Predict and Provide vs Explore, Envision and Plan: Transforming the Urban Planning Approach towards the Future

Elzbieta Krawczyk
Technological University Dublin, elzbieta.krawczyk@tudublin.ie

John Ratcliffe
Technological University Dublin, john.ratcliffe@tudublin.ie

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‘Predict and Provide’ vs. ‘Explore, Envision and Plan’: transforming the urban planning approach towards the future

Elzbieta Krawczyk, Professor John Ratcliffe

Abstract

Thinking about the future of humanity cannot be separated from thinking about the future of cities. Today, half of the world’s population lives in cities and the number of urban dwellers is constantly growing. On one hand, cities play a key role in generating economic growth; they are cores of human activity and frontiers of technological and cultural progress. On the other, urban areas are a source of a broad range of social and environmental problems and are especially vulnerable to the threats posed by factors such as climate change, terrorism, pandemic, social and cultural clashes. Considering the role and situation of cities today, it becomes evident that a change in ways of thinking and acting about the future of cities is required in order to ensure their prosperous and sustainable development in the future.

This paper argues that futures methodologies can stimulate that change by providing a fresh, systematic, imaginative and innovative approach for the examination of possible, probable and desirable urban futures. On the outset, the paper explores the reasons behind the recent growth of interest in the application of futures methodologies in urban planning. It discusses the shortcomings of the current planning approach towards the future and outlines in which way futures methodologies can assist communities and decision-makers in envisioning and creating the desired future. Finally, the authors present the Prospective methodology model that can be used to promote and facilitate the shift in ways of thinking and acting about the future of cities.

Elzbieta Krawczyk, MA, Research Fellow at The Futures Academy, Dublin Institute of Technology, Bolton St., Dublin, Ireland; Assistant-Secretary General of the WFSF. Email: elzbieta.krawczyk@dit.ie, Tel. +353-1-402 3749, Fax: +353-1-4023699.

Professor John S. Ratcliffe, D.Tech. MA, BSc(EstMan)FRICS, FSCS, FIAVI; Director and Dean - Faculty of the Built Environment, Dublin Institute of Technology, Bolton St., Dublin 1, Ireland; Secretary General of the WFSF, Chairman of The Futures Academy. Email: john.ratcliffe@dit.ie, Tel. +353-1-4023711, Fax: +353-1-4023699.
1. Introduction

Thinking about the future of humanity cannot be separated from thinking about the future of cities. Today, half of the world’s population lives in urban areas and the number of urban dwellers is constantly growing. Cities are placed centre stage in the modern world; the world that is shaped by rapid technological developments, expanding globalisation, profound cultural shifts and new economic trends. In this very complex and well connected world, cities function as the nucleus of human activity, frontiers of progress and engines of economic growth. By many, cities are seen as a key factor that will shape the future of the world. There is, therefore, an ongoing endeavour to ensure their prosperous and sustainable development alongside the provision of good living conditions for all their inhabitants.

At present, cities struggle with a broad range of problems. Most of these difficulties are the result of an inability to cope effectively with the consequences of both global and local change and the extreme complexity of urban and regional systems. It is ever more being recognised that urban planners and policy-makers lack an effective future-oriented approach that would enable them to anticipate future transformations, efficiently prepare for ensuing consequences and tackle the inherent complexity. There is a growing need for planners, decision-makers and communities to become more creative and imaginative in the way they think, talk and act about the future of their cities.

The central thrust of this paper is based around the argument that futures methodologies can provide a fresh, systematic, imaginative and innovative approach that would assist urban planners, decision-makers and communities in exploring possibilities and envisioning and creating their desired future. The paper explores the context of the recent growth of interest in the application of future-oriented approaches in urban planning processes. It identifies the main deficiencies of the current planning approach towards the future, which is often described as the ‘predict and provide’ model, and discusses the ways in which futures methodologies can assist communities and decision-makers in envisioning and creating the desired future. Finally, it presents the Prospective methodology model that can be used to promote and facilitate the shift in ways of thinking and acting about the future of cities, a shift towards a fresh planning
approach towards the future that can be described as ‘explore, envision and plan’
(‘explore alternative future possibilities, envision the preferred future and plan to
achieve it’).

