hall, the artist reminded the citizens of the need to look at their environment in a different way. Depicting the city in 2100 in this way gave the Utopiales an air of optimistic anticipation, rather than simply fantasising about the options for the future.

In the constraint-free field of arts and architecture, there of course exists plenty of other interesting works. This is also the case of commercial companies which use and abuse picturesque elements to market their products and even sponsor competitions to dream up visions of the future²⁶.

5.3. Motivations, horizons and values of forward-looking exercises

Linking elements such as rationale of the foresight exercise, time horizon, sectoral priorities and underlying values is a perilous exercise. Still, coming back to our archetypes, we can try to build up a schematic view of these linkages and try to determine which are or would be the driving values of urban reflections.

The following table must be considered as a first draft of how the archetype could be illustrated by elements for each category. This draft is of course open to debate and none of the examples analysed for this paper would fit perfectly in one archetype. This

²⁶ <http://www.scientificamerican.com/blog/post.cfm?id=a-glimpse-of-a-car-friendly-urban-f-2010-06-15>.

is why, at this stage, we will not associate cities with our archetypes. The typology must be tested and refined before wide-ranging utilisation.

Archetype	Horizon	Motivations	Values
1. Long term / systemic	Beyond 20 years	Anticipating major changes in the long term, tackling systemic challenges, adapting to social or demographic evolutions; Marketing reasons also intervene in the rationale (“being the best in ...”)...	Solidarity with future generations, good governance, making sense of complexity; Sometimes survival or urgency for action; Preservation of the social capital.
2. Long term / sectoral	Beyond 15 years	Tackling environmental challenges, anticipating the impact of technological evolutions; Reducing dependency on or impact of certain types of activities...	Quality of life; Solidarity with the future generation; Preservation of the environment; Long-term efficiency.
3. Short term / sectoral	From 5 to 10 years	Protecting a competitive position; Resolving a specific issue; Developing a large infrastructure project...	Effectiveness; efficiency; Value for money; Attractiveness (satisfaction, pride).
4. Short term / systemic	From 5 to 15 years	Resolving complex situations; Managing a large urban project; Preparing a new development programme...	Effectiveness + social cohesion; Democratic participation/ debate; Good governance.

One can see that these values, especially for archetypes 3 and 4, are more related to performance and governance than to genuine urban themes. In other words, few of the urban exercises seem to give rise to a reflection questioning the essence of urbanity or seriously envisage a different role, a different shape, a different meaning for cities in the coming decades.

This table could be more sophisticated by the integration of challenges in another column and other selective factors such as size of the city, localisation in Europe, nature of economic development, institutional context, etc. These could be further developments of the research project.

What is interesting in developing such typology is the possibility to systematically envisage the different dimensions of the reading grid when analysing challenges and building visions.

Let us take for instance the difficult challenge of demography:

- how can it be tackled in the short term / in the long term?
- what are the demography-related responses that can be envisaged in a specific way?
- which systemic responses can one also take into account to ensure long-term impacts on urban demography?

- what is the rationale behind each of the options?
- what are the underlying values behind the long-term vision that we want to preserve or to instigate?

In all, how can we differentiate policy responses according to the axes of the grid and, secondly, to the layers of multi-level governance and the specific contextual factors relevant for each urban region?

6. Conclusions and recommendations

This piece of work must be considered as food for thought, i.e. an issue paper which reflects the urban concerns seen in 2010 from the point of view of city-led forward-looking approaches and exercises. It is neither exhaustive nor completed and calls for further research. As a first recommendation, we would directly point out the need to gather empirical evidence more systematically and to envisage a monitoring of urban foresight exercises following the model of the EFMN, now the European Foresight Platform.

The provisional conclusions that can be drawn from our analysis are twofold.

One set of conclusions relates to the content of the urban initiatives. As far as urban challenges are concerned, we have pointed out emerging but widely shared and thus robust issues that will keep the policy-makers busy for the five to ten coming years in addition to structural issues already at the heart of current urban strategies. This set of issues confirms the increasing complexity of the general policy environment in which cities compete and interact with each other.

The analysis of existing visions is less rich. Examples found across Europe are rather consensual, built in the mould of traditional economic growth models, and few seem to take into consideration the long-term effects of emerging and possibly worrying trends such as climate change or demography. The underlying values of most forward-looking exercises do not seem to be openly discussed and remain in line with the development schemes applied to urban issues since the Second World War. Dys-visions or dramatic scenarios are used to “sound the alarm” and put some light on the need to tackle issues urgently.

The other concluding comments that can be made are methodological.

The practice of foresight – or forward-looking as we often wrote in this paper in order to reflect a wider reality – does not follow a single framework. It is characterised by a wide diversity of rationale, methods, time horizons, and levels of participation. Whereas this variety is logical and even desirable in the European urban landscape, one misses nonetheless elements of consistency, evaluation and benchmarking regarding the relevance and the significance of some (types of) exercises compared to others.

As a consequence of this diversity, one also sees a cleavage emerging in how existing challenges are being treated: short-term responses are developed in order to ensure action and movement towards a desired future, but there is little evidence to show that the identified growing structural long-term challenges are being met with innovative policy responses and understood in their systemic consequences. Whereas most urban processes generate interesting strategies and operational policies, one misses, in the review, daring visions, innovating plans, novel configurations or new-fangled discourses.