2. Futures thinking in urban planning – the context

“Recent writers have proclaimed the future orientation of planning as
unique to the field’s identity and have called for renewed focus and
development of future-oriented skills.” (Myers and Kitsuse 2000)

In the decade of the 1990s and first years of the 2000s, cities witnessed an ‘explosion’
of projects that utilised the potential of strategic planning and various futures
methodologies. Future-oriented approaches are being used in cities around the world to
develop strategies, visions and plans in order to help urban territories to tackle their
present problems and ensure prosperous development in years to come (Albrechts et al.
2003). The increased interest in future-oriented approaches is triggered by two
intrinsically linked factors. The initial factor is the extensive transformation of both
global and local environment, in which urban planning operates. This transformation, in
consequence, has posed new challenges for urban planners and governments. It is being
increasingly realised that the current planning approach and its methods are less and less
effective in dealing with these challenges. This section provides an in-depth discussion
of recent changes of the planning context and the weaknesses of the planning approach
in dealing with the challenges posed by them.

2.1 Transformation of the planning context

The overall context for contemporary urban planning can be summarised in the
following way:

“All that is certain about the future of cities is that they will change, rapidly,
profoundly, and unpredictably. Urban planners and policy-makers face a
complicated and difficult task. They will be required to make sharper choices, and,
because, the future is unknown, to make decisions and design programmes based
on incomplete information, in macroeconomic conditions that are likely to make resources scarce.” OECD 1994:158)

A number of more detailed aspects can be identified within this context. These aspects are shown in Fig. 1.

![Figure 1. The global context for the contemporary urban planning](image)

The contemporary processes of change are characterised by instability, disruption, rupture, conflict, break ups and complex and adverse effects of transformations (Healey et al. 1995). The forces of change pervade transversely through all dimensions of society, reconstituting previous relationships between the economic, political and socio-cultural systems. Changes taking place in one dimension have repercussions for all other areas. Consequently, one of the main challenges to urban planning at present is to make sense of, cope with, and adapt to these changes (ibid).

In recent years, the process of economic globalisation has had profound effects on the urban development (Thornley and Rydin 2002). Due to trade liberalisation measures and rapid technological changes, which have been transforming the relations between production, distribution and consumption, national governments have a decreasing number of tools available to them for intervention into their economies. As competition
between cities and urban regions seem to have become the main determinant for the development of urban systems, the role of regional and urban governments in shaping the future of their territories is growing (Brotchie et al. 1995, Kresl 1997, Cheshire and Gordon 1995, EC 1999, Albrechts et al. 2003, Van der Berg et al. 2004).

Another important driver behind many future-oriented actions and projects are environmental concerns both globally, for example ozone depletion and global warming; and regionally and locally, e.g. flooding, desertification, air quality, water resources, waste management and the like (Thornley and Rydin 2002). Over last decade, the agenda of sustainability became one of the most recognised challenges for governments at local, regional, national, and global levels. In order to seriously consider the issue of sustainability a holistic long-term view is required.

Cities have been also strongly affected by the substantial transformations in the way urban governments are structured and financed. Changes in the financing of the local government, following reductions in national and local budgets, have led to the search for new forms of fund raising, such as joint financing among public institutions and between public and private bodies (PPPs). Additionally, new forms of multilevel governance have appeared as a result of changes in the government structures (Albrechts et al. 2003). An example of such a multilevel structure is the ‘concertation’ process which originated in France. ‘Concertation’ can be described as a process which facilitates the coherence between actors and partners viewpoints through the establishment of a social, political and/or administrative consensus (ENDA 2004). It can be also defined as negotiation occurring in the public decision-making processes taking place in urban planning (de Carlo 2003).

Cities, besides the issues discussed above, are also faced with a number of other challenges. They need to anticipate and respond to the opportunities and threats arising from the social and cultural transformations, demographic change and the accumulation of social and environmental problems. In the face of globalisation and European integration, they often try to re-establish their local and regional identity and create a new image (Albrechts et al. 2003, Van der Berg et al. 2004).
Usually, it is a combination of all factors shaping the context for contemporary urban planning (Fig.1) that drives cities to undertake future-oriented exercises; however, in some cases some reasons are more important than others. Parrad (2004), who reviewed a range of projects representing futures thinking in European cities, has identified four different types of exercises: ‘strategic planning’ activities; ‘strategic competitiveness’ projects conducted to increase economic competitiveness of cities and their regions; ‘metropolitan projects’; and exercises driven by the agenda of ‘sustainable development’. The future-oriented projects in urban planning differ as they refer to diverse traditions, are set in unique local contexts, have different motivations and objectives, use diverse methodological approaches, and look into short- to long-term futures. Despite all the differences, there are also common threads identified. To begin with, a strong need for these kinds of venture arise from the pressure for cities to position themselves within local and global context, as well as to improve their competitiveness, attractiveness, quality of life, and reorganise and enhance their governance systems. Secondly, the projects are recognised as innovative and are, therefore, fragile. Often such new approaches and methods do not fit into standard institutions, which are needed to support these projects. The main difficulties lie in the continuation of the mobilisation of actors and the complexity of project management (Parrad 2004).

2.2 Planning weaknesses

The growing search for new more effective ways of approaching and shaping the future of cities is a direct consequence of the recognition of planning weaknesses in dealing with the challenges posed by the contemporary world. These deficiencies have increasingly been debated in recent years. Although developments in the planning theory, attempt to address the needs arising from the changing context, within which planning operates, major weaknesses in the practice and reality of planning are still observed. Here, the major shortcomings of the current planning approach towards the future, which is often described as ‘predict and provide’ model, are identified and discussed.

- **Deficiency in dealing with complexity and uncertainty of change.** Contemporary cities continuously undergo rapid, profound and unpredictable changes (OECD 1994). Planners, operating in the complex environment, comprised of many
interconnected elements, are constrained by lack of certainty as to the future consequences of planning actions as well as to the effects of change in general (Myers 2001). Often, the traditional planning techniques developed “in a lineal and incremental world do not have the flexibility needed to address multi-faceted and rapidly paced change” (Ratcliffe 2002a:9).

- **Limitations of projections as the main methods supporting urban decision-making.** Projections and forecasts, especially population projections, are used for planning in many areas, such as education, health, transport, and land use. Projections are criticised for: (a) under-representation of uncertainty, what effects robustness of plans based on them; (b) being ‘unvaried’ and not giving much attention to the complex interactions within and between urban dimensions; (c) focusing on measurable variables, such as economic, demographic and environmental, and underplaying the less tangible ones, like social, cultural and political; and (d) rejecting the imagination by attempting to concentrate on what will be, rather than what could be (Cole 2001). Forecasters have often been criticised for failing to present the assumptions on which forecasts have been developed, and for stating the results of forecasts without presenting alternatives arising from the changes of the input variables (Wachs 2001). Planners have been also blamed for using projections as if they described the most probable future and as if this future was desired (Isserman 1985).

- **Main focus on spatial form.** For many years urban planning has mainly been focused on shaping the physical form of cities and the provision of necessary services. Planning activities included budgeting, land development, funding of social services, project management and other short-term activities (Isserman 1985). Myers and Kitsuse (2000) argue that the strong focus on spatial analysis has often led to a neglect of the future aspect. Although space and time are two essential dimensions for describing the world, it is difficult to concentrate on both simultaneously. Furthermore, for a long time, planners have had a tendency to use land use maps and other spatial methods to envision the future of cities (ibid). Consequently, techniques for spatial analysis and territorial planning have advanced greatly, in contrast to the methods for tackling the time dimension of planning (Myers 2001, Ratcliffe 2002a).

- **Short-term orientation of planning.** The short-term focus of planning activities has been reinforced by planners’ efforts to strengthen the political relevance of
planning and the need to respond to the crisis on the ground. Being more ‘politically relevant’ meant greater influence of short-term budgets and the short-term horizons of the electoral process over planning activities (Myers and Kitsuse 2000, Myers 2001).

- **Lack of an integrated and holistic approach to the urban system.** A common planning practice is the separation of the physical form from the social, economic, cultural and environmental dimensions, instead of treating all these aspects in an integrated fashion (Gaffikin and Morrisey 1999). Consideration of different urban elements separately often leads to neglecting the important connections and interdependencies between them which results in ineffective policies and poor decisions. Plans developed in one sector rarely relate to the wider spatial impacts of other activities and policies, and usually implement only a single sectoral perspective (Koresawa and Konvitz 2001).

- **Lack of effective community participation and collaboration between stakeholders.** Decisions about the future involve gaining agreement among a great number of stakeholders, many of whom vary in their valuations of key factors and hold different, often emotionally based, views (Myers 2001). Although the topic of ‘collaboration’ is becoming more and more important in planning thought (Puglisi 2000), along the lines of Patsy Healey’s concept of ‘collaborative planning’ (Healey 1997), the typical planning approach is not very well suited to ‘managing’ community participation and collaboration of stakeholders, as it comprises techniques designed for experts and trained professionals (Serra 2001). There is a need to build “convergence of values and meanings that go beyond the specialised knowledge of a few experts in order to investigate the diversity of experience, attitudes and values of different groups and communities” (Puglisi 2000:2).

- **Neglect of a visionary approach towards future.** Many authors have pointed out the lack of visionary approach towards the future (Isserman 1985, Brooks 1988, Myers and Kitsuse 2000, Ratcliffe 2002a). Isserman (*op cit.*) argued that all too often planning ‘has lost sight of the future’ and it lacks a vision that would lead the present to the future. Among the factors to blame for such a situation are: a shift from thinking and planning the cities with a vision, to planning with use of scientific methods and financial mechanisms blocking idealism and visionary thinking. It has also been claimed that planners are “institutionally caged in a
cautious and conservative role and they don’t wish to appear too off-the-wall to policymakers who want concrete answers” (Cole 2001:373).

3. Futures methodologies in support of urban planning

Considering the changed context within which planning operates and the weaknesses of the current planning approach towards the future, it becomes clear that a new planning mindset and a fresh methodology for dealing with the future dimension of urban planning are required. In this paper, we argue that such a new approach should be developed upon the concepts of futures thinking and we propose a methodology model (Prospective methodology) that could be used to promote and facilitate the shift in the ways of thinking, talking and acting about the future of cities.

3.1 The new approach

The fresh approach proposed in this paper can be described as ‘explore alternative future possibilities, envision the preferred future and plan to achieve it’ (in a nutshell ‘explore, envision and plan’). It can be also illustrated by the adage ‘divergence, emergence and convergence’ (Ratcliffe and Sirr 2003). The proposed approach is based on the concepts and principles of futures studies. First and foremost, it tries to reinforce the view that the future will not be an extension of the past, and, therefore, it can unfold in unlimited number of ways, and can, more importantly, be shaped. It proposes an in-depth exploration of the short- to long-term possibilities in order to inform decision-makers about existing possibilities, and it promotes the development of a vision of a preferred future to encourage change in the desired direction. One of the main features of that approach is that the future of cities should be explored, envisioned and planned in a collaborative and concerted effort of communities and stakeholders. Finally, this new approach should provide methods and mechanisms for:

1. communities
   - to envision their desired future, building upon common values and wishes;
   - to actively participate in decision-making processes;

2. professionals
   - to challenge the thinking of people involved in urban planning processes;
to manage the increasing complexity of urban systems and the context within which they function, and to deal with the uncertainty of future change;
- to identify global trends and examine how they interact, and what consequences they could have for a given urban territory;
- to anticipate and examine the short-, medium-, and long-term impacts of future change as well as consequences of their policies and decisions;
- to channel the thinking of stakeholders into contemplating what future is desirable in the long-term perspective and the tasks that need to be addressed in order to achieve that future;
- to consider cities as entities and examine various urban components in connection to other dimensions;
- to discern the needs and values of communities, and to map the changing aspirations and ambitions of policy and decision-makers; and
- to develop mechanisms that would facilitate collaboration of all stakeholders and communities in shaping the future.

3.2 The Prospective methodology model

The Prospective methodology model was adapted and further developed by the authors in hope that it can both encourage a different way of thinking about the future of cities and be used in planning processes for realisation of actual projects. The Prospective process (Fig. 2) consists of the five main phases:

(1) **Formulation of the problem/strategic question.** As this methodology can be used for different purposes in the planning processes, it is very important to identify and formulate a specific problem/strategic question that is going to be examined at the start of the process. Often, the initial concept of the problem or issue to be considered is vague and needs further clarification, therefore, it is useful to form an exact statement of the problem/question and determine the expected outcomes of the exercise. Among the methods that can assist in formulating and clarifying the problem/strategic question are strategic conversations carried out with the key actors/stakeholders and brainstorming sessions.

(2) **Understanding of the past and present.** An overall aim of this phase is to draw a complex picture of the present situation. Having a fully comprehensive picture of the present situation enables the exploration of possible alternative futures and helps to
determine a path from the present state to the desired future state. This phase involves the completion of the following steps.

- **Recognition of the main actors and stakeholders.** It helps to recognise, the individuals and agencies that should be involved in the process of the exploration of the future and development of the vision, and who would be responsible for undertaking various actions to implement it. These people and institutions should be invited to participate in the process.

- **Identification of key issues and problems characteristic of the present situation.** This involves collecting a whole range of factual and statistical information as well as knowledge on community perceptions, memories, values, wishes and fears.

- **Exploration of past and present decisions, policies and factors that have led to the development of the present situation.** These should be considered at the local, regional, national and global level.

- **Gaining an understanding of interactions between actors and factors.** Mapping relationships and interactions between actors and factors can help to reveal interdependencies, of which there was no previous awareness, and, therefore, their impact and consequences are not fully appreciated.

There are different methods that can be employed in order to complete the steps of this phase: strategic conversations, brainstorming sessions, desktop research, Prospective workshops, environmental scanning, mind-mapping and relevance trees.

(3) **Exploration of the future.** The main aim of this phase is to identify the main driving forces of change, trends, issues and factors, so as to understand how they can influence the future and to create images of possible future states. The proposed technique for the exploration of the future is the particular scenario method developed by Ratcliffe (2002b). The scenario method consists of the following steps:

- **Identification of the driving forces of change.** The driving forces of change are identified within the six sectors approach: Culture/Society, Demography, Economy, Environment, Governance and Technology. They can be determined using methods such as environmental scanning, strategic conversations with experts, targeted questionnaires, Prospective workshops and brainstorming sessions.

- **Detection of the main issues and trends shaping the future.** This involves an examination of the driving forces of change recognised earlier and, deriving from
them, more specific issues and trends that would have an impact upon the problem/strategic question. They can be identified using the same techniques as for the identification of the driving forces of change.

- **Clarification of the level of impact and degree of uncertainty.** As the issues and trends derived previously would have a different role to play in creating and shaping the future, it is very helpful to classify them according to their level of impact upon the problem/strategic question and degree of uncertainty (likelihood) of occurring within a given timeframe. This step can be carried out during a Prospective workshop, brainstorming session or through a survey.

- **Establishment of scenario logics.** This part is crucial for the whole scenario process. Here, the structure and foundations of scenarios are established. The scenario logics, built around the trends with a high level of impact and high uncertainty of their outcome, provide the main themes for scenario stories. These themes would perform differently in each scenario.

- **Creation of different scenario stories.** Scenario stories are developed around the scenario logics established previously. They can be developed during a workshop by the participants, or can be written by a member of a project team.

It is important to remember that the process of exploration of the future is as important as its outcome (a set of scenarios) as it allows participants to understand how the future unfolds and to learn to anticipate changes and their consequences. This part of the process should involve the main stakeholders and decision-makers in order to let them develop a more comprehensive understanding of the complex and interconnected context within which the future of their urban territories is unfolding.

(4) **Development of the most desirable vision of the future.** This is another crucial step in the Prospective process. Knowing what future is desired enables the direction in which decisions and actions should be led to be determined. It helps to develop measures that would monitor the current course of action and verify the direction taken. Knowing what type of future is desired enables the path and means how to get there to be identified; it also supports strategic thinking and planning. The vision can be described as a ‘landmark’ that orientates present decisions and actions.
Figure 2. The Prospective process

1. **Formulation of the problem / strategic question**

2. **Understanding of the past and present**
   - Identification of the main actors present on the scene
   - Recognition of factors responsible for the current situation
   - Identification of the key-issues characteristic for the present state
   - Understanding of interactions between actors and factors

3. **Exploration of the future**
   - Identification of driving forces of change
   - Determination of main issues and trends shaping the future
   - Clarification of the level of impact and degree of uncertainty
   - Establishment of scenario logics
   - Creation of different scenario stories

4. **Development of the most desired future vision**
   - Generation of ideas of what is desired
   - Agreeing a vision of the desired future shared by all stakeholders and sections of society

5. **Recommendations and suggestion for the implementation of the vision**
   - Generating policy proposals and suggestions for action
   - Development of indicators to measure progress
   - Identification of bodies responsible for action
   - Development of feedback systems and mechanisms for revising the vision and to generate new suggestions in order to respond to changing conditions
The desired vision can be created in a single visioning exercise, during the Prospective workshops, through targeted questionnaires and a series of brainstorming sessions, futures workshops and so on. When visions for urban territories are being developed it is necessary to ensure that everybody is invited to take part in the process: stakeholders, public and private organisations, community groups, minority groups, different generations, individual citizens and so on. Different parties and groups have different expectations, aspirations, needs, values and fears. It is very important to let them express their views and to enable them to engage in a dialogue that would result in agreeing a shared vision.

There are two main steps in this phase of the process. The first step involves the collection of views, aspirations and ideas held by different stakeholders and groups about what kind of future is desired. The aim of the second step is to reach, through dialogue and negotiation, agreement between all involved parties on what the desired vision is.

(5) **Recommendations and suggestions for the implementation of the vision.** The last phase in the process involves four main steps. The first one is generating policy proposals and suggestions for action. These are usually generated during Prospective workshops, brainstorming sessions, strategic interviews and surveys. The proposals can have a general or specific character. The second step is the development of indicators for measuring progress. It aims at the establishment of measures that would enable the monitoring of progress towards the achievement of the vision and provide feedback information on the key issues specified in the vision. The third step involves the identification of bodies responsible for the implementation of the vision. It is hoped that these bodies would have been involved in the process of the creation of the vision and, therefore, would accept their role in its implementation. The last step includes the development of feedback mechanisms for communicating the progress towards achievement of the vision, and for revising the vision and generating new suggestions in order to respond to changing conditions.

**4. Conclusions**

The central role of cities in contemporary world requires a greater focus to be placed on the ways how their prosperous and sustainable development can be achieved. Major transformations of the planning context in recent years, which is now characterised by
accelerating change, growing uncertainty, strengthening economic competition between cities, changing nature of urban governance, environmental pressures, and social, cultural and demographic shifts, have posed a range of new challenges for people and institutions involved in urban planning processes. It is widely recognised that contemporary planning, due to serious weaknesses in its approach towards the future, has great difficulties in dealing with these challenges, and therefore, a fresh, systematic, innovative and imaginative approach for the examination of possible, probable and desirable urban futures is needed.

The new approach proposed in this paper, ‘explore, envision and plan’, is developed upon the concepts and principles of futures studies. It reinforces the view that there are many different futures possible and, therefore, it is possible to shape the future of cities according to society wishes, and in a collaborative, concerted effort of communities and stakeholders. It is hoped that the Prospective methodology presented in this paper will encourage the shift of the planning mindset from the traditional ‘predict and provide’ model to the ‘explore, envision and plan’ approach. It is also hoped that this methodology will be used in practice by both communities in envisioning their desired future, and planners and decision-makers in exploring future possibilities, understanding the complexities of urban environments and anticipating change and its consequences.
References:


1 The authors have identified a long list of cities that undertook future-oriented exercises: Lyon, Barcelona, Bilbao (Krawczyk and Ratcliffe 2004), Munich, Vienna, Budapest, Warsaw, Prague (Tosics 2003), Hanover, Flanders, Northern Ireland (Albrechts et al. 2003), Glasgow and the Clyde Valley (Goodstadt 2001), Vancouver, Hong Kong (Freidmann et al. 2004), Helsinki, Venice, Utrecht, Birmingham, Brno (Parrad 2004).